Catechism of the Duties of Life, Being Lessons in Conduct, Intended for Use in Schools or In Homes. Proof Edition.] [ALL RIGHTS RESERVED.
"Train up a child in the way he should go; and when he is old, he will not deport from it."—SOLOMON.
By George Warren Russell.
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To The Boys and Girls of today, The Men and Women Of the Future this Catechism is Dedicated by The Author.
CAMBRIDGE, N.Z., 1888.

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Preface.

IT has long been felt that the secular character of the Education System should not debar lessons of Morality and Duty from being taught. The want of a text book on these subjects, at once simple and comprehensive, has prevented any steps being taken to teach the Duties of Life in the schools. This Catechism is intended to supply that want in such a manner as to lit in with the secular system of education.

The author has endeavoured to lay down broad and noble principles for the instruction of the scholars. The Catechism teaches the dignity of all honest labour; and enumerates the duties attaching to the various relations of life, as parent and child, master and servant, and as a citizen. It also includes the general range of duties we owe to our fellow men.

These are matters which all will agree should in some form or other be taught to every child. At present these subjects are ignored by the educational systems, and to the absence of this teaching may be attributed the lack of reverence and respect for their superiors, and of a due appreciation of their duty to others—in some cases oven to their own parents—which so many of the youth of the present day display.

No doubt what is termed the "religious difficulty" has had a good deal to do with Morality and Duty being excluded from the teaching in the schools; and it would appear that in adopting a secular system the error has been fallen into of excluding teaching on these subjects under the belief that Morality and Duty are necessarily inseparable from Religion. The writer dissents from this, and thinks that the lessons taught herein will be acceptable alike to those who believe in a religious system of education and to those who believe in a purely secular system. The clergyman's functions are not invaded, whilst the thoughtful parent or earnest teacher will find in the questions and answers so many pegs on which to hang fuller instruction on the subjects dealt with, and illustrations of them culled from history and every day life.

The catechetical form has been used, so as to secure that both questions and answers shall be committed to memory. Thus the benefits of the instruction will be felt in after life, even though only an imperfect grasp of the lessons and duties taught may be obtained at school.

The learning of the poetry is regarded as a most important factor. Poetry is the natural and best means of conveying noble thoughts, and any child who learns the selections contained herein will have implanted within his or her breast the seeds of noble thoughts and actions.

That this Catechism may assist in developing a noble type of boys and girls, who will help to

Ring out the false, ring in the true,

is the fervent wish of the author.
G. W. Russell.
CAMBRIDGE, NEW ZEALAND, 1888.

Catechism of the Duties of Life.

SECTION I. DUTIES OF LIFE.

1. Question. What are the chief duties of life?

Answer. The chief duties of life are: To provide by honest toil for the wants of ourselves and those who are dependent upon us; to improve our minds; and to endeavour to improve the condition of others.

SECTION II. OF LABOUR.

2. Q. What is meant by honest toil?

A. By honest toil is meant labour of any kind which is honest in itself and is honestly performed.

3. Q. Why is labour a duty?

A. Labour is a duty because it supplies the necessities of our existence.

4. Q. How does labour supply our necessities?

A. The food we eat, the clothes we wear, the houses we live in—almost everything we use—are the result of labour performed either by ourselves or by others on our behalf.

5. Q. And what is to be inferred from this?

A. We learn from this that a life of active and intelligent labour is the lot of man.

6. Q. What other advantages are there in labour?

A. Besides supplying our wants labour exercises and strengthens both body and mind; it also prevents the energies being wasted in idleness or evil pursuits. Therefore even those who are not compelled to work should seek out an occupation which would suitably employ them.

7. Q. What kinds of work are there?

A. Work may be with the mind, or the hand, or with both. As from the nature of things there is an endless variety of occupations, so are people of different minds and inclinations fitted for them.

8. Q. Is all labour of equal merit?

A. No. Labour is meritorious according to the skill and knowledge required, and the responsibility involved; but all honest toil, whether with the mind or hand, is honourable and dignified.

9. Q. What then constitutes the dignity of labour?

A. Labour is dignified by the cheerful and faithful discharge of the duties involved, whatever may be their nature.

10. Q. How should you regard labour generally?

A. As labour is the lot of man I should be contented with the position in life I may for the time being hold, and faithfully discharge its duties.

11. Q. .But should you not aspire to something better?

A. Whilst faithfully discharging my duties, I should endeavour by study, application and skill to lit myself for a higher position whenever it may be open to me.

12. Q. But is there not something further required?

A. I should always act in a way that will merit the confidence and trust of others, by being honest to all, loyal to my employer, and by cheerfully doing my work with all the skill and energy I possess.

SECTION III. OF THE RELATIONSHIPS OF LIFE.

13. Q. Name the chief relationships of life.

A. The chief relationships of life are as Parent and Child, as Master and Servant, and as a Citizen or Member of the State.

SECTION IV. OF PARENTS AND CHILDREN.

14. Q. What are the duties of parents to their children?

A. The duties of pa refits to their children are of a twofold character—those which relate to the body, and those which relate to the mind.

15. Q. State the first class in detail.

A. It is the duty of parents to provide their children with food, shelter, and clothing according to their means and station in life.

16. Q. State the other class of duties of parents to their children.

A. In addition to providing for their bodily wants, parents should teach their children what is right and just. They should also direct their minds, and prepare them for the battle of life by advice, counsel, and example.

17. Q. State the duties of children to their parents.

A. Children should love, honour, and obey cheerfully the lawful commands of their parents. They should also assist them in all their undertakings, and seek their advice and counsel in all matters of importance.

18. Q. Is there not another duty?

A. Specially it is the duty of children at all times to speak kindly, respectfully, and reverently of their parents.

19. Q. Do these obligations always remain?

A. Although on attaining man's or woman's estate I shall have the right to decide for myself, the duty of loving and assisting my parents will always remain.

20. Q. State the reasons.

A. Because to them I am indebted for care in infancy, for watching over me in sickness, and for providing as they were able for my wants.

21. Q. What is to be learned from this?

A. Gratitude should lead me to soothe the declining years of my parents by securing and adding to their comfort by every means in my power.

SECTION V. OF MASTERS AND SERVANTS.

22. Q. What are the duties of masters and mistresses to their servants?

A. Masters and mistresses should pay fair and just wages to those they employ. They should also watch over their health and general welfare, instruct them in their handicraft or occupation, and treat them with kindness and consideration.

23. Q. What are the duties of servants to their masters?

A. They should faithfully and loyally serve those who employ them, and should bring to bear their best skill and energy in carrying out the work entrusted to them, as a return for the wages they receive.

24. Q. Is there any further duty?.

A. Servants should carefully watch over their employers' interests, and should protect their property and reputation as if they were their own.

SECTION VI. OF THE DUTIES OF CITIZENS.

25. Q. What do we owe to the Sovereign?

A. As the head of the State we owe to the Sovereign or her lawful Representative loyalty, respect and obedience.

26. Q. What are the duties we owe to the State?

A. It is our duty to obey the laws and teach others to do so. We should also respect every properly-constituted authority for maintaining law and order.

27. Q. What further duties are there we owe the State?

A. It is our duty to qualify ourselves to take a part in the government of the country, when called upon to do so.

28. Q. Is there not something more?

A. The highest duty we owe to the State is to assist in securing good government and the passing of those laws which will be best for the country, both now and hereafter.

29. Q. What are the objects of government?

A. The objects of government are to protect the lives and property of the subjects from external and internal foes and wrongdoers; and to promote the general well-being of the people.

30. Q. What is meant by the general well-being of a Slate?

A. It consists of three divisions—the material, the intellectual, and the social.

31. Q. Can these be detailed?

A. The material, intellectual and social well-being of a people are so interwoven with each other, that it is difficult to distinguish them. It may be said, however, that all three go hand-in-hand.

32. Q. And why is this?

A. Because each of the three in a properly organised society acts and reacts on the other two.

33. Q. State some of the results which flow from the advancement of the general well-being of a people?

A. If the material, intellectual and social well-being of a people are secured there will be peaceable enjoyment of property; general diffusion of the comforts of life; intellectual advancement; culture of the arts and sciences; liberty of opinion; just laws; and the development of industrial pursuits.

34. Q. How may these be stated briefly?

A. The object, of all government should be to promote the greatest present and future happiness of the

greatest number of individuals, and only by endeavouring to secure this is true patriotism shown.

35 Q. How are individuals affected?

A. A State is made up of individuals, and the well-being of those individuals makes the well-being of the State.

SECTION VII. OF MATTERS OF OPINION.

36. Q. How should we treat the views and opinions of others?

A. On matters of principle relating to what is just and right in itself, we should be firm and unyielding.

37. Q. And in regard to other matters?

A. On those subjects upon which there is ground for difference of opinion, we should respect and treat with consideration the views of others, however strongly we may differ from them.

38. Q. And why so?

A. Because no one view embraces the whole truth of any question, and therefore from their point of view those who differ from us may be right.

39. Q. Is there any other reason?

A. The full and free expression of opinion on all matters should be encouraged, because thus a wider view is obtained, and enquiry is promoted.

40. Q. What will follow from this?

A. Increase of knowledge, and all the benefits which follow from it.

41. Q. But how are correct views to be obtained?

A. By reading good books, by observing censes and effects, by reflecting on them; and above all by honestly and sincerely striving to find out the truth.

42. Q. What may be called the Golden Rule of Knowledge?

A. The Golden Rule of Knowledge is to love truth for its own sake, independent of bias, prejudice, or self-interest.

SECTION VIII. OF RECREATION.

43. Q. What is recreation?

A. Amusement, diversion, and change.

44. Q. What should be its object?

A. As we have already learned that work is a necessity and duty of life, recreation should be treated as a relief and relaxation to the mind, or body, or both.

45. Q. How does it accomplish this?

A. By drawing the mind off to new objects, or by securing the exercise of the body, and thus lessening the strain caused by following the line of duty.

46. Q. What are the chief forms of recreation?

A. They are twofold: those which affect the body, and those which affect the mind; or, physical and intellectual.

47. Q. State the physical forms of recreation.

A. They include athletic exercises and games, and those amusements which tend to strengthen and exercise the body.

48. Q. And the intellectual.

A. Intellectual recreation includes all such occupations of the mind as rest and revive the intellectual faculties.

49. Q. What rules should guide us in our recreations?

A. Duty should not be neglected to enjoy recreation. Also, our recreations should be rational and humane, not doing injury to the rights or feelings of others.

50. Q. And what further?

A. We should only pursue such recreations as will bear reflecting upon, and should avoid all such as are dishonorable, cowardly, and not worthy of a noble mind.

51. Q. State the reasons.

A. Because the possession of an approving conscience alone gives true pleasure and happiness to the mind; whilst enjoyment derived from acts which are wrong and selfish debases and degrades.

52. Q. What then should we aim at in our recreations?

A. We should follow only those recreations which will improve us both in body and in mind.

SECTION IX. OF CONTEMPLATION AND REFLECTION.

53. Q. Is there not one special form of recreation most necessary, yet much neglected?

A. One of the most desirable forms of recreation is contemplation and reflection.

54. Q. Why is contemplation beneficial?

A. Because in contemplation our minds are drawn from ourselves to a wider view of nature and human life, and thus we obtain higher ideas of man's duty and destiny.

55. Q. And why is reflection beneficial?

A. Because by it we sec our own weaknesses and learn to guard against them, also to cultivate those qualities which will hold them in check.

56. Q. Will reflection teach us anything; further?

A. Learning and seeing our own weaknesses will teach us to think kindly and charitably of others, and will lead us to lend a helping hand to others in trying to conquer! their tendencies to folly or evil.

57. Q. Should reflection be engaged in by all?

A. In the hurry of life from home duties or business cares, all should from time to time pause to think and reflect.

58. Q. For what reason?

A. Because many mistakes and follies would be avoided, and many misjudgments of others prevented, if we took time to reflect upon the present and future results of our actions upon ourselves and upon others.

59. Q. What should be chiefly sought in all recreations?

A. Purity and nobleness; the cultivation of true manliness and womanliness in both our physical and intellectual recreations.

60. Q. How may these be tested?

A. Briefly, whatever in our reading or other recreations improves our better self, by teaching us to restrain our tempers and appetites, to sacrifice our inclinations and comfort to benefit others, and to do our duty in any sphere of life we occupy, is to be commended.

61. Q. And what to be avoided?

All that tends to debase the mind, or make us selfish and extravagant, or lessen our recognition of the duty we owe to others.

62. Q. State the reasons.

A. Because purity of thought and action improves and enlarges the range of the mind, ever adding new pleasures, whilst impurity lowers the moral tone and dulls the intellect.

63. Q. Should all seek to improve their minds?

A. As the powers and capacities of the mind are not limited, it is the sacred duty of all to seek to improve their minds by reading and study.

64. Q. What subjects can most profitably be studied?

A. This must be decided by the tendencies or tastes of each, but the study of history, the operations of nature, science, books of travel, or the record of the lives of great and good men and women, are all well calculated to improve the mind.

65. Q. How does study of the subjects named inprove the mind?

A. Because thus the mind is lifted from the occupations and cares of life to wider fields of thought, and sees more clearly the greatness of the world which is outside and apart from itself.

SECTION X. OF TRUTH.

66. Q. What is meant by truth?

A. Truth is that which neither states nor suggests what is false, nor keeps back what is true, in order to deceive others.

67. Q. Then is truth twofold?

A. Truth possesses the two qualities of clearness and exactness, and a truthful person is always careful that those he is dealing with understand exactly what is meant, and are not deceived in any way.

68. Q. Name the opposite of truth?

A. A LIE.

69. Q. Are there no distinctions in lying?

A. There are no distinctions in lying. Whatever is meant to deceive is a lie.

70. Q. Then what constitutes the essence of lying?

A. The intention to deceive, whether it take the form cither of suppressing part of the truth, or actually

stating that which is false.

71. Q. How should truth he regarded?

A. As truth is one of the marks of a noble mind, we should prize it beyond all profit or gain.

72. Q. How should a lie be regarded?

A. A lie is the greatest dishonour of which we can be guilty.

73. Q. Why so?

A. Because truth gives us confidence in each other and thus cements society together, while its beauty is acknowledged even by those who do not habitually adhere toil.

74. Q. Will any circumstances justify departure from the truth?

A. None whatever. Even where our own interests will apparently suffer by sticking to the truth, we should neither hesitate nor prevaricate.

75. For what reason?

A. Because, habits of deception and falsehood are easily formed, and grow with great rapidity; hence we should avoid all deception or any departure whatever from the truth.

76. Q. Is there any other reason?

A. A lie degrades the person who tells it, and invariably requires other falsehoods to screen it.

77. Q. Name one of the things which tends to lying.

A. The habit of exaggeration, which weakens the clear view of truth, and often leads to actual falsehood.

78. Q. What then should be guarded against?

A. We should avoid any deviation from the truth, however small, and should strictly adhere to the truth even in the most minute particulars.

79. Q. What is an oath?

A. An oath is a solemn affirmation, in which God is appealed to as to the truth of a statement made or a promise given.

80. Q. How many kinds of oaths are there?

A. There are two, namely, those which pertain to Courts of law, and those which pertain to promises made.

81. Q. State particulars of the first kind.

A. Witnesses in Courts of law give evidence or testimony, and by their oath are sworn to tell "the truth—the whole truth—and nothing but the truth"—regarding the matter being dealt with, so far as they know, for verification of which they appeal to God.

82. Q. State particulars of oaths regarding promises made.

A. This kind refers to oaths of allegiance to the Sovereign, or to carry out faithfully the duties of a public office, the promise being supported by an appeal to God.

83. Q. Docs the taking of an oath confer any greater obligation to tell the truth?

A. It does not increase the moral obligation, but it does increase the legal obligation, as it renders any one swearing falsely liable to be punished for perjury, or false swearing.

84 Q. Why does an oath not increase the moral obligation to tell the truth?

A. Because the obligation not to deceive others always remains, and no circumstance can either strengthen or weaken it.

85. Q. How then may our duty on the matter be summed up?

A. It is our duty not only to avoid actu[*unclear:* al] falsehood, but also to see that our words [*unclear:* and] not misunderstood in a way calculated deceive or injure others.

SECTION XI. OF SELFISHNESS AND DISHONESTY.

86. Q. What selfishness?

A. Selfishness is the exclusive or [*unclear:* under] regard of a person to his own feelings, [*unclear:* in] forests and happiness, without consideration for others.

87. Q. What are its chief forms?

A. Selfishness may take various form as covetousness, avarice, love of pleasum indolence, or the gratification of the appetites but its essence is always the same.

88. Q. "What is the essence of selfishness?

A. Contempt for or neglect of the interests or rights of others.

89. Q. But is not the first duty of each to himself?

A. Only in so far as the fair and just rights of others to equal privileges and benefits with ourselves are recognised.

90. Q. How may this he proved?

A. Neglect to recognise the claims, rights and interests of others has been the foundation of every abuse and

wrong the world has seen, hut especially of slavery.

91. Q What follows from this?

A. It follows that in considering the welfare and benefit of others we aim at the highest benefit of the State, and therefore of the individuals who together constitute the State.

92. Q. Is there any other proof?

A. Those States where the interests of classes and individuals have obtained undue power, to the exclusion of the common good, have invariably crumbled to the dust in consequence.

93. Q And what further?

A. The greatest and noblest men and "women the world has seen have been those who have sunk self-interest in the desire to promote the good of their fellows.

94. Q. now may these considerations be applied to every day life?

A. It is our duty in ail the affairs of life, both business and pleasure, to see that we do not become so absorbed in our own aims and wishes as to lose sight of the needs, feelings and rights of others.

95. Q. Name one of the commonest results of selfishness.

A. Where selfishness rules the mind it frequently leads to actual dishonesty.

96. Q. What is honesty?

A. Honesty is that dealing with others which is just, fair, and truthful.

97. Q. What docs dishonesty spring from?

A. A selfish desire to secure that which by right belongs to others.

98. Q. How is it shown?

A. Dishonesty may be shown by deceiving others, either by falsehood or suppressing the truth, or by overreaching them on account of their necessity or ignorance.

99. Q. Is honesty a universal duty?

A. Honesty is undoubtedly a duty which applies to all persons, times and circumstances.

100. Q. State the reasons.

A. Because fair dealing between man and man is the foundation of law and order, and the bond of society.

101. Q. Is there any other reason?

A. Because dishonest conduct deprives others of their rights, and of that which belongs to them.

102. Q. What further reason can be urged against dishonesty?

A. Because securing for ourselves, either by cheating, falsehood or any form of deceit, that which belongs to others, is dishonourable, unmanly and base.

103. Q. Why is dishonest conduct base and unmanly?

A. Because such means of acquiring benefits are not according to the principles of justice, as they do wrong to the rights of others.

104. Q. What are the principal evils of selfishness?

A. Selfishness destroys the kindlier feelings of our nature; it contracts the affections, narrows the mind, and prevents the enjoyment of the true pleasures which spring from benevolence and generosity.

105. Q. How docs selfishness do this?

A. By fixing the mind and affections on self, thus driving out consideration for others.

106. Q. What are the further results?

A. Selfishness, like every other craving of the mind, when given way to increases it:; power and influence, until it becomes a habit and a passion.

107. Q. What is the effect of this?

A. The mind thus loses its healthful balance, and becomes unduly sensible to adversity or disappointment.

108. Q. But are not dishonest men often successful?

A. They may he successful so far as acquiring wealth or attaining any object desired, but such is not true success.

109. Q. For what reason?

A. Because in order to attain success by dishonesty or deceit they sacrifice the nobler qualities of the mind, and throw away that self-respect and sense of manliness which constitute the nobility of our nature.

110. Q. What follows from this?

A. It therefore follows that success in life is to be measured, not only by the end attained, but also by the means employed to attain success.

111. Q. How may this be differently expressed?

A. To express the same truth in another way, it may be said that we should aim after that true success in life which can only be secured by the strictest honesty and fidelity in small things as well as in large.

112. Q. Do men become dishonest all at once?

A. All wrongdoing begins in trivial acts.

113. Q. What follows?

A. As the mind becomes accustomed to evil it goes further and further, until acts are committed from which it would at one time have turned with dread and horror.

114. Q. What should we learn from this?

A. We should learn to preserve a scrupulous integrity in all matters, however small, and avoid taking that first step in a wrong course which so often ends in dishonesty and crime.

115. Q. How may this be done?

A. By acting from principle, and following out what we have already learned namely, the desirability of reflecting on our actions and their effect on ourselves and on others.

116. Q. Is there anything further?

A. We should avoid giving any promise or making any engagement that we do not intend to perform, or which we may not be able to carry out.

117. Q. But may not circumstances aris to prevent our keeping promises or engagements?

A. They may, undoubtedly; but if they can be foreseen it is our duty to state [*unclear:* chem].

118. Q. For what reason?

A. Because mental reservations are [*unclear:* of] the essence of dishonesty, whilst candour and uprightness are marks of honesty and straightforwardness.

119. Q. How may our whole duty to others he summed up?

A. By the Golden Rule—DO UNTO OTHERS AS YE WOULD THAT THEY SHOULD DO UNTO YOU.

120. Q. What would result from this?

A. If this rule of life were followed by all, selfishness and dishonesty would disappear.

121. Q. Why so?

A. Because we should cease to act according to the selfish promptings of our nature, and would judge our actions by the standard which we would wish others to adopt in their conduct towards us.

SECTION XII. OF KINDNESS.

122. Q. What is kindness?

A. That disposition or temper which delights to make others happy.

123. Q. How does it manifest itself?

A. Kindness manifests itself by supplying the wants of others, and promoting their happiness or welfare as far as we able, consistent with our duty to those dependent upon us.

124. Q. What are the special features of kindness?

A. Kindness always exhibits itself in benevolence, sympathy, humanity, and consideration for others.

125. Q. Should kindness be practised by all?

A. Kindness to others is alike a duty and a privilege.

126. Q. Why is kindness to others a duty?

A. Because by kindness we lessen the troubles and increase the happiness of others, and thus carry out the Golden Rule.

127. Q. And why is kindness to others a privilege?

A. Because in being kind to others we promote our own truest happiness; for we thus secure the greatest of all pleasures,—that of doing good.

128. Q. Are there any who have a special claim on our kindness?

A. We should at all times be specially kind and considerate to the aged, the weak, the infirm, and all who are poor and distressed.

129. Q. Can these be more fully stated?

A. The wants and necessities of those who are blind, deformed, or maimed, most strongly appeal to our sympathy and kindness.

130. Q. For what reason?

A. Because of their being helpless owing to causes beyond their own control.

131. Q. Is there any further reason?

A. We should help those who are afflicted as an expression of gratitude at being ourselves preserved from the troubles which afflict them.

132. Q. Why should the aged receive special kindness?

A. Because their long experience entitles them to respect, and their feebleness appeals to our sympathy; and because we should treat them as we ourselves hope to be treated in old age.

133. Q. What other classes besides the aged and the afflicted specially deserve kindness at our hands?

A. All infants and young children, and those who from ignorance of our language, weakness of intellect, or

a lack of the blessings of education have not had the same opportunities as ourselves.

134. Q. But is not charity often bestowed on unworthy objects?

A. It is unfortunately true that charity is often bestowed on those who are unworthy or ungrateful, but the fault of this lies with the receiver, and not with the giver.

135. Q. How then should we act?

A. Whilst making due enquiry as to the needs and deserts of those we assist, we should remember it is better that ten unworthy persons should receive our aid than that one who needs and deserves it should be refused.

136. Q. How should we treat dumb animals?

A. We should always treat dumb animals with kindness, thoughtfulness and consideration.

137. Q. For what reasons?

A. Because they cannot tell their wants, and because, being our inferiors in the scale of creation, given for our use and service, it is our duty to provide for their wants and comfort.

SECTION XIII. OF TEMPERANCE.

133. Q. What is temperance?

A. Temperance may he defined as that habitual self-control which prevents our going to excess in pleasure or any other self-gratification.

139. Q. Is self-control a duty?

A. We should at all times control our actions and desires within the limits of duty to our better self and to others.

140. Q. For what reasons?

A. Because our better self is alone capable of the truest joys and happiness, and distinguishes us from the remainder of the animal creation.

141. Q. What then should guide us?

A. We should regulate our gratification of self by the dictates of temperance and self-control.

142. Q. What should be specially avoided?

A. We should avoid excess in eating or drinking, especially the hateful and degrading vice of drunkenness, and all other actions which will take away our self-respect and cause us to feel ashamed.

143. Q. How may this be done?

A. By occupying the mind with useful and ennobling studies, by healthy recreations, by shunning bad company, and by recognising that true manliness implies the knowledge and mastery of ourselves.

SECTION XIV. OF ANGER.

144. Q. Name a common instance of want of self-control.

A. Anger, or violence of temper, is a common cause and instance of want of self-control.

154. Q. How may this be proved?

A. Because when anger rides us we are apt to feel, say, and do things which in a calmer moment we regret; hence, violence of temper is both a cause and an instance of want of self-control.

146. Q. What frequently follows?

A. It frequently happens that angry tempers lead to fury and rage, and sometimes to crime.

147. Q. But is not anger sometimes justifiable?

A. Anger is undoubtedly justifiable towards those who have wronged us or others, but we should even then retain our self-command, and whilst being angry at the wrong should be charitable to the offender, and try to win him or her to better actions.

148. Q. Would not this cause us to take too lenient a view of all offences?

A. Whilst charitably dealing with those who wrong us personally, our duty to society requires us always to assist in bringing to justice those who break the law.

149. Q. For what reason?

A. Because if crimes were re unpunished society would not be safe; hence punishment is meant to make examples of offenders, and thus deter others from crime.

150. Q. How then should we act?

A. We should cultivate a spirit of calmness and self-command, which does not take offence easily, and judges kindly and charitably the words and actions of others.

SECTION XV. OF HABIT.

151. Q. Name one of the chief features of character;

A. One of the chief features of character is habit.

152. Q. What is habit?

A. Habit is an internal principle which leads us to do easily, naturally, and with growing certainty, what we do often.

153. Q. What habits should we cultivate?

A. It follows that we should cultivate good habits.

154. Q. Name some habits specially to
be cultivated.

A. We should habitually practise things good in themselves, such as honesty, truthfulness, justice, and temperance.

155. Q. But what further?

A. we should cultivate habits of kindness, thrift, cleanliness, tidiness, patience, punctuality, courtesy, and thoroughness.

156. Q. Is there any special reason for cultivating these?

A. As habits grow in strength, and thus increase their power, it is evident that if we are not cultivating good habits bad ones are acquiring power over us.

157. Q. How may this be illustrated?

A. livery good quality or habit has its opposite, and hence if we are not tidy we are cultivating a habit of untidiness; if we are not cleanly, we are cultivating a habit of dirtiness; and so on all through the range of life's duties.

158. Q. What then should be our line of conduct m this respect?

A. We should be careful in small things, and whatever we do, do it well.

159. Q. Is there anything further?

A. We should always speak and act in a way that will prevent our falling, into bad habits, which will bind us down to evil courses.

160. Q. Is there not something more?

A. By studying our characters and dispositions we should find out our weak points, and cultivate those habits which are good in themselves.

SECTION XVI. OF THRIFT.

160. Q. What is thrift?

A. Thrift is a combination of industry, economy, and perseverance.

161. Q. To what does thrift lead?

A. Thrift leads to care in the use of time, money, and material.

162. Q. Is the proper use of time a duty?

A. It is our duty to make the best use we can of our time.

163. Q. For what reason?

A. Because the present is our only certain opportunity for work, self improvement, or doing good to others.

164. Q. Why so?

A. Because the future is uncertain—none can know or foretell what the future may he, nor how long life and opportunity may last.

164. Q. Is there any other reason?

A. Lost opportunities never return. Others may occur, but those which are lost are gone for ever.

166. Q. How then should we regard time?

A. We should regard time as a precious boon, and both value and use it accordingly.

167. Q. Is care in the use of money a duty?

A. As money is a means of increasing our own comfort, providing for those dependent upon us, and doing good to others, we should spend it carefully.

168. Q. Is there anything further?

A. By saving money we are able to provide against loss, and the time of sickness and old age.

169. Q. How then should we act regarding money?

A. We should live within our means, and cultivate habits of economy and frugality.

170. Q. What should we specially avoid?

A. We should specially avoid the vice of gambling, which invariably leads to idleness and dishonesty, and often to the serious crime of theft.

171. Q. What further should we avoid?

A. We should avoid entering on ventures or incurring debts which we are uncertain of being able to carry through or pay.

172. Q. How may our duty on this matter be summed up

A. We should be careful and economical without being mean or miserly; and we should try to put by every week a sum, however small, as a provision for the future.

173. Q. What may we hope thus to secure?

A. We should thus secure a free and independent mind, and avoid the unhappiness of being dependent on either public or private charity in sickness or old age.

174. Q. What further springs from thrift?

A. Care of all things we possess, or which are in our charge, will spring from a spirit of thrift, because we shall recognised they have a value.

SECTION XVII. OF HEALTH.

175. Q. What is our duty regarding health?

A. As health enables us to use the opportunities which time affords, and [*unclear:* thus] fulfil the duties of life, it is our duty to [*unclear:* pr] serve our health in every way we are able.

176. Q. How may this be done?

A. By taking reasonable care to [*unclear:* avoi] bodily hurt, or those things which may derange our bodily functions.

177. Q. What is necessary to this?

A. We should study and obey the law of health, and should also especially study our own bodies, and avoid those things which are hurtful to us.

SECTION XVIII. OF INFLUENCE.

178. Q. What is influence?

A. Influence is that impression which our words and conduct make on others.

179. Q. What influence should we try to exert?

A. We should at all times see that the influence of our words and example is to benefit and improve others.

180. Q. For what reason?

A. Because Influence and Example never die. They go on repeating themselves from one to another, as those we influence will in turn influence others.

181. Q. What should we learn from this?

A. The importance of ourselves taking pattern from those who are upright, kind, and good.

182. Q. And what further?

A. The great importance of carefull considering our words and actions, that [*unclear:* was] may not influence others in a wrong direction.

183. Q. Are there any we should specially he careful with in this matter?

A. We should specially watch that [*unclear:* on] influence and example are not hurtful [*unclear:* a] those younger than ourselves, and who [*unclear:* loe] to us for guidance and direction.

184. Q. Have all influence?

A. Influence and Example are thing we cannot separate from us, as we all have circle within which our influence operates.

185. Q. What then should he our aim?

A. We should so speak and act that [*unclear:* th] influence we exert may benefit those who [*unclear:* are] around us, and thus leave an example worthy of being imitated.

SECTION XIX. OF SUCCESS IN LIFE.

186. Q. What are the essentials of success in life?

A. The first essential of true success in life is, as we have already learned, honesty and integrity; for success gained by dishonest means takes away our self-respect.

187. Q. What further effect has dishonesty?

A. By taking away our good name it destroys the confidence of others in our statements or promises, and thus lessens our influence.

188. Q. Name the other essentials of success?

A. Besides honesty, the other essentials of success are fixity of purpose, thrift, and application.

189. Q. What is fixity of purpose?

A. By fixity of purpose is meant having a clear and distinct object in view, and working to secure it.

190. Q. What will follow from this?

A. Those who have a fixed purpose in life do not waste their time and energies on useless pursuits: having selected an object, they work to secure it.

191. Q. Are such always successful?

A. Though we cannot command success, he is more likely to be successful who aims at an object than he who works from day to day with no definite purpose in view.

192. Q. What then should we do?

A. We should set before us an honourable object in life, and endeavour to secure it by honest means, and with due respect for the rights of others.

193. Q. How does thrift secure success?

A. Thrift leads to habits of frugality and economy, and thus teaches us to save what many others waste.

194. Q. What follows?

A. Those who are thrifty gradually increase their store of wealth, and thus acquire increased power, as they are able to assist and employ others, and can deal to greater advantage than those who are without means.

195. Q. What is application?

A. Application means industry and perseverance in following after an object.

196. Q. How does this tend to success?

A. A man who applies himself to his calling uses all his skill and energy to become proficient in it.

197. Q. In what ways may this proficiency be attained?

A. By observation, study, and energy; or, briefly, by doing as well as we can all we undertake.

198. Q. What means should we adopt to this end?

A. We should bring our whole energy to bear on our calling, and endeavour to become as perfect in it as possible.

199. Q. How then do fixity of purpose, thrift and application combine with honesty to secure success?

A. By fixity of purpose we are led to work with and for an object; by thrift we save and keep what others waste, and thus make the best of our opportunities; and by application we improve our skill and knowledge, and thus are able to work to the best advantage.

200. Q. If we attain success, how should we demean ourselves?

A. If successful we should aim at using well what we possess: a sense of gratitude should lead us to think kindly of those who are less fortunate, and to do what we can to lessen the misery of the poor and distressed.

SECTION XX. OF SELF-RELIANCE AND FORTITUDE.

201. Q. are all successful?

A. As there are many chances and occurrences—as ill health, losses, accidents,—we cannot foresee or prevent, it must follow there are many who cannot he successful in life.

202. Q. How then should we regard such misfortunes?

A. We should bear them with a brave heart, with fortitude and resignation, and make the best of what we cannot prevent or avoid.

203. Q. What further should we remember?

A. If success does not always attend us we should remember that trouble of some kind is the lot of man, and that there is no position in life entirely free from care and anxiety.

204. Q. What further should we see to cultivate?

A. We should endeavour to cultivate habit of self-reliance.

205. Q. For what reasons?

A. Because it is our duty to learn [*unclear:* a] depend on ourselves, rather than on others and because it is a manly and noble impuls seek to be independent, and to go throng life without resting on others.

206. Q. What will most assist us [*unclear:* in] cultivating a self-reliant spirit?

A. Learning to depend on our own [*unclear:* no] sources, and carrying out the simple [*unclear:* ru] never to ask others to do for us what [*unclear:* was] are able to do for ourselves.

207. Q. How may our duty be finally summed up?

A. We should honestly carry out the duties belonging to our lot in life; be just and considerate to others in word and deed and so control our own tastes and inclination as to leave an example worthy of imitation.

Selections of Poetry to Accompany and

Illustrate the Catechism of the Duties of Life.

Polonius' Advice to his Son.

There; my blessing with thee!
And these few precepts in thy memory
See thou character. Give thy thoughts no tonga
Nor any unproportional thought his act.
Be thou familiar, but by no means vulgar
Those friends thou hast, and their adoption tried
Grapple them to thy soul with hoops of steel;
But do not dull thy paha with entertainment
Of each new-hateh'd, unfledged comrade. Bewared
Of entrance to a quarrel, but being in,
Bear't that the opposed may beware of thee.
Give every man thy ear, but few thy voice;
Take each man's censure, but reserve thy judgment
Costly thy abit as thy purse can buy,
But not express'd in farcy; rich, not gaudy;
For the apparel oft proclaims the man.
Neither a borrower nor a lender be;
For loan oft loses both itself and friend,
And borrowing dulls the edge of husbandry.
This above all: to thine own self be true,
And it must follow, as the night the day,
Thou canst not then be false to any man.

SHAKESPEARE,

Ring Out, Wild Bells.

Ring out, wild bells, to the wild sky,
The Hying cloud, the frosty light:
The year is dying in the night;
King out, wild bells, and let him die.

Ring cut the old, ring in the new,
Ring, happy bells, across the snow:
The year is going, let him go:
Ring out the faise, ring in the true

Ring out the grief that the mind,
For those that here we see no more;
Ring out the feud of rich and poor,
Ring in redress to all mankind.

Ring out a slowly dying cause,
And ancient forms of party strife;
Ring in the nobler modes of life,
With sweeter manners, purer laws.

Ring out the want, the care, the sin,
The faithless coldness of the times;
Ring out, ring out my mournful rhymes,
But ring the fuller minstrel in.

Ring out false pride in place and blood,
The civic slander and the spite;
Ring in the love of truth and right,
Ring in the common love of good.

Ring out old shapes of foul disease;
Ring out the narrowing lust of gold;
Ring out the thousand wars of old,
Ring in the thousand years of peace.

Ring in the valiant man and free,
The larger heart, the kindlier hand;
Ring out the darkness of the land,
Ring in the Christ that is to be.

TENNYSON.

Doing Good Deeds.

MY dearest maid, I have no song to give you,
No lark could pipe in skies so dull and grey;
Yet ere we part, one lesson I will leave you,
For every day,

Be good, sweet maid, and let who will be clever,
Do noble, noble things, NOT dream them all day long;
And so make life, death, and the vast forever,
One grand, sweet song.
C. KINGSLEY (In a young lady's album).

Remembered by What we have Done.

NEEDS then the praise of the love-written record,
The name and the epitaph graved on the stone?
The filings we have lived for, let them be our record,
We ourselves but remembered by what we have done.

We need not be missed, if our lives have been bearing
(As their summer and autumn moved silently on)
The bloom, and the fruit, and the seed of its season—
We shall still be remembered by what we have done.

We need not be missed, e'en if others succeed us,
To reap down those fields which in spring time we've sown;
They who ploughed and who sowed are not missed to the reaper—
They are only remembered by what they have done.

Not ourselves, but the truths that in life we have spoken—
Not ourselves, but the seeds that in life we have sown—
Shall pass on to ages; all about us forgotten,
Save the truths we have spoken, the things we have done.

So let our living be, so be our dying;
So let our names lie, unblazoned, unknown:
Unpraised and unmissed, we shall still be remembered,
Yes.—but remembered by what we have done.

H. BONAR,

Speak Gently.

SPEAK gently!—it is better far
To rule by love than fear.
Speak gently—let not harsh words mar
The good we might do here!

Speak gently—love doth whisper low
The vows that true hearts bind;
And gently friendship's accents flow—
Affection's voice is kind.

Speak gently to the little child!
Its love be sure to gain!

Teach it in accents soft and mild—
It may not long remain.

Speak gently to the young, for they
Will have enough to bear:
Pass through this life as best they may,
'Tis full of anxious care.

Speak gently to the aged one,
Grieve not the careworn heart;
The sands of life are nearly run,
Let such in peace depart.

Speak gently, kindly to the poor—
Let no harsh tone be heard;
They have enough they must endure,
Without an unkind word.

Speak gently to the erring—know
They may have toil'd in vain;
Perchance unkindness made them so;
Oh, win them back again.

ANON.

Work.

WORK! 'tis a noble and a manly word,
For Nature all around us works incessant.
Our mother earth, the vast and mighty ocean,
The stars, the planets, and the glorious sun,
All, all fulfil their mission: so must I .
Be mine to work while it is called today,
For fast the night of Death approaches,
Wherein no man may work. . . .
Hence, indolence! hence, sloth! hence, idleness!
Though not in halls of state, nor scenes of pomp
And glory lay my field of work and toil;
Though in some humble and forgotten place
My task I find and follow day by day,—
Still would I rather have the consciousness
That I have bravely done that duty next my hand.
Than aimed at great things and accomplished nought.
'Tis not the work we do, but how 'tis done,
That stamps with dignity our lot in life.

G. W. RUSSELL,

Speak the Truth.

Be the matter what it may,
Always speak the truth;
Whether work or whether play,
Always speak the truth.
Never from this rule depart,
Grave it deeply on your heart;
Written 'tis in Virtue's chart:
Always speak the truth.

There's a charm in verity—
Always speak the truth;
There is meanness in a lie—
Always speak the truth.
He is but a coward slave
Who, a present pain to waive,
Stoops to falsehood: then he brave,
Always speak the truth

Falsehood seldom stands alone—
Always speak the truth;
One begets another one—
Always speak the truth.
Falsehood all the soul degrades,
'Tis a sin from which proceed
Greater sins and darker deeds;
Always speak the truths

When you're wrong the folly own;
Always speak the truth:
Here's a victory to he won;
Always speak the truth.
He who speaks with lying-tongue
Adds to wrong a greater wrong:
Then with courage true and strong
Always-speak the truth.

AMERICAN SACRED SONGSTER.

Promptness in Action.

THERE is a tide in the affairs of men,
Which, taken at the flood, leads on to fortune;
Omitted, all the voyage of their life

Is bound in shallows and in miseries.
On such a full sea are we now afloat;
And we must take the current when it serves,
Or lose our ventures.

SHAKESPEARE.

True Nobility.

HOWE'ER it be, it seems to me,
'Tis only noble to be good.
Kind hearts are more than coronets,
And simple faith than Norman blood.

TENNYSON

Little by Little.

Little rills make wider streamlets,
Streamlets swell the river's flow;
Rivers join the ocean billows,
Onward, onward, as they go.
Life is made of smallest fragments
Shade and sunshine, work and play;
So may we, with greatest profit,
Learn a little every day.

Tiny seeds make boundless harvests,
Drops of rain compose the showers;
Seconds make the flying minutes,
And the minutes make the hours.
Let us hasten, then, and catch them,
As they pass us on our way;
And with honest, true endeavour,
Learn a little every day.

Let us read some striking passage,
Cull a verse from every page;
Here a line and there a sentence,
'Gainst the lonely time of age.
At our work, or by the wayside,
While the sun shines, making hay;
Thus may we by true endeavour
Learn a little every day!

ANON.

Speak No Ill.

NAY, speak no ill!—a kindly word
Can never leave a sting behind,
And, oh! to breathe each tale we've heard
Is far beneath a noble mind.
Full oft a better seed is sow
By choosing thus the kinder plan:
For if but little good be known,
Still let us speak the best we can.

Give me the heart that fain would hide—
Would fain another's fault efface;
How can it pleasure human pride
To prove humanity but base?
No, let us reach a higher mood,
A nobler estimate of man;
Be earnest in the search for good,
And speak of all the best we can.

Then speak no ill—but lenient be
To others' failings as your own;
If you're the first a fault to see,
Bee not the first to make it known.
For life is but a passing day,
No lip may tell how brief its span;
Then oh! the little time we stay
Let's speak of all the best we can.

ANON.

Psalm of Life.

TELL. me not, in mournful numbers,
"Life is but an empty dream!"
For the soul is dead that slumbers,
And things are not what they seem.

Life is real! Life is earnest!
And the grave is not its goal;
"Dust thou art, to dust returnest,"
Was not spoken of the soul.

Not enjoyment, and not sorrow,
Is our destined end or way;
But to act, that each to-morrow
Find us farther than to-day.

Art is long, and time is fleeting,
And our hearts, though stout and brave,
Still, like muffled drums, are beating
Funeral marches to the grave.

In the world's broad field of battle,
In the bivouac of life,
Be not like dumb driven cattle!
Be a hero in the strife!

Trust no future, howe'er pleasant!
Let the dead past bury its dead!
Act—act in the living present!
Heart within, and God o'orhead

Lives of great men nil remind us
We ran make our lives sublime,
And, departing, leave behind us
Footprints on the sands of time;

Footprints, that perhaps another,
Sailing o'er life's solemn main,
A forlorn and shipwrecked brother,
Seeing, shall take heart again.

Let us, then, be up and doing,
With a heart for any fate:
Still achieving, still pursuing,
Learn to labour and to wait,

LONGFELLOW.

National Greatness.

ILL fares the land, to hastening ills a prey,
Where wealth accumulates, and men decay.
Princes and lords may flourish, or may fade,
A breath can make them as a breath has made;
But a bold peasantry, their country's pride,
When once destroy'd, can never be supplied.

GOLDSMITH.

Kind Words.

KIND words ran never die,
Cherished and Lies';
God knows how deep they lie,
Stored in the breast:
Like childhood's simple rhymes,
Said o'er a thousand times,
Ay, in all years and climes
Distant and near.
Kind words can never die,
No, never die.

Sweet thoughts can never die,
Though, like the flower?,
Their brightest hues may fly
In wintry hours.
But when the gentle dew
Gives them their charms anew,
With many an added hue
They bloom again.
Sweet thoughts can never die,
No, never die.

A. HUTCHNSON.

Well may your hearts believe the truth I tell:
'Tis virtue makes the bliss where'er we dwell;

COLLINS.

Let it Pass.

BE not swift to take offence,
Lot it pass!
Anger is a foe to sense,
Let it pass!
Brood not darkly o'er a wrong,
Which will disappear ore long;
Rather sing this cheery song,
Let it pass!

Echo not an angry word,
Let it pass!
Think how often you have erred,
Let it pass!
Since our joys must pass away.

Like the dewdrops on the spray,
Wherefore should our sorrow stay'?
Let it pass!

If for good you suffer ill.
Let it pass!
O, be kind and gentle still,
Let it pass!
Time at last makes all things straight:
Let us not resent, but wait,
And our triumpn shall be great:
Let it pass!

ANON,

Love of Parents.

MY loving father, mother,—
I never can repay
The heavy debt I owe to them,
And will owe them for aye!

How much to them indebted
I ever hence shall be
For loving, tender care
In helpless infancy!

For clothing, food and shelter—
And hearing all my cares
In wayward childhood's weakness,
And the succeeding years.

In youth's impulsive moments
Their kind advice was given
To shield from harms I knew not!
My follies soon forgiven!

And when in hours of sickness,
Yea, nigh to death, I lay—
How tenderly end gently
They nursed me nigh; and day!

How could I cause one sorrow
To hearts whose love so true,
And pure, and good to me was given
E'en long before i knew?

O loving father, mother,
I never can repay
The debt I owe—will always owe—
But this much will I say:

That long as God shall spare ye,
My gratitude I'll prove
By kindly words and filial deeds,—
True evidence of love '

In life I'll love my parents.
And when they've closed their eyes
In death, sweet loving memories
Shall in my breast arise.

G. W. RUSSELL.

Contentment.

When man has cast off his ambitious greatness,
And sunk into the sweetness of himself,
Built his foundation upon honest thoughts,
Not great but good desires Ins daily servants,
How quietly he sleeps I How joyfully
He wakes again, and looks on his possessions,
And from his willing labours feeds with pleasure!

BEAUMONT AND FLETCHER.

Front Cover
New Zealand Dairy Produce and the Markets of Great Britain and Australia.
With the Compliments of the New Zealand Loan and Mercantile Agency Company, Limited.
Dunedin: Printed by G. R. Smith, "Otago Daily Times" Office High Street. MDCCCLXXXVIII.

To Directors of Dairy Factories and Others Interested in Dairy Produce in Otago.

We have very much pleasure in presenting you with a copy, in handy form, of two important and very interesting circulars which we have received from our London Manager in reference to the preparation, packing, &c., of New Zealand produce intended to be sold in the London market. It is well known that the produce it-self is suitable for British consumption, but the great difficulty has always been to know what are the peculiarities of the Home markets, and how produce should be manipulated so as to bring its full real value in

these markets. Our Manager in London handles a very large quantity of produce every year, and from the time the Colony commenced to send dairy produce and mutton to London, he has taken the keenest interest in that branch of business. His facilities for learning all about the trade are unrivalled, and that he has gone thoroughly and heartily into the matter is plainly apparent from the fullness and clearness of the circulars which we now print. I trust you will find them interesting and an aid to you in your operations.

The circulars are as follows:—

Butter and Cheese, &c.

LONDON,

3rd August, 1885.

Referring to our special circular of 21st October 1887, we now think it desirable in the interests of shippers to comment upon the experiences of the past season, find to make some further suggestions regarding the conduct of the trade in these products, which has been initiated under circumstances that give promise of considerable success in the early future.

Butter.

CONDITION.—On the whole this has been quite as good as could have been looked for, having regard to the general want of actual experience amongst those [*unclear:* mgaged] in packing, transporting, shipping, and refrigerating the various consignments sent hither for realisation. From lack, apparently of concerted arrangements, shipments were carried in temperatures varying from, say, Odeg to 56deg Fahr—*i. e.* part was carried in frozen and part in cool chambers. Those shipments which were forwarded as "ordinary" ago, and consequently arrived here as "[*unclear:* grease]," not come within the scope of these remarks.) In most instances no definite advice was sent by ship-[*unclear:* ers] as to whether consignments were stowed in [*unclear:* ozen] chamber or cool chamber; and as even that portion which was carried as frozen [*unclear:* rgo]o was, as a rule, thawed out before passing into consumption, it was some times impossible to determine the value of the experiments made. In other cases where definite advice was [*unclear:* sent] was often, however, found impracticable to [*unclear:* ascerin] from those responsible for the discharge of [*unclear:* eamors], which is conducted with great speed, [*unclear:* hether] the butter was actually carried as shippers [*unclear:* tended]. In the absence of sufficient and complete experiments it is still difficult to decide that the one system produced results materially different from the other, but amongst experts it is still held that it is at least safer to carry butter in the frozen state, but undesirable to carry it in the same chamber as frozen meat, which not unfrequently is subjected to over 32deg of frost. Butter may be subjected with safety to not more than about 5deg, and if well made may be carried in a temperature of say 40deg Fahr. The range of temperature for carrying butter would thus be from say, 25deg to 40deg Fahr.—or on average freezing point. Further experiments must however be made, with more precision, if possible, than those already undertaken in order to arrive at a definite understanding on this point.

QUALITY.—The variety was endless, ranging as it did from nicely packed, bright, waxy firm, mildly-salted, clean-flavoured parcels, to Indifferently-packed, streaky or mottled, greasy, coarsely-salted, rancid lines. These variations may not have been in many instances apparent at time" of shipment, but if the butter had not been made in such a way as to keep well, no amount of salting would prevent it turning rank, and possibly altering in texture of colour during the voyage. In the case of butter, perhaps less than any other colonial produce, do appearances at time of shipment afford a reliable guide as to its quality (and condition) at time of sale. The quality of the best butter received from New Zealand (and Australia) was such as to give great satisfaction to consumers, and for such parcels there was always a ready sale, buyers having very quickly overcome any prejudices that might have existed against the purchase of Australasian consignments.

PACKAGES.—The great bulk received was of a satisfactory character. The kegs containing about 601b net, of white or light-coloured woods, hound with galvanised hoops, found most favour with buyers. Prime qualities, packed in Pond's patent boxes, containing about 50lb each were also readily purchased, but inferior sorts in similar packages were unpopular. Prime qualities in bright, clean baskets were received in a few isolated instances, and readily sold. Butter in rolls or packed in tubs, old casks, tin-lined cases, coarse-painted boxes, &c., were difficult of sale. In future chiefly kegs and Pond s put cut boxes will be asked for, and the latter should be used for prime qualities only. Inferior butter will probably realise more money if packed in kegs

than if packed in these boxes. Butter in rolls should not be sent.

PACKING.—Butter in kegs did not always have the necessary line white muslin cloths between it and the thin layer of fine salt which should always have been found at the top and bottom of each keg. With enamelled boxes this precaution has not been found needful. It seems doubtful whether many of the kegs received here had been properly treated—scalded and then washed out with salted water—before the contents were packed.

BRANDS.—Except in a few isolated cases, there have been no regular arrivals under distinctive marks, such as would have enabled consignees to make arrangements for sales in anticipation of arrival, or would have attracted buyers to a recognised centre for the purpose of securing butter of a known quality. The few shippers who steadily supplied the market with butter of regular quality under a recognised brand secured better results than could have been obtained for similar produce received at irregular intervals or under varying brands. It is very desirable in the interest's of shippers that they should confine their operations as far as practicable to one regular quality, and that they should select and adhere to the use of one brand for each quality, which brand should be as distinctive as possible. The packages should be prominently marked. It might be found advantageous to affix on the lid of each keg or box a round or square placard of nearly the same area as the lid, containing the words "Guaranteed pure butter" in prominent letters. This is done with advantage in the case of some Continental descriptions. Such labelling would, however, prove most detrimental to the development of the colonial trade if by any chance any consignment were found to fall short of the requisite standard of freedom from adulteration in any shape or form.

REGULARITY in receipt of shipments, in their quality, condition, texture, colour, saltness, flavour, package, &c., &c., has not been by any means secured by the great majority of shippers from New Zealand. It may be safely asserted that without attention to this all-important matter of regularity shippers will not secure on average such good prices for their consignments as might be secured by giving it full and careful attention If a buyer has purchased butter of a certain brand by one steamer and is satisfied with his purchase he expects to replenish his stock on the arrival of the next steamer, and will at once treat for the purchase of a brand which he already knows. If none of that brand is on board, or if it's quality is different from its predecessor, he probably declines to have anything further to do with the brand in future, and tries another mark. The question of regularity in supply, quality, &c., is a much more vital one in the case of such a perishable product as butter than in the case of most other articles, because the gradations in qualities are so numerous, so difficult to detect, and so liable to alteration between date of purchase and time of consumption that buyers are eager to avail themselves of all the assistance they can get from those shippers who will help them by employing a brand regularly, and maintaining its quality and character throughout the season. They are often [*unclear:* constrained] a full price in order to secure a brand they [*unclear:* ka] experience, rather than allow a rival to buy [*unclear:* ft] the other hand, they will *not* sample many [*unclear:* ca] any one mark; they assume regularity [*unclear:* in] parcel, and if this is not found to exist they [*unclear:* in] avoid the mark in which irregularity has been covered. Shippers will therefore find that they reap a tangible benefit by giving close attention this matter. Indeed, it may be found better [*unclear:* to] a "fair average quality" regularly than [*unclear:* to] "secondary" and a "prime quality" [*unclear:* alter] In this connection it should be noted that-lines" of butter will almost invariably [*unclear:* sell] readily than small parcels of various [*unclear:* marh] qualities, even although "on average" [*unclear:* the] may be equal to the larger consign ents [*unclear:* in] of quality, condition, colour, [*unclear:* flavour], &c. always expect to get small lines—say under [*unclear:* 10] at a reduction from the price they are [*unclear:* prep] pay for larger shipments. For these [*unclear:* reasons]' made on the factory or creamery [*unclear:* system] commands more attention than does [*unclear:* that] from numerous small dairies.

Specifications and advices as to [*unclear:* quality], pecially when experiments were being [*unclear:* made] often received in an incomplete form. [*unclear:* The] tare and net weight of each package should [*unclear:* be]—each package being numbered. The [*unclear:* meth] preparation should be stated in a word; [*unclear:* also] butter at time of shipment (if possible), [*unclear:* and] with any other particulars likely to effortful information to buyers or elicit helpful come for the future guidance of shippers.

Shippers, carriers, [*unclear:* warehousekeepers], wholesale buyers, and consumers alike [*unclear:* have], learn in connection with New Zealand [*unclear:* butter] that cannot be gathered except by practical [*unclear:* ence] as to the best means of making, [*unclear:* carr] storing, and distributing butter which has to [*unclear:* be] so long after being made, and brought [*unclear:* to] under such trying conditions as to [*unclear:* transit] Hence the desirability of having *full* particularly specifications.

Cheese.

CONDITION.—On the whole this has [*unclear:* been] good, but not a few shipments have been [*unclear:* spe] being carried as ordinary cargo, or under [*unclear:* unsatory] conditions as to temperature in so-[*unclear:* called] chambers. Some consignments have been [*unclear:* carr] frozen chambers; but while it cannot with

certain ascertained that these were adversely [*unclear:* affected] by it is not improvable that some of the bitter which characterised their flavour was the reason the extremes of temperature to which [*unclear:* chee] shipped was subjected. So far then as [*unclear:* reae] perience is of practical service, there appears no reason to depart from the range [*unclear:* originally] mended—viz., 40deg to 50deg Fahr. A [*unclear:* great] would be gained it it could be arranged [*unclear:* to] cheese in a separate chamber with a good [*unclear:* curr] cooled air passing through [*unclear:* it-]

QUALITY.—While this has been irregular [*unclear:* th] out the average has been higher than [*unclear:* might] been looked for, and has led those engaged industry to hope that New Zealand cheese will take a foremost place amongst imported descriptions. Some consignments have consisted of [*unclear:* cheeses] had been kept too long before being [*unclear:* shipped]. faults were found—namely, with the [*unclear:* crumb] which was sometimes so marked as to [*unclear:* interfere] the drawing of samples; with [*unclear:* the]" character of some, with the irregularity of [*unclear:* qu] found in the same mark, and even in the [*unclear:* same] age, and with the occasional lack of [*unclear:* richness]. ch l [*unclear:* thre] hand, many consignments were landed in good order, were of rich quality, evenly coloured, regular throughout, and in a few instances were almost perfectly "clean" in flavour. Such parcels have [*unclear:* ealised] rather better prices than were at the [*unclear:* date] their sale obtainable for United States or Canadian consignments

SIZE.—The suggestions made in our special circular of 21st Oct. 1887 (reprinted below) were probably not deceived in time to admit of arrangements being completed for the shipping of 58lb to 70lb upright Cheddar [*unclear:* haped] cheeses-the size most readily saleable in this market. The assortment received during the [*unclear:* ast] season was much varied, and whilst shipments were generally sold on the merits of their "quality and condition." the question of shape and size effected their sale more or less appreciably.

FLAVOUR.—In the great majority of cases the favour of New Zealand cheese has been too strong [*unclear:* or] nippy" for the English taste. Many consignments have been very ill-flavoured, being bitter [*unclear:* or] "oniony," or garlic-tainted; whilst others, though not altogether so mild as was desirable, possessed considerable merits by reason of their being rich and [*unclear:* alrly] "clean" to the taste. Possibly the "nipponese," and "onion" or "garlic" flavour may each, [*unclear:* part] from the question of pasture, be partly due to the changes of temperature to which the cheese was subjected between time of manufacture and date of [*unclear:* ale]. Further experiments with data, as to pasturage, as to temperature when made, as to storage sending shipment, as to temperature when [*unclear:* shipped], are still required to enable consignees to arrive [*unclear:* t] a reliable opinion on this point. COLOUR—This has been generally good. Mottled cheeses have, however, been too numerous. An even colour is wanted, and probably a paler shade than that usually employed would better have met the requirements of this market. White cheese, but only when of prime quality, commanded full rates. A small proportion of the produce of each dairy might with advantage be so shipped, if the quality be really good. Inferior or secondary white cheese will probably make less money than inferior or secondary coloured cheese.

PACKAGES—'These have been throughout unsatisfactory. The wooden cases used were too large and [*unclear:* lumsy], and were frequently broken by reason of their own weight before reaching warehouse here. The tins In which some consignments were packed were entirely unsuitable. The least objectionable form of package is that In which the fewest number of cheeses is packed—one cheese in each package being the only satisfactory arrangement. Roughly made, but strong, round baskets, with lids, have been availed of by some shippers, and no exception can well be taken to this form of package, provided its prime cost is not excessive. They are well suited for carrying 561b to 701b cheeses, but still in point of neatness, they fall considerably short of the round wooden boxes used by Canadian and United States shippers, so well known in this market.

UNIFORMITY as regards size, shape, colour, flavour, &c., has by no means been secured, either in respect of New Zealand shipments generally, or as regards the produce of any district in that colony. Further, many of the factories have not confined their operations to the making of cheese of one size, shape, or quality, but under *one* mark have sent forward (without any intimation of the fact) small, old, inferior cheeses, weighing 20lb to 25lb each, and large, new, prime cheeses, weighing about 60lb each. Until *regularity* is secured in the preparation and shipment of each factory or dairy, it is manifestly impossible to sell "to arrive"; and buyers will not take the trouble to ask for the "first offer" of a coming shipment of any particular mark unless they can rely upon its quality being even throughout, and equal to previous parcels. For this privilege buyers will often pay a premium for a known brand. The trade as a whole, however, will not satisfactorily develop until shippers throughout New Zealand agree to make *one leading kind*—say full cream cheese of upright Cheddar shape, weighing about 56lb to 70lb each, mild in flavour, close in texture, slightly coloured, and packed singly.

Pork.

In case it should be found desirable to utilise dairy refuse in "fattening pigs for transport in freezing

chambers to the London market, we may mention the following considerations for guidance of shippers—viz.: The most suitable weight in carcass is about 60lb. The carcasses will be most saleable if shipped whole, *i e.*, without detaching head and feet, or splitting into sides. The best time of arrival is during the cool and cold months of the year, avoiding if possible the months of May to September.

—Yours, &c.,
HENRY M. PAUL,
Manager.

The second circular to which we have referred was received towards the end of last year, but very much of the information it gives is still fresh and of importance, and I am [*unclear:* ure] you will consider it well worthy of reproduction. It is as follows:—

Cheese, Butter, and Pickled or Salted Beef and Pork.

Cheese.

LONDON,

21st October, 1887.

For the guidance of shippers we send the [*unclear:* following] marks upon the above articles written from a London and point.

Past Shipments from Your Colony.—These [*unclear:* have] received too irregularly to admit of a steady made being established in New Zealand produce, [*unclear:* such] is done in Canadian. United States, Dutch, &c. The f[*unclear:* hality] and condition have also been very irregular it the goneml impression left on the minds of experts here is to the effect that the great majority of the shipments received comprised cheese of originally excellent flavour and consistency, and had they been shipped under different circumstances as to temperature in ships' hold they would have found a ready market amongst the highest qualities generally available in this market. Quite recently a few cases, shipped at lnvercargill, which happened to be stowed in a particularly favourable position in the hold of the "Tainui," viz,—in close proximity to the freezing chamber,—reached London in perfectly good condition, and the opinion above quoted found verification in the fact that for these cases 60s per cwt, the top price for prime American cheese, was easily secured. It is manifest then that for quality and method of preparation your colony can compete with America or Canada. The great drawback to the successful sale of your produce in this market is its unsatisfactory condition on arrival. This has not yet been proved to be an insuperable difficulty, but for some reason with which we are not acquainted, shippers have continued to ignore the instructions, which we have so frequently sent, that they should avoid shipping cheese as general cargo, and should insist upon having cool space provided for the transport of their produce. On this side, when we have approached the shipping companies with a view to getting them to provide cool chambers for butter and cheese, we have always been met with a request for information as to the quantity likely to be shipped. To this we have been quite unable to give any satisfactory reply, the irregularity with which shipments have come forward from year to year rendering any estimate unreliable. The matter must be taken up on your side, and already we understand that some negotiations are now in progress, if not already carried into effect, with the New Zealand Shipping Company (Limited) in this connection. But it should be taken up by all the shipping ports in order to command the attention of the steam ship companies.

The following more specific instructions may be of service to you in guiding shippers, should the necessary accommodation be forthcoming, viz:—

- Size: The most suitable cheese for this market, when of good to prime quality, are those weighing from 56lb to 70lb each. Smaller cheeses, though saleable at a reduction in price, are less suitable.
- Shape: The best is the Cheddar shape.
- Flavour should he as mild as possible.
- Colour: Straw colour is most sought after, but cheese of a slightly reddish hue will also sell well.
- Packing: Each cheese should he packed by itself in a round wooden box with a close-fitting lid, after the style of the well-known American Cheddar cheese boxes. It is no use putting the cheeses in tins for this market.
- Uniformity as regards size, shape, colour, flavour, &c. in each shipment is a great desideratum. More important still is uniformity in style of manufacture throughout New Zealand, which, if secured even approximately, would greatly assist colonial shippers in their competition with America.

- Temperature during the voyage to this country should not exceed 50deg Fahr., with 40deg for a minimum record. Freezing must be avoided, at least until further experiment may justify its adoption. In any ease shipping in a cool chamber will undoubtedly be the more economical course to follow.

Charges in London amount to a small fraction over ¼d per lb, to which must be added freight and primage, as may be arranged on your side.

Market prospects are at the present moment perhaps somewhat more promising than usual, owing to the prospective temporary shortness of the Home supply. The general quality of English produce has fallen off very much during late years, owing to the increased rise of "skim" milk by manufacturers. What America can send we have no means of estimating, as we only receive from that quarter whatever may not be required for local consumption. For the same reason we do not receive the pick of the American manufactures. Prices are very irregular throughout the year, the range for the past 12 months for American being from 28s to 65s per cwt. This, however, arises largely from the great differences in quality sent to this market at different seasons of the year. There is always a good demand for sound, well-made cheese, and it seems not improbable that on average, about 45s. to 50s. per cwt, according to quality, might be readily secured throughout the year for [*unclear:* New] produce of that description. During the [*unclear:* late] and winter months (say September to [*unclear:* Mar] siderably higher levels could doubtless [*unclear:* be] and so far as practicable an effort should [*unclear:* be] place colonial shipments on the London market that period of the year.

A Standard of Quality.—The desirability [*unclear:* of] before you exactly that style of cheese which best suit the wants of our market suggests [*unclear:* to] we should name some particular colonial [*unclear:* br] are fortunately in a position to do [*unclear:* so] "Tainui" we received last month a [*unclear:* con] from the Gore Dairy Factory Co., of [*unclear:* Inv] which was, perhaps, as nearly as possib-[*unclear:* pe] point of size, colour, shape, flavour, at time [*unclear:* ment]. We assume that to have been the cast, seven eases which were packed close to the [*unclear:* ref] chamber happened to come to hand in good [*unclear:* com] that is to say, unaffected by the heat of [*unclear:* the] hold, and these seven cases were a practically sample of what New Zealand cheese ought [*unclear:* to] is the parcel previously alluded to.

Butter.

The following remarks are for the guide shippers generally.

- Quality: From what we can [*unclear:* infer] appearance of the least injured of the [*unclear:* variments] from time to time received from [*unclear:* your] is manifest that a really high-class article is a rule, though in almost every case [*unclear:* coming] notice it was spoiled in the course of the voyage country through improper stowage in ship's ordinary cargo. Nothing need therefore be side this head except to ask snippers to keep up the of their manufacture to a regular standard if able.
- Condition: Fresh butter is so [*unclear:* peris] article that it had better not be shipped, [*unclear:* in] time at any rate. If butter containing [*unclear:* only] cent, of salt can be safely conveyed to [*unclear:* this] will probably he found to command a better [*unclear:* p] similar butter salted to the extent of 3 to [*unclear:* 4] though the latter is the safer article to [*unclear:* send] distance. Practical experience alone can [*unclear:* dec] is the better style to adopt, and to that [*unclear:* endments] should be carefully made at the [*unclear:* outs] ably the "2 to 3 per cent, of salt [*unclear:* product] realise 5s. to 10s. per cwt more than [*unclear:* the]" cent, of salt produce," if both were [*unclear:* made] same circumstances, shipped at the [*unclear:* same] landed in equally good order.
- Packages for ordinary purposes [*unclear:* should] of hard wood, hooped with wood or [*unclear:* galvar] and made to contain, net, 60lb. to 100lb. [*unclear:* eab] preference here for the smaller size.
- Time of arrival ought to be [*unclear:* during] months—say, September to March. [*unclear:* Arran] must be made to avoid arrivals during the [*unclear:* hot] months.
- Temperature During Voyage: [*unclear:* From] practical experience it is somewhat [*unclear:* uncert] degree of cold is best adapted for the [*unclear:* preser] butter shipped in your colony. If [*unclear:* frozen] meat, it arrives in good order, but quickly [*unclear:* tu] If carried with cheese at a temperature [*unclear:* rising] Fahr., it may not stand the voyage. The best is, probably, carrying in a temperature [*unclear:* two] degrees below freezing, but that may [*unclear:* pro] portionately costly. It may not be practicable special compartments for butter, as it is [*unclear:* des] split up a shipment between the [*unclear:* freezing] chamber to test results.

Prices: As regards the trade in casks or kegs, values actuate considerably as between summer and winter, and at certain periods (say May to August inclusive) [*unclear:* e] liable to severe depressions, in which all qualities [*unclear:* ffer] more or less. In the absence of supplies of colonial butter in good condition it is difficult to [*unclear:* timate] its probable value if sound, but possibly it [*unclear:* auld] take rank with Danish produce, if landed [*unclear:* here] a condition similar to that in which it was shipped, [*unclear:* uotations] for prime Danish butter in recent years [*unclear:* ave] ranged between 110s. and 130s. per cwt. during [*unclear:*

ptembmer] to March, and between 70s. and 90s. per ewt. during May to August.

Charges in London would amount to about ½d [*unclear:* per] up to ½d per lb., according to price

Experiments: In conducting these, we must ask [*unclear:* ippers] to be most careful to see that their [*unclear:* intentions] to shipment are *precisety* carried into effect, as it [*unclear:* as] frequently happened in our experience that experimental shipments have failed entirely in their object owing to those in charge of steamers [*unclear:* neglecting] carry out the wishes of shippers. Please take [*unclear:* special] of this point in dealing with butter, cheese, &c. [*unclear:* uther], it is desirable that the various kinds of produce shipped, and the varying conditions under which they are shipped, be clearly set forth by special marks on each package, and also that we receive *full* advice thereof. We should also be advised of the various rates of freight (if paid in the colony) and the [*unclear:* lative] cost of the several descriptions, in order to [*unclear:* rive] at a reliable opinion as to their suitability for [*unclear:* e] Home market.

Pickled or Salted Beef.

Past shipments have not been of a satisfactory character, cither as regards their quality on arrival, [*unclear:* or] prices for which they were necessarily sold. But having to altered conditions on your side, prices at one me deemed unremunerative may now be looked [*unclear:* upon] satisfactory, and it may, therefore, be useful to [*unclear:* ippers] to lay before them briefly some of the conditions which must be adhered to in preparing concernments for this market, viz.:—

- Quality: Prime pieces only may be packed, [*unclear:* othing] but briskets and flanks should be availed of. [*unclear:* o] throats, necks, chuck-ribs, shins, or other common [*unclear:* eces] should under any circumstances be used. If [*unclear:* ese] 40ge prime parts be carefully cut up by a skilled [*unclear:* man] to pieces weighing about 8lb each, they can then be [*unclear:* seribed] as "extra Indian mess," and the casks [*unclear:* may] so branded.
- Packing: Each tierce must contain 38 pieces, [*unclear:* d] must weigh, net, 304lb without brine. A thick [*unclear:* yer] of salt should be placed at either side of the [*unclear:* rce], and it should be filled with sound sweet brine, [*unclear:* ar] in colour.
- Casks or tierces must be so manufactured as to event leakage of brine, and to that end must be amde of closc-graincd hard wood, with similarly hard [*unclear:* ngs]. The hoops should be of wood, or failing that, [*unclear:* vansied] iron, to the complete exclusion of ordinary [*unclear:* nwork]. They must be of a uniform size and [*unclear:* ape]

The foregoing precautions must be taken, [*unclear:* otherwise] meat will probably arrive here dark and devoured, poor in flavour, and possibly tainted, [*unclear:* instead] being bright and ruddy with clear pickle. In addition it should be pointed out that it is most desirable that the meat be cured in a low temperature, and that if saltpetre be used in the process of curing, it should be applied only by a skilled hand, as an over dose or an ill-timed application may be prejudicial rather than beneficial to the subsequent condition of the meat. The great end to be arrived at is to lay the meat down here in a condition as nearly as possible approximating its character when freshly killed. Highly-coloured fiery shipments are of as undesirable a type as are those of an opposite type.

Supplies must arrive at regular intervals throughout the year.

Prices are at present somewhat depressed, American "extra Indian mess" being quoted at 75s to 80s per tierce of 304lb net. New Zealand produce in sound condition and of "regulation quality" would not realise more than, say, 70s per tierce, owing to its being a new article; but in course of time that friction in price would doubtless disappear.

Charges in London, say, ¼d per lb.

Pickled Pork.

The market has of late been short supplied with this article, and it is just possible that an outlet might be found here for suitably prepared shipments of New Zealand origin. The following are the regulations as to contents of casks, &c.:—

- Size: Each tierce must weigh 200lb net, and may be constructed on the same lines as those made for pickled beef.
- Contents: Each tierce must contain 50 pieces of pork, each weighing 4lb. These are to consist of 30 pieces ex backs and ribs (streaky part), and 20 pieces ex coarser parts, but no shin pieces will be accepted by buyers. Hams and shoulders will doubtless be disposed of locally.
- Quality must not be too fat, but it should rather he fat than lean.
- Preparation: We cannot well guide your friends in the various details necessary to the successful preparation of the article for sale in this market, but must leave them to arrange for the employment of

someone practically expert in the preparation of pickled pork as sent forward to this country and elsewhere in large quantities from America and from Denmark.

Prices: At present these are unusually high. There is no American here. Danish is quoted at 75s per tierce of 200lb net. That quotation will not in all probability, be maintained, and must not in any way be accepted as an indication of the probable value of New Zealand produce. We cannot even estimate that until we have seen a shipment from your colony landed in satisfactory order. Not more than 10 tierces should form the experimental consignment.

—Yours,
HENRY M. PAUL,
Manager.

Charges.

P.S.—Referring to the paragraphs in foregoing re cheese and butter, we have to report that in view of the possible development of a considerable trade in these products we have made special arrangements with our wharfingers whereby their charges for landing, warehousing, and delivering operations will in future be materially reduced.

To the above I think it desirable to add the following remarks:—

Dairy Produce.

From the increased attention that is now being paid to dairying in this country, and prominence into which our dairy produce—especially cheese—has come in the Home and Australian markets, it is certain that a very great future awaits this [*unclear:* industry]. therefore imperative that the closest attention should be given to it, and that [*unclear:* the] reliable information should be gathered in order that the best results may be [*unclear:* ob] Our London Manager has, in the foregoing letters under dates 21st October, 1887, [*unclear:* a] August, 1888, given most complete information with regard to the [*unclear:* requirements] London market, and in reprinting them at this time I would take the [*unclear:* opport] making some suggestions as the result of our own experience in handling consignment cheese and butter.

Cheese.

While the English market presents an outlet for unlimited quantities of cheese seasons of the year, and must continue to receive the great bulk of our exports, the returned have not always proved satisfactory, and the risks in transit from [*unclear:* im] stowage are not inconsiderable. My opinion is that *during most years* our most [*unclear:* p] market will be found in Australia, where, with a large and increasing [*unclear:* population], of local dairy produce are quite inadequate to meet the demands, and where not [*unclear:* with] protective tariffs, very large quantities of our cheese are sent annually. It may [*unclear:* hap] course, in some years of exceptional growth in Australia, that a smaller [*unclear:* quantity] produce would be required; but ordinarily it may be taken for granted that [*unclear:* A] J must import from New Zealand the great bulk of the cheese consumed. During [*unclear:* th] season we have sold to different of our Australian offices several large parcels [*unclear:* of] cheese at prices *considerably in advance of the highest riding London rates*. [*unclear:* Unfort] the profit has not in every case been realised fully by the factories, the cheese having sold to local buyers early in the season; but the fact remains that the Australian proved by far the most remunerative market during the past year. The size of that has hitherto commanded the highest price in Australia has been *the loaf*, [*unclear:* v] say 9lb. Usually this has sold for 1d per lb more than the larger [*unclear:* makes], experience of the past season has been that the loaf cheese has been difficult to [*unclear:* sel] increased price. Probably the most suitable size to make, in view of the [*unclear:* heavier] making the smaller cheese, is the 28-30*lb cheese*. The larger or 60lb cheese, [*unclear:* made] English market, is not favoured in Australia. I am desirous of placing at the [*unclear:* disp] cheese factories, farmers, and others, the exceptional advantages this Company [*unclear:* po] for the handling of this commodity. In Australia we have our own officers at [*unclear:* the] centres (Melbourne, Sydney, Adelaide, Brisbane, Rockhampton), who have [*unclear:* given] attention to this branch of our business, and in addition we have correspondents at important centre in Australia. *We act only as Agents, never buying on our [unclear: own] no matter what the inducements may be,* and our sole interest is to get the highest [*unclear:* p] price for our clients. We only make *one charge for commission*, whether [*unclear:* the] entrusted to our care is sold in the Dunedin, the Australian, or the [*unclear:* London] Liberal advances to factories, at lowest rates of interest, can be arranged [*unclear:* for] cheese to come in for sale through us. I invite enquiries for information [*unclear:* con] our rules of business from any who are interested.

Better.

The great drawback to the profitable sale of our butter here and [*unclear:* elsewhere] uneven character of our supplies. Some of the potted butter coming into this market the very primest quality, while again there is a considerable amount of inferior [*unclear:* red] the price for which must be very disappointing to the farmer. The butter [*unclear:* trade] country can never be on a satisfactory footing until butter is made on the factory [*unclear:* pri] and put up in even packages to suit the market to which it is being sent. The [*unclear:* loss] Colony from the present unsatisfactory condition of things must amount to many those of pounds per annum.

Donald Stronach,
[*unclear:* Mam]

DUNEDIN,

September, 1888.

Scheme For Colonization by Pensioners
Drawn up by a Sub-Committee of the National Association for Promoting State-directed Colonization.
To Which is Attached Some Considerations as to the Benefit to be Derived by the Colony from Settlements of Pensioners,
By Captain Daveney, Officer Paying Imperial Pensions in Auckland.
Aukland: Printed by Wilsons and Norton, Queen and Wyndham Streets. MDCCCLXXXVIII.

29, S. JAMES'S PLACE,

3*rd January*. 1888.

MY LORD,

I have the honour to forward for your consideration a skeleton scheme in connection with the subject of pensioners' emigration.

It will be within your recollection that I brought the subject under discussion in the House of Lords, in the form of a motion for papers, in July last, in reference to the Colony of New Zealand, where the homestead settlement exists, and where the pensioner settlements formed by Governor Sir G. Grey proved successful.

The enclosed scheme is not drawn with regard to any special colony, but its terms are applicable to all.

On page 2 is an extract from the Financial Statement of the Premier of the newly-elected House of Representatives in New Zealand, which shows a desire on the part of the Colonial Government to take action in the matter.

I venture to forward the enclosed scheme for your consideration, in consequence of your favourable reply on the 21st of July last, viz., that the subject should receive further attention at the hands of the Secretary of State.

I am, my Lord,
Your obedient Servant,
Sandhurst.

THE UNDER SECRETARY OF STATE,
WAR OFFICE.

Extract from Financial Statement

by Major Atkinson, Premier of New Zealand, November 7th, 1887.

"The time also apparently is favourable to the establishment of pensioner settlements. Much interest is being taken in this subject by leading men in the United Kingdom, and a good deal of thought and attention has been given to the details of a scheme by a gentleman in Auckland, who has devoted a large amount of time and energy to the matter. The Government are of opinion that every effort should be made to induce a considerable immigration of this class of persons to the colony. As an essential means towards accomplishing the above

important objects—and, indeed, the settlement of the country generally—the Government propose to amend and simplify the land laws, and as far as possible, make them uniform throughout the colony; to allow selectors full freedom of choice as to tenure, and above all, and as the dominant idea, to enable the *bon# fide* settler, to get possession of, and a title to, his land with the least possible delay and expense. It is, perhaps, desirable here to declare that the Government fully recognise the wisdom of the principle which has been acted on since 1879-80, namely, that the proceeds of the disposal of our lands should be treated, not as ordinary revenue, but as a special fund for opening up the country and promoting settlement."

Before attempting to propose a scheme for Colonization by Army Pensioners, we would point out that, if it could be arranged, the Pensioner and the Colony would both benefit by it. The Pensioner: first, because, instead of finding himself a surplus hand in a labour market already overcrowded, he would have an opportunity of utilising and improving his resources; health and steadiness, perseverance and work, alone being required to ensure success: and secondly, because, whereas in England he would find it most difficult to provide for and start his children in life, in the Colonies they would be of great assistance to him, and able eventually to start themselves.

The Colony: because Pensioners—men of from 38 to 46 years of age, medically examined and passed constitutionally fit, would be desirable men for it to assist, inasmuch as every 100 Pensioners would represent, at £120 a head, £12,000 capital, and a further annual payment from the Home Government, which, if capitalized, would represent about £16,000. Now, capital and eligible men are what all Colonies require to develop their resources and increase their revenue.

Part I: Capital. For Men about to be Discharged (Army).

In considering the question of Capital, the first point is—How much is absolutely necessary?

As a basis on which to calculate this, we have taken Mr. A. Simmons's "Approximate cost of a family of five persons," as given in a "Table of Colonization Schemes," submitted to the Parliamentary Committee (1887), and we have added to his calculation £10 for outfit..

This gives a total of £160 for the more distant Colonies (for details see estimate on p. 5 for first year's expenses), which £160 the Pensioner must be in a position to expend during the first year of Colonization.

To meet this outlay he has—

1st. Any money he may have in the Savings' Bank.

- Many soldiers have considerable sums of money in the Savings' Bank, but we do not think it would do to reckon on this, and savings are not considered in these calculations.

2nd. His deferred pay (after 21 years' Service).

- A soldier discharged in 1888, after 21 years' service, will receive about £11 deferred pay, and each succeeding year this source of capital will increase by an additional £3, and interest thereon for nine years at 2½ per cent. In 1891 deferred pay, with interest, will be about £22. In the following years this sum will be increased yearly by and interest thereon at 2½ per cent, for fifteen years, till 1897, when a man's deferred pay, at the end of 21 years' service, will be worth about £46. It will continue at this till 1901, when men so discharged will have had no interest on their deferred pay, which will then be worth about £36.

3rd. His Pension.

- At present the only way a soldier discharged to pension, after 21 years' service, can use his pension to raise a sum of money, is by obtaining a six months' advance, but this is quite inadequate for purposes of Colonization.

If, however, the Secretary of State for War would permit a Pensioner to commute, that is, capitalize, a portion of his pension on a fair basis, the necessary funds for Colonization would be forthcoming.

We should strongly urge only allowing as much pension to be capitalized as would produce the necessary amount, because, in cases of men failing as Colonists, they would then still have something left, and would be kept from actual starvation. Moreover, we should attach certain conditions, to prove the *bon# fide* intention to colonize, and to ensure the best application of the funds.

Pensions differ under circumstances of service, but average pensions, after 21 years may be taken as—

By calculations founded on 300,000 pensioners' lives, it is found that a pensioner's life is not so good for insurance purposes as average life,—large numbers dying during the two or three years following discharge,—but the lives of those medically examined and passed fit for Colonization would undoubtedly be of at least equal value to average life, and therefore it might be hoped that if Government allowed pensioners to

commute a portion of their pension, the tables would not be calculated on a basis of interest at 5 per cent, like that for officers, but on a basis like Government annuities.

A soldier enlists between 17 and 25, and completes 21 years' service between 38 and 46. We have taken 40 as an average age on discharge in following calculations.

A 1d. a day = £1 10s. 5d. per annum, which capitalized on Government annuity basis, gives about £26; 6d. a day capitalized gives £156.

Capitalized on basis of 5 per cent, interest in accordance with Tables for Commutation of Officers' Pensions, 1d. a day gives capital value of about £20; 7d. a day gives £140.

From above data an approximate estimate can be compiled for first year of Colonization as follows, for a family of five persons, to most distant Colonies:

We have not taken credit for a Colonial assisted passage, but as pensioners are small capitalists, and nearly all the Colonies at one time or another have given, and three Colonies are now giving, assisted passages to this class, there is little doubt but they would be granted.

With a view to the practical working out of the above, we would suggest that these and following proposals should be submitted to the Secretary of State for War, and that he should be requested to consider whether they, or some modification of them, cannot be carried out.

Scheme.

A Royal Warrant or other necessary authority to be obtained for Army Pensioners, after 21 years' service, to be allowed to commute a portion of their pensions, as follows:—

In case of Private Soldiers, if on basis of Government Annuities, 6d. a day; if on basis of 5 per cent (like Officers), 7d a day.

- In case of Rank and File Non-Commissioned Officers, 6d. a day, or such sum as will leave them not less than is a day.
- In case of Sergeants, 9d. a day, or such sum as will leave them is. 3d. a day.
- In case of Senior Ranks, at same rate as Sergeants, viz., at rate of 9d. in every 2s.
- In 1894, deferred pay will be larger by about £20 than in 1888. If £180 has been found sufficient, we should suggest the amounts allowed to be commuted by Private Soldiers should become either 5d. or 6d., according to basis of commutation.

Above privileges to be granted only to men registering their names for Colonization, and signing a paper authorising sum resulting from said commutation of pension and their deferred pay to be applied to expenses of passage, etc.; residue to be paid them in Colony selected by them, under certain conditions proposed below.

Men wishing to avail themselves of the above privilege, to send in their application through their Commanding Officers, stating what Colony they wish to go to, a given number of months before date of discharge, and the Commanding Officer to insert thereon whether he considers the men fit candidates. (Number of months would depend on where their Regiment was serving, and how long it took to make arrangements. It is most desirable that men should go straight from their Regiment to port of embarkation.;

The Officer commanding to forward the application, together with—

- *A Medical Certificate* of the physical fitness of the man and his family; (the form of this certificate to be approved of by the Colonial authorities.)
- A copy of man's Medical History Sheet;
- A copy of man's Record of Service, with probable date of discharge inserted thereon;

—through the General commanding the District in which the Regiment is serving, direct to the Pension Commissioners Department.

That Department having checked record of service, and noted data for commuting pension, to forward the papers to the Colonial Office.

Colonial Office to forward to Agent-General of Colony selected by intending emigrant.

Agent-General, if satisfied with the case, to arrange for passage as soon as possible after date of discharge, and to send notification to port of disembarkation; returning papers, with date and port of embarkation and name of ship noted thereon, to Pension Department, who, adding necessary information of pension and commutation, would return the papers to the Regiment

Authority to be given by Secretary of State for War for soldiers about to Colonize to remain on, and be discharged just in time for them to proceed to port of embarkation.

The natural wish to see their relations before leaving England to be met by granting the furloughs generally given before discharge.

Contracts to be arranged whereby outfits, in accordance with voyage and Colony, should be supplied to men and families; payment being made by Regimental Paymasters.

Money for passage to be paid by Paymaster; money equal to cost of sending the man to his place of enlistment, whatever that might be, being credited towards it.

Surplus from commutation and deferred pay to be transmitted (telegraphic transfer, if necessary) to Department in Colony charged with payment of pensions.

Authority to be given Colonial Pension Department to advance six months of reduced pension from date of arrival, if necessary.

The reduced pension accumulated during voyage to be also in hands of Colonial Pension Department on arrival of pensioner.

For Men Already Discharged to Pension (Army).

In their cases there would be no deferred pay available, and it would be necessary to capitalize for them from 7d. to 9d. of their pension, according to basis of commutation and the man's age at date of application for permission to colonize.

The pensioner would have to forward his application and medical certificate through the District Pension Officers, who, in these cases, would do what the Commanding Officer and Paymaster do in the others. In all other particulars the action would be the same.

It would be a matter for grave consideration whether men who took their discharge after a Colonization of Pensioner Scheme was working, without availing themselves of it, should be allowed afterwards to have the privileges given to men already discharged, of commuting a larger portion of pension.

Pensioners from the Royal Navy & Marines.

The case of pensioners from the Royal Navy and Marines is much the same as that of pensioners from the Army.

With a very few exceptions, sailors join the Navy as boys between the ages of 15 and 16½ Their time begins to count towards pension at the age of 18, and they serve 22 years from that age to qualify; that is, they become entitled to pension at 40 years of age.

Their pensions vary from £18 to £54 a year, but very few are so low as £18; the average is said to be about £30.

Under these circumstances, we do not see any reason against commuting £10.

On the basis of Bank Annuities, at age of 40, £5 19s. 4d. per annum would produce £102.

Therefore, £1 would produce about £17, and £10 would produce about £170. This would leave the lowest pensioner only £8 a year, but men really fitted for Colonization would undoubtedly have more. £178 in the first year would meet all requirements, which would be precisely the same as given for soldiers.

The proceedings for commuting would be much the same as in the army.

The man would have to apply and sign necessary documents a given time before discharge, which documents would be forwarded by the Officer commanding the ship from which he was to be discharged, to the Naval Pension Department, who would forward to Colonial Office, as in case of Army pensioners.

The man would have to be kept on his own ship or a guard ship pending completion of transaction and date of his sailing for the Colony.

It is probable that, as a sailor, a man's passage money might be lowered in consideration of his services, but this would be a matter for arrangement.

Sailors already pensioned, like soldiers in a similar position, would have to arrange through their District Pension Officer.

All men, whether soldiers or sailors, discharged—or time expired abroad—should have the option of either returning to England or going straight to the Colony they select. This would not cost the country anything, and might save the men their passage money out to the Colony. If they choose to go to Colony direct, their families, if not sent out free, would be sent out to them with proceeds of commuted pension.

PART II. Colonial Arrangements for Reception and Start of Pensioners in Colonies.

In the first place, it would be necessary for the Colonial Office to communicate with the various Colonial Governments, pointing out the position and means of pensioners, and inviting them to assist in Pensioner Colonization. If any Colony responded and made necessary arrangements, Pensioner Colonization could begin;

other Colonies being added to list of those available as they chose to give facilities.

The way in which a Colony might be fairly asked to assist would be as follows:—

- By authorising their Agents-General to act for pensioners as to providing passages and notifying their departure to proper persons in Colony. (This has been done at different times for emigrants by most Colonies.)
- By giving free or assisted passages. (This has been done by many Colonies, and the latter is being done now by three Colonies for small capitalists.)
- By providing accommodation at ports of disembarkation for Colonists, and proper persons to receive them and pass them on to their locations at once. (This has already been done by some Colonies.)
- By free passages up country. (This also, we understand, has been already done at times.)
- By having suitable localities previously selected; that is to say, localities which are healthy, well provided with water, of productive soil, and at such a distance from, and with such communication with, a market as shall enable the Colonists to dispose of such portion of their surplus produce at a fair profit, as is necessary to enable them to obtain those necessaries of life which their own farms do not produce.
- By having said suitable localities divided into lots for "Village Homestead Settlements," and a capable head man appointed. (Definition.—"Village Homestead Settlement": A suitable block of land divided into small lots of acres and a settler on each, forming a village, under a head man.)
- By—in above Village Homestead Settlements—giving free grants of lots containing a certain number of acres;
- Or, by letting on long leases, with power of renewal, such lots;
- Or, by sale of such lots on deferred payment system.
- (The Village Homestead Settlements are working in one Colony. The above three systems of allotting land are working in various Colonies.
- By advances on loan at interest of giving sums, to assist in putting up buildings, and, at so much an acre, to assist in clearing land. (This is done in one Colony.)

In Part I. of these proposals we advocated all the surplus money in the hands of Government being transmitted to the Pension Department in the Colony, but did not go into the question of its after distribution.

We would suggest that no money be given to the pensioner till he arrives at the place where he is to settle. All necessaries on landing and while travelling up country to be provided and paid for by Pension Officer out of the man's funds. This will prevent any temptation to spend money on landing, and prevent persons at port of disembarkation taking advantage of newly-landed settlers.

Further, we believe it would be well, that of the surplus, such sum only should be given on arrival at settlement as shall be found desirable—(this sum to be fixed after careful enquiry made beforehand)—and that the rest should be paid in certain fixed sums, according to estimated requirements, with the quarterly payments of uncommuted pensions.

Moreover, as a man might soon after arrival be tempted to mortgage or sell his land, and so be ruined, whereby the object of commuting his pension, namely, to assist and render him independent, would be frustrated, we recommend that all pensioners should, in their original application for commutation, undertake not to raise money on or sell their holdings without permission of the Pension Department, until they have been a given number of years in possession.

If the above suggestions be adopted, a clear agreement to it would have to be embodied in every man's first application to be allowed to commute his pension and Colonize.

Some Considerations as to the Benefit to be Derived by the Colony from Settlements of Pensioners, By Captain Daveney, Officer Paying Imperial Pensions in Auckland.

It is presumed that Government could, during the present depression, purchase from the Natives at Te Kuiti a block of land of 50,000 acres, fit for the settlement of Imperial Pensioners, for the sum of £10,000, this being at the rate of four (4) shillings per acre.

Taking the rate laid down by Sir E. Walter of £25 per man as average amount to be paid to each pensioner, this would make an annual payment to these men of £25,000: money to be spent in the settlement.

The Imperial Government allows to the Colonial Authorities for the trouble and expense of disbursing these

moneys 3 per cent.; this would amount to £750 per annum, so that in about 13 years Government would receive back the whole of the original cost of the land.

In the laying out of the Village or Township for such a prosperous settlement, it is but natural to suppose that very good prices would be obtained for each site, because 1,000 pensioners means 1,000 wives and say from 2,000 to 3000 children, consequently the settlement would contain from 4,000 to 5,000 souls. The money obtained from these sales would more than recoup all moneys spent by Government in surveying and in laying out the roads within the settlement.

By the scheme which Lord Sandhurst has submitted to the War Office to enable a pensioner to commute 6d. per diem of his pension, for the purpose of colonization, he would receive during the first year in the Colony, the sum of £176. This money is to be applied towards passage, buildings, implements, seed, stock, and maintenance for the first year; therefore supposing the settlement to contain 1,000 men, the enormous sum of £176,000 would be spent during the year, and this does not include the private means each pensioner may possess.

In a letter from a warrant officer on leave from India, to the Government of this Colony, it is shown that his own pension would be £216 per annum, and that many of his comrades had requested him to find out the details of what they might expect should they make New Zealand their home. The pensions of these men average £100 per annum, and as a rule they possess some private capital. Definite and distinct information on this subject is looked for from many would-be settlers.

The passage of a pensioner from India is paid by the State. It is the privilege of a soldier to elect to come to a Colony instead of returning to England.

Very many men from the Royal Irish Constabulary, whose pensions vary from £70 to £90 per annum, would willingly make this Colony their home, provided some inducement was offered to them to this effect

It must be borne in mind that the pensioner of the present day is a very superior man to the one of the olden times. For years past no man has been taken on for his second period towards pension, whose character was not good, and sobriety is a *sine qua non*. All are now taught trades, and the school is an institution in every regiment, so that a most intelligent class of settlers would be introduced.

As regards the manhood of the offspring of pensioners, those who are sceptical about the matter should visit the pensioner settlements inaugurated by Sir George Grey, and they will find that the most robust and stalwart citizens of this Colony are the descendants of those pensioners. How could it be otherwise, seeing that only the fittest of the manhood of Great Britain and Ireland, who have served the State for 21 years in all climes, survive to receive pensions, and that these are their descendants.

The Colony has completed at great expense the railway as far as Te Kuiti, some 35 miles beyond Te Awamutu, and to all appearance years will elapse before it is further extended. The land is totally uncultivated and belongs to Natives, consequently there can be no traffic on it to repay the enormous outlay incurred. But should the proposed pensioner settlement be located near or at Kuiti, then that which seemingly was a most unprofitable undertaking, would at once be converted into perhaps a paying concern.

decorative feature

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Fallacies of Orthodoxy.

Fallacies of Orthodoxy

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IT has been claimed by the existing Church in *all* ages that their particular *religion* has been *beneficial* to mankind; and one of the chief *arguments* in favour of *orthodoxy*, used by its *exponents* is, that mankind has *programed*, both *morally* and *intellectually*, just so far as he has become impregnated with *faith*; and it has been the aim of the many sects to *outvie* each other in converting the *whole world* to their *religious views*. Furthermore, it is *adduced* by orthodox theological teachers of the Christian *creed*, that exactly in proportion, as mankind leaves the faith of his *fathers*,—renounces *their religion*, and stands forward as an *independent* member of society, just in that proportion must he be *shunned* by *all* who would be regarded as well-regulated *Christians. Now*, although we are prepared to admit that there may be many honest exponents of so-called Christianity, while we acknowledge with all reverence that many of the teachings purporting to come from Jesus of Nazareth are sublime and grand, well calculated to increase the happiness of the human race and

preserve morality; still, we claim, that as reasonable beings, we, individually, are entitled to use our reason, as much upon religious questions and old-time dogmas, as to exercise that right upon any other question at issue. In the social relations, in business activity, in the political arena, in the arts and sciences, in *all* philosophical and astronomical research, man has constantly exercised his right to individual standing and opinion, and on no other question have his conclusions been so utterly ignored, as upon the all-important question of religion. It must be acknowledged also, that man has advanced just exactly in proportion, as he has acted up to the dictates of his reason; that he has progressed intellectually only as his moral courage has allowed him to declare his opinions. We must remember, too, that every pioneer of a new fact, every discoverer of a new science, every creator of a new art, every innovator that this world has seen, has been persecuted to the full measure of oppressive power, because he dared—full of the sublimity of a new fact—to stand out from the ranks, and declare his individu- ality. Galileo was a martyr, not because his facts were false, not because there were any proofs that his theories were erroneous, but, because he upset a theological system by his discoveries, and overthrew an orthodox surmise by an objectionable truth; and Bruno, Socrates, and very many other grand minds, suffered each in their turn, for attempting the enlightenment of mankind. Take the Bible and read it as you would any other book, in an unbiassed spirit, and notice the very hazy ideas the writers enjoyed, respecting the Solar system; and the Church *today* still objects to any scientific research, in *any* direction, because she knows that her position becomes more untenable with every new fact discovered.

Orthodoxy is stagnant, it simply cannot advance, and the moment a man doubts, he is looked upon as a suspicious character. Now, all we ask, is, that man shall progress in his religion, as he does in mechanics, and that the blind superstition of past ages, shall be laid away with the wooden ploughs, and shell trumpets of a by-gone generation. In this creation man alone stands crowned with Kingly and God-like reason. Far below him are the animals of instinct, and brute force, to-day he stands supreme, as he ever has stood, because he commands a gift denied the lower animals, the divine spark of reason, and, whilst he uses and directs this faculty to benefit himself mentally, physically, and socially, strangely enough he seems inclined to accept as truth, any religious teaching he may acquire from his every day surroundings; in other words, man uses his reason to push his way to the front ranks in the arts and sciences, and seems to utterly collapse on any religious knowledge. We only ask for the free right to exercise this gift as much in religion, as in politics, as much in creed, as in physics, and in thus asking we fearlessly lay a few ideas before you. Bearing in mind that to doubt on religious questions is considered a crime, we acknowledge that our first attempt to reason out our individual opinion on Biblical Questions was a very timid one, but as we read that No man can save his brother's soul "—we felt a self responsibility for our belief, and, as belief *must* be based upon evidence, we were impelled forward, almost against our will, and what we considered at the time, our better judgment. Investigation at first only made things worse, and our position was not a particularly happy one, until reason came to the rescue, and demanded a deeper scrutiny, unbiassed by preconceived religious myths; and *then* the mind was untrammelled by a blind superstition and ignorance called faith, and fact, stern unrelenting fact, stood out distinctly and arrayed itself against its fictitious opponent, and insisted upon immediate investigation.

We found inaccuracies and misstatements on every page, revenge and wrath, where should have been pity and tears. We read that God was supreme and merciful, and found him ready to compromise, and turn vindictive. That he "was slow to anger and of great kindness," and yet guilty of commanding His chosen people to lead helpless women and innocent children to infamy and death. We read that the wicked shall go down into the pit, and all the people that forget God; and then we were told of the peculiar and justice-lacking doctrine of the atonement. The law of an eye for an eye, was supplanted by the injunction to turn to the striker the other cheek. We had been brought up to believe that the Old Testament teemed with prophecies concerning the advent of the Messiah, yet with sickening disgust we searched in vain for any such prophetic foretelling, and no impartial mind can honestly affirm, that Jesus was ever expected by any writer of the Jewish Testament; and if ever the so called Saviour lived, we claim that he was a reformer in his day. He taught a religion of love, infinitely superior to the older doctrine of despair, and although some precepts and examples are demonstrated as unworkable, and unsuited to a world such as we inhabit, though His teachings are sadly deficient in some respects, (as to private rights in property, &c.), yet for the man Jesus we have all reverence and respect, and He stands out sublime in contradistinction to the savage vindictiveness of the orthodox God.

Let me ask you,—Can you believe that an all-powerful God could be guilty of mean revenge? Candidly, do you feel that you can honestly declare that you have the smallest particle of reverence for the Jehovah depicted by Moses? Honestly, can you prostrate yourself before a Diety who is supposed to be full of hatred towards your fellow-men, and who only promises to save you from damnation, at the expense of nine-tenths of your fellow-beings? Taking David as a sample of a man after God's own heart, do you feel like trusting this being with the keeping of your sister's immortal soul? Beading what you do about this Infinite Spirit, the Bible (rod, do you not rather feel equal to risking instantaneous annihilation by challenging his right to act in the manner ascribed to him? Does it not seem that this Old Testament God idea, must have been the outcome of an

ignorant, superstitions brain, a crawling, fearful phantasy born of a disordered reason, an attempt to describe what the writer intuitively felt *he* would be, had *he* the power he gave to his fancied God? We tell you the God idea has progressed as man has progressed! The God of the seventeenth century was a kingly conception compared with the Diety of the earlier ages, and the ideal God of the eighteenth century was not to be compared with the Almighty of the present day, and the God of the future will be infinitely above all previous evolvements, for unquestionably, man creates his own God, he can only realise a Supreme Intelligence, just in proportion as his reason out-shadows and conceives an ideal—and "MAN'S IDEAL IS MAN'S GOD."

The God of the early savage was represented by some rude image, the God of the Romanist is many degrees higher than this, and the difference between the intellectual strength of the savage, and the Romanist may be guaged by their conception of an Infinite Power.

Facts require no bolstering, they are there, self-evident and real; faiths are the exact opposite of this, the only thing required of you is to keep quiet, and believe. Facts prove themselves, are demonstrated by science, and are immutable, self-assertive, and palpable. Faith is the dry-rot of a dead forgotten past, a resurrection of antiquity, an assumption of ignorance, palmed upon credulity and weakly intellect. The fact and *you* may not exactly agree, but in religious controversy, whilst clinging faith is pleading with agonising tears for your adherence and friendship, naked facts, scorning the remnants of a vanished past, stands erect and defies your antagonism. Then, reason, king-like, acts as arbitrator, appeals to your intelligence, and demands in the name of suffering humanity, your honest alliance. Fact and Faith are the two opposing forces which have governed and ruled the lives of millions, and in the dark ages, Faith was a giant, whilst Fact was cradled in the bosom of gross ignorance. *Faith* is fast becoming imbecile, whilst *Fact* is being daily crowned with the laurel wreaths of knowledge in the incessant march of progress. *Fact* is real, tangible, sublime, and firm; facing the light of investigation, and courting the dissecting knife of earnest science, she dares an honest refutation, whilst *Faith* cringes and fawns, and asks you to take on trust, fictions which enveloped our world for centuries in darkness and despair, and adduces *no* support but *antiquity*, and claims a prestige that cannot be discounted in the sunlight of reason. Freedom in speech and thought must be admitted as essential to eternal progression, for, tied down and clogged by old-time prejudices, man stands in a narrow court, walled in by arbitary despotism. The outer world of advancing thought revolves unnoticed by him in his pent-up circle, and ignorance reigns, unbroken by the sunshine and storms developed by free inquiry. I *Whereas*, if *Reason*, which is almost almighty, is allowed to assume the rein of authority, the eagle eye of truth sweeps into the distant horizon of the unknown, and, guided by unfettered I reason, solves the problem which the orthodox Scriptures would I teach as being beyond the comprehension of *finite man*. The law of causality so dominant in *Adam*, and still more so in our primitive mother *Eve*, the "*I want to know"* of our first historical parents, has been blamed by the Church as causing the I whole of the crime and misery existing on our planet, and why? Because the Church has ever felt that this particular passion of man, this honest spirit of enquiry, this rending of the veil of mystery, this persistent endeavor to fathom the unknowable, and pierce the secrets of nature, this "I want to know" has, I from the earliest days, been antagonistic to the doctrine of any set creed, and further, the Church has always intuitively known that scientific investigation must eventually cause her downfall. Man, fresh from the Creator, a grovelling, naked savage, still had sufficient king-like dominion over the brutes to demand and maintain his supremacy. Yet, in his ignorance of astronomy and natural law of cause and effect, he felt and believed that there were two opposing powers around him, one of which intervened for his good, whilst the other only gloried in working him evil, and, whilst he feared both powers, and equally worshipped both forces, still, as he advanced, as his knowledge grew, his adoration alone has been preserved for the beneficent Being, or power, *which he called God*, and leaving the orthodox rut of his day and generation, he began to think a little. He noticed that cause and effect had a great deal more to do with his *success* or *defeat* than he at first imagined, and his love of enquiry caused him to become a student of natural philosophy, and as his brain became able to take in the mass of fact he gathered by observation, his terror lessened, and presently he stood upright in the sovereignty of independent manhood, and to-day, exactly in proportion that a nation claims its independence of dogma, and aspires to increasing knowledge, so exactly in that proportion shall we find an earnest, truth-seeking community.

It has been claimed that Christianity has raised the moral tone of the civilised world! and yet if we calmly deliberate on on the Bible teachings, we only wonder that, in spite of these *Sacred writings*, man feels under any moral obligation to-day.

We go further, and declare, in all earnestness—that the nineteenth century man is moral in spite of the Bible; and we affirm, that had the book never been written, man's moral tendencies would have been as clean, if not cleanlier than they are. Polygamy has long been discouraged by civilised races,. *not* because it is forbidden in the Scriptures, but rather because man's innate sense of right demanded the alteration. Slavery has been abolished in direct opposition to Bible teachings, and the right of conquest, with relation to private property, has become, through man's better nature, a dead letter. We do not sacrifice on the altar of war the innocency of

prattlirg children, neither do our modern warriors revel in the abject spoilation of maidenly virtue—(see Numbers xxxi. 17-10)—we have learned better things—and we have *not* learned them from the book that enforces the *command* to slay every soul who defends, and spoil every *heart* that makes home beautiful and life worth having. We have grown better; the world has progressed in spite of the fulmination and denunciations of the Scriptures of the Church, and the anathemas of her priests; and we know, if there had been no brave soul who-was willing to sacrifice his life and reputation in the interests and for the development of his fellow man, the nineteenth century would still have been wrapped in the swaddling clothes of superstition and credulity. Bern ember this, man has advanced in spite of the Bible; man has achieved miracles in modern invention in the face of dogmatic creed; and man has dared to bring forward and prove startling theories, in direct opposition to orthodox calculations.

Scientific investigation has proved the age of our world to be at least six millions of years; orthodoxy limits it to as many thousands. Scientific minds reject the idea of an universal flood, whilst Scripture affirms it. Think for one moment! Mount Ararat is 17,000 feet high. Where could the water, necessary to attain that altitude have come from, and, still greater mystery, where has it gone to? Science demonstrates that had a flood ever been, piscatorial life must have become extinct, and a second creation necessary in consequence; for river-fish must have died by the mixing of the silt and fresh water, and deep-sea fish would have followed suit. We might go further into this flood question, and prove by figures the Bible absurdities as to space and accommodation in the ark; but we refer you to Win. Denton's work, entitled "Radical Discourses," and to Draper's "Conflict between Religion and Science," either of which will afford food for thought to any reflecting mind. Let us speak plainly: we do do so on all other questions, and that we have been silent on this all-important subject *so* long is a slur and disgrace to the dignity of manhood.

Had we a witness in any court of justice whose unsupported evidence was full of discrepancies and contradictory statements, we should at least hesitate to accept as truth any testimony he gave, and if, in excess of this, we found on inquiry that vindictive ignorance and selfish gain prompted his utterances, we should at once refuse to be guided in our verdict, even upon his oath. If we were about to purchase ever so small a section of land, we should demand as business men to see the title, to prove to our own satisfaction that the sale was *bona fide*.

If we hear of any great engineering feat we want to see the result, we want to know about it. We prove the truth of telegraphy, we know the efficacy of steam, and we have demonstrated the efficiency of all motive powers to the satisfaction of an overseeing governmental eye. The English Constitution, through its appointed officers, demanded a scrutiny before it would sanction water-carriage by steam, and only four or five years ago electric tramcars were objected to by the same Government, because they were not considered sufficiently safe as a means of transport. Thus a maternal Government legislates for the well-being of her subjects in this life, and tacitly leaves them to work out the problems of their future welfare.

In earlier days the Church was a recognised authority, not only on religion, but upon all other matters of importance; but she did not grow sufficiently fast to satisfy the cravings of the average man, and her retirement from politics and science ushered in the dawn of a new era to the detriment only of herself. She *was* considered infallible: *to-day* she is impotent. Until *lalely*, she was a power to be feared, now, a *rain* to be pitied. Four centuries ago, in the arrogance of her unlimited power, she abrogated kings, and with the tortures of her inquisition, rejected any truth that was likely to assail her position. To-day she is personified weakness, and will allow you to differ from her doctrines just a little, if *you* will only pay for a seat in her chancel.

Music probably is the most God-like art that man can claim. From the earliest historical records we gather that man has revelled in its delightful strains and been soothed by its entrancing melodies, and the Church to-day, stripped of its musical attractions would lose 50 per cent, of its so-called worshippers. It did not take the cunning of a nineteenth century priest to prove this fact, for from the most ancient M.S.S. we find that she employed music as an aid in her devotional exercises, and whilst she broke the statuary, the divine reflection of Deific power, whilst she burned the literature which was the result of many centuries' culture and learning—the epitome of the grandest minds, and a compilation of the most sublime truths, whilst she destroyed in blind hatred the master touches of the earliest painters, and robbed the canvas of the noblest conceptions, and gave to the fire the result of the most lofty intuitive genius and God-like aspirations—she retained music *literally*, for she imprisoned it in the bosoms of aesthetic womanhood and designing priestcraft,—she retained it, *not* for the benefit of the world, but with subtle reasoning she weighed well its effect on the masses, and many a soul rich in integrity, many a heart too pure to doubt what it could not understand, many a brain too lofty to stoop to attempt to find deceit in an undercurrent, many such, whose feelings were thus appealed to by divine harmony, were restful and seemingly satisfied, but not with the *creed*, it was the *music* that engendered lofty thoughts, the harmony that breathed of heaven, and the melody that instilled a rapture born of a celestial afflatus. Thus music has been an accessory to dogma and creed, and without it, the Church of Christ would fail in appealing to the sympathies of the people.

Now, it is a fact patent to the most superficial observer, that the Deity has granted to mankind the sublime gift of Reason, which has lifted him above the brute level, and, as no power so granted can with impunity be allowed to waste through disuse, we may with truth contend that the man who *will* not reason is a *bigot*, that the man who *cannot* reason is a *fool*, that he who *dares* not reason is a moral coward, and that *he* alone who unhesitatingly tries to solve by the light of reason, any question affecting his relative position to time and eternity *is a man*—a man in the full acceptation of the word. Man is essentially a progressive being; he bears to-day the stamp of a divinity more marked than it was 1000 years ago, and, as his race strides forward in the intellectual march, the imprint of greatness will be more discernable and easier to recognise if he employs reason as an adjunct in the social conference.

Reason *can* be the only attribute calculated to enable man to keep his position, as it is *due* solely to this power that man *has attained* his present intellectual freedom. Faith is a peculiar mixture of ignorance and superstition. We trust, or have faith, because we are inclined to reverence what our parents believed; the doctrine of obedience has so permeated our being, so imbued our organism, that even after attaining majority, and been deemed qualified to think out our position on matters social, political, and scientific, we still remain orthodox to the religious sentiments of our forefathers. We know that *many* things which were considered most proper and consistent, have turned out on personal inspection to be full of fraud, and perfectly unfitted to cope with the necessities of the hour. We have seen *new* inventions displace *old* systems, new theories overturn old ideas, and fresh light has poured in on various subjects, and staggered our leading men of science, and every revelation has only brought man closer to fact and nearer to perfection. Yet in our religious ideas we have remained bigots; we have clung to *faith* and let *reason* cry out; we have *trammelled* and *restrained* man's kingly thought, for we have ignored the repeated contradictions and failures of a *faith*, and remained blind to the consistency and inflexibility of a *fact*.

We stood by faith, simply because our fathers did so, forgetting that our fathers were content with many *other* things beside faith that we *long* ago rejected and cast aside; also, faith was easy, it only required to be credited and obeyed. But *fact* was a *very* different personage. You were continually being hunted up to cope with some new discovery which she brought under your notice, and you wanted rest. It was so much easier to let someone *else* do the thinking that you sided with faith, and took your ease with your back turned, and your eyes closed to the most palpable fact, and you let faith preside, which she *did* by following your example and going to sleep.

We would wish that orthodox people were as conversant with the Bible as the average Freethinker, and science to-day demonstrates the utter impossibility of sacred statements, and as we have to take the Bible on faith, and the statement of science on dead fact, we admit that we lean considerably in favour of science to the detriment of our adherence to the good old Book. The most noble minds of the past have suffered martyrdoms of pain, because they elected to teach a new departure in science to the world, and in consequence were denounced as enemies to mankind. We *know* that the man of the *million* who stood forward to announce the birth of a new fact was *wonted* as *insane;* or imprisoned as a dangerous teacher. We know that Orthodoxy has ever been satisfied with the existing state of things, and that *fact* has always had to fight hard to maintain even the feeblest footing. In religious matters every new thought was trampled underfoot, and on the very question that man should he allowed more freedom and scope than any other, there has always been a strong tendency to break and burke honest enquiry.

Every man who doubts, strengthens and helps at the birth of a new fact; every honest doubter is a guarantee for the future freedom of our planet. Doubt is the outcome of reflection, and reflection is the pet child of Reason; and by the exercise of your honest reason on any point, you only claim your just privilege as a *man*.

Bigotry is despotic; Orthodoxy is sleepy ignorance; and as champions for man's intellectual freedom, we must endeavour to make *truth heard* and *fact* witnessed and confessed. The old argument that antiquity ought to claim consideration for the Bible teachings is not advanced by the Church, since recent discoveries in India prove indisputably that the Hindoo precepts are centuries older than the Christian; and that probably the *Bible* is partly copied from the *Vedas* is also a recognised doubt, expressed by many leading minds. That *Brahminism* is older than the Mosaic doctrine will not be denied by any Orthodox clergyman, and that the teachings of that faith will favourably compare with Bible tenets, we could prove by extracts taken from each. But our present effort is not so much in favour of any particular creed, as to endeavour to awaken a real and lively interest, absorbing and paramount, in the fact, that as *man* advances, socially, politically, and mentally, so he *must* progress in his religion. Probably the Bible suited the generation it was written for; but exactly as when babes, mother's milk was the natural and most proper food, and now, as men, we require stronger meat, so we must alter our spiritual diet.

The Ministry will tell you that their doctrine of atonement is nineteen centuries old, and We will tell you that the same idea was taught twenty-five centuries back, but the fact of its antiquity only proves that our fathers believed it and taught it, and it no more binds us to it, than the fact that they believed the world was *flat*,

or that the sun stood still. Personally, I would rather be an honest doubter, often in error, yet earnestly striving to pierce the mysteries of nature, than be an abject believer on *any* subject, and I do not consider that a Divine intelligence has any right to endow a man with a reasoning brain, and then eternally damn him for the expression of an honest thought. God is infinite, therefore anything I do cannot possibly harm or injure him in any way. I know nothing of Him, only that He *is* infinite, He has not even written *one direct word* to give me an insight into his character, or to allow me to guage His disposition. That the Mosaic account of the Deity is an incorrect one—*I am sure*. That is, I have my own private opinions of the required attributes of a Supreme and Eternal Father, and to meet that opinion there must be an unswerving sense of mercy and love, I can imagine a God of goodness and truth, of nobility and intelligence, because my ideal of humanity is such, and it is impossible for me to imagine anything higher than my ideal, and when I read of the God of Genesis I feel impelled to exclaim, *This* God is a fraud; this picture of the *Infinite*" is the outcome of an ignorant, cruel, and debased brain; there is no sublimity or grandeur to command my respect, no gentleness that awakens my adoration, no kind forgiveness that calls up my esteem, absolutely nothing but punishment for enormities committed and planned by his own express command, and I say, once for all, that the God who could be guilty of the atrocities ascribed to Jehovah of the Pentateuch is beneath the contempt of any reasoning man. Understand me, I am speaking of the Bible God, whose existence I deny, and I deplore that there really is any necessity to endorse my honest conviction that he never existed. I want you to imagine the All-Powerful One as depicted by the Old Testament, and then ask yourself one question, can you respect Him'? And if you cannot respect a Being whom you only know by the way that He is represented, you must either decline his acquaintance or seek other references. I prefer the latter course, and my reason tells me that whilst the Bible Fiend is immeasurably beneath my notice, inwardly I feel the presence of an Intelligence who applauds my conviction. Personally, I feel that I would like to *blot out* the creeds which have promulgated such an awful theory respecting the Architect of the Universe, and, whilst I live, I am determined to give my honest thought in the plainest language at my command to rescue my ideal of a Creator from the degradations and aspersions fathered upon him by hypocritical and fraudulent priesthood. Honestly, it is easier to recognise a Divinity in the portrait given us of his Satanic Majesty, than to imagine a God of Justice in the Jewish Jehovah. I would far rather pay my homage to the Devil of Mosaic history than I would pay fealty to its God. The Satan introduced to our notice in the guise of a serpent disseminated the first truth, and gave the first lesson in general know ledge to our trembling parents. True, from a Bible standpoint, it was disobedience that he encouraged; but, had man not followed the dictate of Reason, he to-day would still be a grovelling, naked eater of roots, devoid of self-respect, and cringing in his ignorance to a power he either now repudiates or silently ignores.

The Devil was the first teacher, and his promise, "Ye shall *not* surely die," proved its truth with the rising of the morrow's sun, and I would infinitely prefer the dictatorship of Satan, and the companionship of such a Devil as depicted in the Book of Genesis, than I would own allegiance to the Jehovah, or claim a friendship with the God of the Israelites. From the first chapter of the Book of Moses to the last Psalm, the eye sickens with reading repetitions of the one fearful scene of bloodshed, and Satan takes a back seat in all these wholesale massacres.

The sacrifice of the innocent bale was not occasioned by an edict from *Hell*, but from *Merciful Heaven*. The infamy imposed upon beautiful imploring woman was in obedience to a divine mandate; and the reckless slaughter of manhood's pride, and the hacking of limbs from the body of the protector of a happy home, was caused by the command of a miscalled God of Justice. Honest indignation bids me hurl defiance at such a God and deny Him.

Let us be honest, and say straight out, we don't believe it, and if we do *not* believe it, why subscribe to it? Why support it? Let us be fair in the matter, and own to being perfectly able to think out our position without the aid of a devil dodger, or a church parson.

We admit that the Bible *has* been the text book of the Church, recognised in our own Courts of Justice, and revered in our schools. Yet it was the text book of *slavery* all Christendom over; (Leviticus xxv. 48-44). It was reverenced by Constantino, the bloody tryant of the fourth century, and is probably recognised by every criminal that our prisons contain. The Bible abounds in the most absurd fables, tells the filthiest of stories, advances bad logic, teaches defective science, and what is infinitely worse, it inculcates *low* morality.

The Doctrine of Jesuism should be fairly placed before us for our consideration, and *we* must be the arbitors of our *own fate*, whatever that may be. Let us examime all doctrine, and let us honestly accept what our common sense and reason tells us is the most correct. *When* man has sufficient courage to dare the opinions of a whole world, to assert the outcome of his honest investigation, *then* will humanity be free and untrammelled by the laws of usage and custom. Let us tell the truth, and shame—*not* the Devil—but the Church, for, like a vampire she has sucked the blood of energy from each succeeding generation. She has in turn occupied the positions of supreme adviser, councillor, guide and director, she has lost caste in every trial against honest endeavour and patient enquiry, and sturdy science at last throws off the long robe of fear, and daringly probes

to the heart of Nature's secrets, in defiance and to the detriment of the old faith.

Every religion is dying a natural death. The open face of truth smilingly looks on, whilst science disencumbers orthodoxy of its frightful accessories. The thumb-screw and rack are laid aside—and no existing Church, even *cares* to be reminded that she *ever used* them. In the name of the Christian religion every fearful degree of crime has been executed. In the name of Christianity, millions of hearts have ceased to beat, and poison has done its rapid and fiendish errand. In the name of religion the faggots have been piled around the naked form of helpless woman, and broken hearted affection has stood by imploring *human* interference. In the name of Catholicism, priest-craft has exterminated thousands of honest thinkers irrespective of nationality or color. And creed-ridden *man* has become the assassin, where unfettered, he would have held out the hand of sympathy; and universal brotherhood has suffered and decayed because of priestly intolerance. Let us give to every mind the right that we claim for ourselves, and credit every being with the integrity that we feel we individually possess. Let free enquiry become a permanent ordinance, and naked truth, by severest tests prove to us, what lias so long been a dead thing, or, at best, a hidden reality. Let the "AGE OF REASON" assert itself, and although like Thomas Paine we may in consequence be deemed sufficiently dangerous to deserve the denunciations of the Church, we will steadily face the "CRISIS," and know that in the end, "THE RIGHTS OF MAN" must be a recognised feature in the legislation of all future governments; and, lest we are accused of tearing down and not rebuilding, let it be remembered, that if we do destroy what never actually existed, we are doing little real harm. We only cause humanity to face stern reality, and take up a definite position; and if man once faces a fact, however bare it may be, it will have one grand merit, it will be true, and freed from *bias*, every step forward will be so much gained. What is advanced will be first proved to be tangible and self-evident, and truth will be clothed in realistic beauty and kingly grace. Each man will become his own Saviour; each soul rest upon its own integrity; and every heart expand in love, which is the holiest passion inculcated by a Divinity, and every individual brain will truly be President and Emperor of the noblest work of nature, the epitome of the Universe, and the apex of Creation—Man.

decorative feature

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The Cosmopolite Series title page

"Biblical Criticisms."

"Something Wrong Somewhere."

No. II. February. 1888. THREEPENCE.

IN continuation of the "Cosmopolite" series, we propose to follow up the "Fallacies of Orthodoxy "—our last month's number—by endeavouring to prove that the said Orthodoxy rests upon a sandy foundation, and that the superstructure is simply a tottering fabric, lacking cohesion in the parts fitted together, and fast falling to decay. It was asked a long time ago—and *we* ask—"Can you gather grapes from thorns, or figs from thistles?" The reply would naturally be, We cannot!—the thing is absurd. Just so! Neither do we expect to get a pure stream from an impure fountain! Many streams are impure, *polluted—not* that the fountain, or *source*, was impure, but, that the stream *had been polluted*,—and if a sanitary reformer saw a stream which had been thus polluted, that he knew contained impurities, which if taken into the human organism would produce disease, and he saw a whole community of people in the act of drinking this impure water, and did not warn them against it, would he not be neglecting his duty towards his fellow-creatures?

The same rule applies in the moral as in the physical world. Give the people purity, pure air, pure water, and you are in a fair way to have a healthy community.

In this age of books and reading we regard it as the duty of the reformer in literature to see to it, that *any* book likely to prove injurious to humanity because of its uncleanness, be subjected to the severest criticism, and every page cleansed from the filth and pollution with which it may have been smeared.

Actuated by the desire to ameliorate the moral condition of humanity, by a fair and impartial criticism and examination of the "Book of Books"—which it is, if measured by the quantity manufactured and circulated, the Holy Bible, or as we have been taught to call it, "God's Word," knowing as we do that if it is really a revelation of the Mind of the "Universal Father," the "All in All," it will, like every part of the great and illimitable universe, be harmonious.

We shall find it to be sublimely grand, harmoniously beautiful, breathing love and joy, peace and happiness everlastingly, and bearing on every page the stamp of Divinity.

If on the other hand we should find it contain anarchy, strife, war (which is wholesale murder), oppression (which means slavery), *cruelty*, "envy, haired, malice, and *all* uncharitableness," we shall *know* that it is *not* the voice of the "Great Creator" speaking to us.

If we find that the above-named and other crimes have been perpetrated by the command of a god, we shall conclude that there is "something wrong somewhere," that this is *not* what the Great All-Father bids His children do; and that the most brutal commands *are* recorded in this Bible as having been uttered by the God portrayed therein, we call the reader's attention to the following passages of Holy Writ, said to have been written by Moses, one of the "*meekest of men*, whose first appearance in public may be regarded as sensational: he, in cool blood, murdered an Egyptian (see Ex., chap, ii., v. 11-12):—

"And it came to pass in those days when Moses was grown, that he went out unto his brethren and looked on their burdens, and he spied an Egyptian smiting an Hebrew, one of his brethren, and he looked this way, and that way, and when he saw that there was no man, he slew the Egyptian, and hid him in the sand."

Comment would be superfluous.

This murderer is the reputed writer of the Pentateuch. *Read what he says* concerning the general conduct of his God. Ex. iv. 24-25. We will not quote on the score of decency, but Ex. I xi. 4, 5, C, says 44 Thus saith the Lord, about midnight I will go out into the midst of Egypt, and all the first-born in the land of Egypt shall die, from the first-born of Pharoah that sitteth upon his throne, even unto the first-born of the maid servant that is behind the mill, and all the first born of beasts. And there shall be a great cry throughout all the land of Egypt such as there was none like it, nor shall be like it anymore," and chapter xii. 29 continues this horrible story by saying, "And it came to pass that at midnight the Lord smote all the first-born in the land of Egypt, from the first-born of Pharoah that sat upon his throne, unto the first-born of the captive that was in the dungeon, and all the first-born of cattle. And Pharoah rose up in the night, he and all his servants, and all the Egyptians; and there was a great cry in Egypt, for *there was* not a house where *there was* not one dead," and as a finish to this wholesale massacre we find in Deut. 1.30, this promise: "The Lord your God which goeth before you shall fight for you according to all that He did for you in Egypt before your eyes." Further, after this bloodthirsty promise, after the drowning of Pharoah's Host, after all, this merciful, Just, and Loving God actually turns round and thus addresses his "Chosen People," Numbers xiv. 82:"But as for your carcases they shall fall in this wilderness, and your children shall wander in the wilderness 40 years and bear your whoredoms until your carcases be wasted in the wilderness, in this wilderness they shall be consumed and there they shall die." What can we think of the following command from this God? Ex. xxxii. 27, "Thus saith the Lord God of Israel, put every man his sword by his side, and go in and out from gate to gate throughout the camp, and slay every man his brother, and every man his companion, and every man his neighbour," and there fell of the people that day 3,000 men. Again, Deut. xx. 10:"But of the cities of these people which the Lord thy God doth give thee for an inheritance thou shalt save alive nothing that breatheth." Once more the Lord says (1st Sam xv. 3), "Now go and smite Amalek and utterly destroy all that they have and spare them not, but slay both man and woman, infant and suckling, ox and sheep, camel, and ass.

Passing over a period of 394 years, we find in Isaiah xxxiv. 2 to 8 that he has become even more ravenous, for he says, "Come near ye nations to hear and hearken ye people; let the earth hear and all that is therein; the world and all things that come forth of it. For the indignation of the Lord *is* upon all nations, and *His* fury upon all their armies: He has utterly destroyed them, he hath delivered them to the slaughter. Their slain also shall be cast out, and their stink shall come up out of their carcases, and the mountains shall be melted with their blood, and all the host of heaven shall be dissolved, and the heavens shall be rolled together as a scroll; and all their hosts shall fall down, as the leaf falleth off from the vine, and as a falling fig from the figtree. For my sword shall be bathed in Heaven. Behold, it shall come down upon Idumea and upon the people of my curse, to judgment. The sword of the Lord is filled with blood, it is made fat with fatness *and* with the blood of lambs and goats, with the fat of kidneys of rams; for the Lord hath a sacrifice in Bozrah, and a great slaughter in the land of Idumea. And the unicorns shall come down with them, and the bullocks with the bulls, and their land shall be soaked with blood, and their dust made fat with fatness, for it is the day of the Lord's vengeance."

This is pretty rough on the Idumeans. We were inclined to think that it was because *they were not* His own, His chosen people, but we read Jeremiah xiii. 13-14. "Thus saith the Lord, behold, I will fill all the inhabitants of this land, even the kings that sit upon David's throne, and the priests and the prophets, and all the inhabitants of Jerusalem with druken-ness. And I will dash them one against another, even the the fathers and the sons together, saith the Lord. I will not pity nor spare, nor have mercy, but destroy them." We think the foregoing passages sufficient to advertise a God of cruel, bloodthirsty disposition, and we will conclude this view of his loving character by references and quotations taken from nine- teenth century men. Professor Denton says, "Hear the bellowing of the cattle, the bleating of the sheep, the death thuds of Jehovah's butchers! See the pools of blood, the Temple floor bespattered with gore, the red stream constantly flowing round the altar, and down into the brook Kedron! Watch the dying struggles of the animals, the varying emotions as they mirror

themselves on the faces of the assembled multitude, where the sickening smell is almost overpowering, where the smoke is constantly ascending in a place that has no chimney, and is grimy as a smithy! What an idea of the worship of a God of love, compassion and mercy!" Mr. Penticost, a Boston Revivalist, says, "If you take a camel hair pencil as I have done, dip it in a bottle of carmine ink, and pass it lightly over those passages of Scripture from Genesis to Revelation that make reference to blood in connection with all that refers to salvation, forgiveness, redemption, sanctification, glory, and everything of that kind, you would be astonished to see how red your bible would look," and he adds, "If you should cut out everything associated with blood, there would be no salvation left at all.'"

Mr. D. L. Moody, another noted Revivalist, speaks in a similar strain. In his sermon on "BLOOD" he says, "If you read your bibles carefully you will see the scarlet thread running through every page of them, the blood commences to flow in Genesis, and runs on to Revelation, that is what God's book is written for! Take out the scarlet thread, and what is left would not be worth carrying home!" If any Deity, or any reputed sacred writings present a more bloody record, they have not been brought to notice. It would seem that no nation in the world could desire a more bloodthirsty divinity, or a more bloody religion.

On the score of obscenity we will say nothing, but refer our readers to the Sacred Book itself; for we know that with obscene passages alone we could reach the limit of this publication; but we should expect the refusal of the publishers, and so our labor would be useless; and in acknowledging the justice of this, we pass by the incest of Lot and his daughters, the cruel deceit of Jacob, the base conduct of Judah and Tamar, Onan, &c.

The parts of the Bible here alluded to are by no means *all* that might be classed with the indecent portions; but by the time the reader has looked up and read them, he will be prepared, we think, to acknowledge that no book of his acquaintance contains half so much that is indecent and unfit to be read by young and old. It cannot be *truthfully* denied that the Bible contains more coarse narratives and indecent language than any other book in circulation.

At a meeting in Holland of clergymen teachers and others for the suppression of obscene literature, the great German philosopher, poet, and writer, Goethe, was present, and on being asked whether he was in favour of the scheme proposed—"By all means," he said, "let us begin with the Bible." He had good grounds for that advice. In suppressing obscene works, the Bible should be the first placed on the list.

Moses, the great Jewish law-giver, as we have already shown, commenced his career with murder, and we are content to leave out all intermediate crimes he committed, and introduce the reader to the closing scene of his lite.

Almost his last command is, "Arm some of yourselves unto the war, and let them go against the Midianites" (Numbers xxxi)—a peaceful-people, and the nation of his wife, Zipporah, and of his father-in-law, Jethro, ("a priest of Midian "), and that he should send 12,000 armed men against them, who slew the five Kings of Midian and all the males, without losing a man, and took all the females captive, and as a booty 075,000 sheep, 72,000 beef cattle, and 61,000 asses, each Israelite being required to kill four men in battle, carry off eight captive women and children, and drive home 67 head of cattle; and, further, when Moses learned that the women and children had *not* been slaughtered he became exceedingly angry, and said (Verse 15), "Have ye saved all the women alive?" (17-19) "Kill every male among the little ones, and kill every woman that hath known man by lying with him; but all the women children that hath not known man by lying with him, keep alive for yourselves, and do ye abide without the camp seven days."

After reading the above, let us remember that in pursuance of this inhuman order, not less than 50,000 women and children were killed in cold blood; and 32,000 young virgins reserved to satisfy the lusts of the murderers of their fathers, and mothers, and little brothers; and then reflect for a little while—bring the picture to our own doors—imagine *our* colony to be conquered by an invading army, and in the deep sorrowing for our fighting dead, amid the mourning of the widows, and the tearful entreaties of the mothers, drowning the wail of the orphan, and the heart-broken cry of severed love, is heard the fiendish command which we have just quoted as having emanated from Moses, "the meekest" of men "and servant of" the Most High God.

Try to picture the sensation of loathing, disgust and the frenzy of despair that would seize upon the survivors of the lost battle field, and then with the rush of honest indignation at such inhuman slaughter, sum up the total in owning your detestation for the man who could perpetrate such atrocities, and express your contempt for a God from whom such commands were taken, and prove your disgust by refusing to recognise in such a Deity your Supreme, Eternal, All-Father.

Numbers xii. 3 says: "Moses was the meekest of men;" but Numbers xxxi. proves him undoubtedly to have been one of the most cruel.

Having thus satisfactorily demonstrated the low standard of morality that the Bible inculcates, having proved the cruelty and bloodthirstiness of its God, and the utter inhumanity of His chosen leader, we will proceed to show how unreliable are the statements contained in the so-called "Holy Scriptures," and endeavour to open the eyes of the truly honest to the glaring inaccuracies and inconsistencies of its statements.

According to Gen. i. 25-27, man was created *after* the animals; but Gen. ii. 18-19 says, man was created *first*.

Genesis vii. 1-5 says, God commanded Noah to take clean beasts into the Ark by sevens. Verse 8-9 of the same chapter says, Noah took in clean beasts by twos.

Gen. viii. 22:"While the earth remaineth, seed time and harvest shall not cease." Whereas, Gen. xii. 54-56 says: "Seven years of dearth came, and the famine was all over the face of the earth."

Ex. iv. 21 and Ex. ix. 12 says: "God would harden, and did harden, the heart of Pharoah;" but Ex. viii. 15 declares "Pharoah hardened it himself."

Ex. ix. 3-6 states that all the cattle of Egypt died; but Ex. xiv. 9 says Pharoah pursued the Israelites with horses and chariots and overtook them.

1st Kings xvi. 6-8 says:"Bassha died in the 26th year of Asa." 2nd Chron. xvi. 1 says: "He was alive in the 36th year of Asa."

2nd Samuel vi. 23 says:"Michael had no child." 2nd Samuel xxi. 8 says:"Michael had live children."

2nd Samuel xxiv. says the Lord tempted David to number the people. 1st Chron. xxi. I says Satan did it.

2nd Sam. xxiv. 9 says: There were 800,000 warriors of Israrel and 500,000 warriors of Judah. Chron. xxi. 5 says: There were 1,100,000 of Israel and 470,000 of Judah—an error of 270,000, or an equivalent to the whole male population of this colony; and this discrepancy of numbers occurs respecting a country very much smaller than Otago, New Zealand.

In Deut. xii. 30-31, God forbid-human sacrifice, but accepts and even commands it in other places (see Gen. xxii. 2; Lev. xxvii. 28-29).

Gen. vi. 5-7 tells us that the wickedness of man caused God to destroy him; but in Lev, viii. 21, we read he will not destroy man though he is wicked.

According to Deut. xxv. 5, a man may marry his brother's widow; but according to Lev. xx. 21 he may not.

Lev. xx. 17 and Deut. xxviii. 22 denounce cohabitation with a sister, but Lev. xx. 11-12 and xvii. 15-16 approves and sanctions it.

Job iii. 11, 13, 17, 19, 22, Eccl. iii. 19-29 and ix. 5-10 says man is annihilated at death; but Daniel xii. 2 says part of the human race is to exist in endless misery.

Ex. xx. 5 says, with 2nd Sam. xii. 14, that children are punished for the sins of their parents, whereas Ezek. xviii. 20 and Deut. xxiv. 16 say children are *not* to be punished for the sins of their parents; and lastly, Job vii. 9, Eccl. ix. 5, Isaiah xxvi. 14 declare positively there is to be no Resurrection of the Dead. Yet in the New Testament there are frequent allusions to the fact of a resurrection. (See 1st Cor. xv. 16 and 52, Rev. xx. 12, 13, &c.)

These are not a tithe of the contradictions to be found in the Bible that might be quoted, but here are enough to convince those who *can* be convinced at all, that the book is far from being harmonious, consistent, and truthful, and that it abounds in cross-assertions, disagreements, and positive contradictions.

"It may not be amiss," says Bennett, "to take a very brief view of the leading characteristics of the most prominent holy men mentioned in the Bible as God's peculiar favourites, with whom He was on the most intimate terms, and who are most often held up to those of the present age as patterns of Godliness and good works, for their character and conduct helped materially in forming a just estimate of the book in which they figure conspicuously. If the book speaks too highly of its most important personages, and upon examination they are found to be men of bad character and reprehensible conduct, the book should materially decline in general estimation as a moral guide and record. Noah shall be the first in the catalogue. He was principally distinguished in five directions. First, as a ship carpenter; second, as a sea captain; third, as a successful conductor of the most extensive menagerie ever gathered together; fourth, as a man who drank too much wine and got so intoxicated as to he in a drunken stupor, with his person improperly exposed; fifth, in cursing the descendants of his own son to *perpetual slavery*, because his son laughed at him as he lay drunk on the ground." Of Abraham he says: "He was called the Father of the Faithful, and he is still so regarded. He is the reputed father of all the Jews, the great-grandfather of Judah, from whose tribe Jesus' step-father descended, consequently, in a particular sense, the progenitor of Jesus, and also the Father of Christianity and Christians. It seems Jehovah was on very intimate terms with Abraham, calling upon him frequently, holding conversations with him, making great promises to him, and sometimes even eating and sleeping with him. They partook of veal, grilled cakes, and parched corn together, and Abraham even washed Jehovah's feet. Abraham *ouyht* to have been a very good man,—was he? It does not appear that he was. He was, unfortunately, addicted to telling falsehoods. When he was 75 years of age and his wife Sarah 65, in consequence of provisions being scarce in his country, they went to Egypt, and Sarah was so attractive in her mature years that Pharoah, the King of Egypt, fancied her, and wished her for a wife, or to take the place of one. Abraham seems to have anticipated this, and instead of telling the King that Sarah was his wife, he used a subterfuge, and introduced her as a sister. If she *was* his sister, he had done worse than lying to live so long with her as his wife. He, however, said not a

word against Pharoah taking her into the palace, and when she was restored to him again, he very willingly pocketed the price of his wife's honor,—or at least, went away much richer in sheep, oxen, asses, camels, and servants, He was also (after this little transaction) much richer in silver and gold, which probably induced him some 25 years later, when he was nearly 100 and Sarah nearly 90 years old, to tell King Abimelech the same story, and notwithstanding Sarah's great age, Abimelech took her into about the same relationship that Pharoah had done, without a word of remonstrance from Abraham, which fact, when we consider his conduct towards Hagar and Ishmael, does not excite our wonder.

Lot was Abraham's nephew. He was called righteous Lot, and was deemed too upright a man to be burned up in Sodom and Gomorrah, so God called him out. But the righteous man's first act was to get drunk and commit incest with his two virgin daughters. If the people of Sodom and Gomorrah did any worse than this righteous man did, they probably deserved the brimstone that God sent them.

Isaac was another of the faithful fathers. He did not greatly distinguish himself, except in practising the same kind of deception his father was noted for. When the men of the plain asked him about his wife, he lied and said, "She is my sister." But a game of deception nearly equal to it was played upon him when he was made to believe that Jacob was his first-born.

Jacob was a cunning knave, without manly feeling. He took a mean and unmanly advantage of his brother, when in a state of extreme hunger, and for a mess of pottage swindled him out of what was considered a treasure of very great value. His brother came in from the fields, wearied and famishing, saying:" Feed me, I pray thee, for I am exceedingly faintand had Jacob possessed the affection and generosity of an ordinary *savage*, he would have freely given the desired food without the slightest reward; but for a bowl of soup he must extract his brother's birth-right.

When practising further deceit he was asked by his father, "Art thou my *very* son Esau." The future father of God's chosen people most falsely said, "I am," making the third he at this interview; and when the strong man Esau came in from the field and found that he had been robbed for the second time, it is said that "He lifted up his voice and wept." During a period of 21 years he (Jacob) afterwards succeeded in robbing his uncle Laban of the best part of his flocks.

Moses we have already brought under the notice of the reader. Aaron was not a man of mark: he showed himself unfaithful to his God, whom he had seen "face to face," and whom he readily forsook and led the people into idolatry, and made them a golden calf to worship. He may have been less talented than his "meek" brother, and was undoubtedly far less tyrannical, merciless, and cruel.

Joshua was emphatically a man of blood and slaughter. It seemed to be his delight to attack nations and cities; to put men, women, and children to death by the edge of the sword, taking their homes and all their property. Few generals have left so bloody a record.

David is the next great general and King—the great Glory of the Jewish nation—the special favourite with his God, being emphatically denominated the "man after God's own heart." After killing the giant Goliath—9½ feet high—with a sling and stone, and Samuel anointing him King, he came promptly into notice. "The Spirit of the Lord came upon him," but his record is not by any means faultless. He did many things which a truly good man would scorn to be guilty of. The manner in which he obtained his first wife Michal was peculiar, if not extremely delicate. Saul named a hundred foreskins of the Philistines as the price of his daughter, but David was fond enough of the killing business to make the number two hundred. Saul became jealous of David, who to save his life fled to Naioth, gathered a band of desperadoes around him, lived a sort of brigandish life, levying black-mail on farmers and others. He robbed farmer Nabul of his wife Abigail. Nabul mysteriously died within 10 days, and she became one of David's numerous wives. After plundering the Amalekites, his services having been refused by the Philistines, and in consequence of the death of Saul, whose son Ishbosheth was assassinated, David became King of Israel and Judah. His lustful passions were aroused when from the top of his house he saw Bathsheba, the wife of Uriah the Hittite, a valiant man, that he brought about an adulterous connection with her; and when she shewed signs of becoming a mother, he sent for her husband Uriah (who was fighting in David's army) to come home for a few days that he might be the putative father of Bathsheba's child. But the soldier was too loyal to his King to sleep at home, and he laid every night at the King's door. David was thus foiled, and he sent him back to the army with a letter to his general, Joab, to place him in front of the battle, where he would be sure to be killed, thus virtually adding premeditated *murder* to seduction, for Uriah *was killed* as per his orders.

To licentiousness and murder he added gross cruelty to his captured prisoners of war.

He killed without mercy or necessity; he placed them under saws and harrows of iron, and roasted them in brick-kilns. He robbed Mephiboseth, a poor cripple, the son of his friend Jonathan, an act which speaks for itself. His murder of five stepsons and two brothers-in-law, to gratify a malignant grudge toward the house of Saul, was characteristic of the man. His injunction on his death-bed to his son Solomon to effect the death of his faithful old general, Joab, whom he dared not en- counter himself, proved the meanness of his character;

and the crowning act of his life seems to have been reached when he commanded his son Solomon to murder Shemei, in the words, "But his hoar head bring thou down to the grave with blood."

Solomon was one of the greatest libertines the world has produced; he kept more females in his seraglio than any man on record; his special gift of divine wisdom did not suffice to keep him true to his religion and his God. He erected altars to the pagan gods of the neighbouring nations, and encouraged their worship; he lived in sensual extravagance and luxury, and died an exhausted, disgusted, disappointed, and unhappy debauchee and roué.

Elijah took pleasure in causing the death of his competitors in the service of Baal, killing 450 at one time, and calling fire from heaven and burning over 100 at another time.—Query! Was it the same kind of fire in which he mounted to heaven?

Elisha called two she-bears out of the wood, and they ate up 42 children simply for calling him a bald-head.

Isaiah was wild and erratic, dealing in language and figures hard to understand.

Jeremiah was accused of being false to his own people, and selling himself to Nebuchadnezzar.

Hosea admitted he took a wife of whoredoms. So we see that principally Bible patriarchs and prophets were not remarkably good men, and if the Bible is to stand on the merits and excellency of its heroes and saints, its character cannot be very exalted.

Having thus shown the falsity of numerous Bible statements, also that many of the leading characters of the Jewish Bible are anything but cleanly, good, and moral men, we conclude that we have satisfactorily demonstrated that the Book abounds in vague absurdities and impure thoughts, and clothes its narratives in language calculated to lower the moral standard of mankind, and we therefore claim that there is sufficient ground to advocate our cause, which is, to endeavour to lead men to look to a loftier ideal: to leave the filthy and improbable stories to fade from the memory of man; for whilst they remain and are perused by young and old, their tendency—which appeals only to the animal side of human nature, and the brutal lust of passionate ignorance—will be baleful and dangerous, and in antagonism to a life of conscientious rectitude.

Its history is faulty, and its science defective; its fables are worn out, and its legends are beyond belief, and have the curse of being told in anything but a proper manner; its astronomy is incorrect, and the best part of the whole Book has been borrowed from earlier conceptions, and culled from ancient records pertaining to peoples of a high moral tone, whose first command in their Decalogue reads—" Thou shalt not kill any living thing" (a subject on which we shall enlarge in a future issue).

We commend to the serious consideration of the reader the following propositions:—

- The Bible is a *human* production, and was written by men of ordinary capacity, who did not excel in beauty of style, depth of knowledge, and purity of purpose, the average writers of the present day.
- It is wholly unknown *who* the great majority of writers were, or *when* they wrote.
- Very few of them ever claim to be inspired, and their writings possess no intrinsic proofs of inspiration.
- Very few of the books were written by those to whom they are credited, or at the time it is claimed they were written.
- The writers were ignorant of the most common truths of nature and science. They thought the earth was a flat, stationery body, having ends, corners, foundations, pillars, &c.; that the sun passed around it, or over it, every day; that it was the centre of the universe, and the principal portion of it. They knew little or nothing of geography, geology, astronomy, chemistry, and many other sciences now pretty well under stood, even by the youth of our land.
- It abounds in errors, improbabilities, absurdities, impossibilities, contradictions, indecencies, and falsehoods; it imparts very little information of a useful or practical character, but is largely made up of crude accounts of wars, bloodshed, marrying, begetting children, concubinage, rapes, adulteries, sacrifices, ceremonies, and rude superstitions.
- If it possessed a value at any former age of the world, and to the people among whom it was written, it has greatly ceased to be of marked value in this age of the world, and to the people of this country.
- That the original copies have been lost many hundreds of years, and all that have existed for 1500 years and more are copies of copies, and transcripts of transcripts, into which many modifications have carelessly, or *purposely*, entered.
- The councils and convocations of bishops and priests which *assumed* to decide which of the books were of Divine origin, and which not, were not men of remarkable ability, information, or morality, and were no more able to form a correct conclusion as to which books should compose the Canon than ordinary men of our own time. On the other hand, they were contentious, and disorderly, sometimes resorting to blows; and we maintain that *no* man is under any obligation to accept the dictum of *any* council that has taken action concerning the Book.
- Thousands of errors of copyists, errors of translators, &c., are known to exist. King James' translation was published in 1611; 100 years afterwards it was corrected by Bishops Tenison and Lloyd; thousands of

errors have thus been discovered and expurgated.

In 1669 Dr Blaney corrected a multitude of errors, reformed the text in many places, and rectified several material errors in

Front Cover

Primary Education System of New Zealand.

Debate on the Education Vote in the House of Representatives, December 19, 1887.

Wellington: By Authority: George Didsbury, Government Printer. 1888.

The Primary Education System of New Zealand.

Debate on the Education Vote in the House of Representatives, December 19, 1887.

The following is that part of Mr. Fisher's speech on the Financial Statement (November 8,1887) which dealt with the cost of the primary education system of New Zealand:—

I come now to the education question. The honourable gentleman, the member for Christ-church North, has the coolness to complain of what we propose to do with regard to the capitation. Sir, did he not himself, in 1884, propose to abolish the capitation? and did he not, fast year, begin to filch it a shilling at a time, without any one knowing anything about it? He had already taken oft one shilling, and we now propose to take the remainder: so that, instead of getting £20,000, we shall only get £16,000, for the honourable gentleman had already taken the other £4,000. He next argues that the House should have ample and abundant opportunities to express its opinions upon this question. Sir, the House expressed its opinion on the question many years ago, when, in 1877, it decided that the statutory capitation should be £3 15s. In the earlier years of the system, and when the country had more money at its disposal than it has now, Parliament increased the amount to £4, by making a 5s. annual grant-in-aid; and it did that for this reason: that in some provincial districts the school system had been carried on upon a somewhat affluent scale, and it became necessary to increase the statutory capitation in order to avoid anything like a violent wrench to the school systems of those districts; but there were other districts where the Education Boards never had been in affluent circumstances, and in those districts the school system had been much more economically conducted. But in paying over the 5s. capitation allowance all districts were treated with uniformity, and so a number of districts which really did not require the 5s. were compelled, *nolens, volens*, to take it. Now, Sir, I have gone through all available statistics relating to the cost of education in other countries, and I confess it is one of the most unsatisfactory tasks I ever undertook, because of the difficulty of arriving at any unifonn basis of cost, "maintenance" covering so many different items of expenditure in different countries. For purposes of comparison I find every education system defective in this respect. They are all weak on the financial side—that is to say, it is difficult to state the comparison with exactness; but some day, when you get a Minister of Education who, in addition to being an educational enthusiast, is at the same time a business man, I am sure you will get an education system sufficient for all our wants at a much-reduced cost. The system must be analysed more keenly than at present, and, if time only be given, I am sure it will be proved that the amount of reduction we propose will not weaken the system at all. I undertake to say that the system will be strengthened, in the respect that we shall be able to obliterate the rapidly-growing feeling that it is too costly. In that feeling there lurks danger to the system itself. Now, Sir, I think it desirable to show what the cost of our system is as compared with the education systems of the Colonics of Victoria and New South Wales, and I have" or "per child" argument does not, I think, convey a correct idea of what the system is costing relatively to our means. Educational theorists put their views of the cost in their own way. I wish to put my view of the cost in my own way. In addition to knowing what we pay, we want to know what we can afford to pay. Well, this table shows what we pay, and it also shows what Victoria and New South Wales pay:—

There it is scon that New Zealand pays £11 2s. out of every £100 of income, while New South Wales only pays £7 14s.; and the New South Wales education system, I assure the House, is not in any respect inferior to that of New Zealand. So that New South Wales, with twice our revenue—twice the ability to pay—pays nearly 50 per cent, less per £100 of income for its educational system.

Hon. Members.—Read the comparative cost per head.

Mr. Fisher.—I will read the figures given in the education paper laid on the table this session, if the House wishes it. I did not read them before, for the reason already given, that the figures do not show in each case exactly what they cover. However, here they are:—

Now, upon examining this table two things will be observed. In two countries the cost is very much lower than the cost in New Zealand; and in three countries the pupils pay fees, which very much reduces the cost of

the system to the State. For instance, in New South Wales each pupil pays a fee of 3d., and last year the fees so paid amounted to no less a sum than £63,164. So that the figures in their naked form as they stand in the table do not furnish an accurate comparison. I have spoken of the difficulty of making a comparison. Let me for one moment dwell upon that difficulty, and illustrate it further. The figures in the table just quoted, as I have already stated, are taken from the education paper prepared by Mr. Habens, the Inspector-General of Schools. The same paper contains this paragraph:—

"The figures that follow are taken from the 'Report of the Committee of Council on Education' for 1885-86. The cost of 'maintenance'—'i.e., salaries of teachers, books, repairs of furniture and buildings, lighting, and warming' (p. xxxiv.)—is stated at page xxxviii. the cost in Board schools is as follows: In London, £3 7s. 10¾d.; in England, including London, £2 6s. 2¼d.; in England and Wales, £2 5s. 4d.; in England, excluding London, £1 18s. 6d.; in Wales, £1 15s. 9¼d. The corresponding figures for the voluntary schools are—£2 2s. 3¾d.; £1 15s. 10¾d.; £1 15s. 9½d.; £1 15s. 4¼d.; £1 13s. These figures are to be compared with £3 16s. 8d. for New Zealand."

I leave the paragraph, coupled with the table in the left hand column, to explain itself Then, again, in England the schools are maintained by grants from the State, by fees, and by rates upon the school district,—the school rate in the London metropolitan district being as high as 8¾d. These varied conditions, I say, make it almost impossible to make any accurate comparison between the cost of the school system of one country and the system of another. But let me ask what the people of New Zealand would say if they had to pay school fees as in New South Wales and South Australia, or if they were rated to maintain their schools as in the case of England. Nest, it is said that our system is costly because ire educate more children in proportion to population than do the adjoining colonies. I do not find that that is so. Upon examining the figures supplied in the reports of the Education Departments of New South Wales and Victoria for the year 1886, which have just come to hand, I find the number of schools and the average number of children in attendance to be,—

So that, in proportion to population, the disparity is not, after all, very great.

Mr. Seddon.—Make a comparison of the number of children attending the schools.

Mr. Fisher.—I thought I had just made the comparison; but really, if the honoured gentleman had made as many comparisons as I have made during the last three weeks j would not ask me to make any more. That disposes of all I have to say in regard that education question.

The Education Debate

The following verbatim report of the Education debate in the House of Representatives is reprinted from *Hansard*.

CONSOLIDATED FUND.

CLASS V.—EDUCATION.

Vote, £360,624.

Mr. FISHER.—As this vote relates to a very large and important question, in which the people of the colony generally feel a keen interest, I desire to express the hope that the discussion upon which we are about to enter may be approached in an impartial and dispassionate spirit. In order to eliminate from the discussion one contentious element, I desire to explain, with regard to the Order in Council to which such frequent reference has been made, that that Order was issued as an answer to hundreds of applications for information forwarded by every educational institution and every educational authority in the colony. No step has been taken, and no step is proposed to be taken, under that Order, until this House, by its vote, shall have expressed its decision on the whole question. Having given that explanation, I hope the House will eliminate from the discussion any discordant feeling which may have arisen in consequence of the issue of the Order in Council. Now, I desire to place the proposals of the Government before the Committee in the plainest possible form; and I may explain that the discussion is taken in Committee in preference to being taken in the House for the reason that it will give members an opportunity of expressing their opinions upon the specific points raised in a way in which they could not have been expressed in a restricted debate in the House. I shall explain to the Committee in short form what the proposals of the Government arc, and It will ask honourable gentlemen to make a note of each proposal as I proceed, for that will facilitate the discussion upon the several points, and will avoid frequent requests for information upon those points as the discussion advances. The proposals, then, are these: By raising the school-age to six we anticipate that a reduction of about 8 per cent, on the total educational expenditure would result. We should save, say, from £26,000 to £30,000. We can only put it approximately, because there is a difficulty, as honourable members are aware, in ascertaining the exact number of children under six attending the schools. That is the first proposal. The second proposal is to take away the 4s. capitation at present paid, which will mean a further saving of about £16,000. The late Government, it will be

remembered, had already taken Is., and we propose to take the other 4s. That means a further reduction of £16,000. The third proposal is to substitute the principle of "strict average" for the principle of "working average" in making out the returns. That change, I anticipate, will result in a further saving of £8,000. The fourth proposal is not to renew the vote of £8,000 for the training of teachers which appears annually on the estimates. That is the vote for the maintenance of the training colleges, or normal schools as they are called, in the different education districts. Having thus clearly placed the proposals of the Government before the Committee, we propose to give the Committee an opportunity of voting separately upon each. To give that opportunity any member of the Committee on either side of the House may submit a proposal to reduce the total vote by £5. the first discussion will be taken on the question of raising the school-age; and, if a resolution to reduce the vote by £5 is carried, that will be accepted as indicating the decision of the Committee that the school-age is not to be raised. Then the Committee will be invited to make a second and further reduction of £5 on the total vote, and if that is carried the resolution will be taken to mean that the capitation of 4s. is not to be withdrawn.

An HON. MEMBER.—How can we show that we wish a shilling taken off each year?

Mr. Fisher.—We do not propose a gradual reduction at all. If the Committee desires the reduction to be gradual, there will be no dilfi- culty in making that clear by a subsequent distinct proposal to that effect we shall have no difficulty in dealing with that point when we reach it. Next, if the Committee objects to the substitution of the principle of "strict average" for "working average," it will carry a resolution for a further reduction of £5. As to the fourth proposal, if the Committee objects to the abolition of the training colleges, it will reduce the total vote by a further sum of £5. Thus there are marked out four distinct stages. I propose that the discussion shall, so far as is possible, be restricted to the consideration of the particular questions in the order in which I have named them. I make these suggestions in the interests of the Committee itself, because the Committee will better understand while discussing one subject that the others have to come on in the order in which they will be put.

Mr. W. P. Reeves said it was understood that, if the school-ago were raised to six years, certain provision would be made to prevent the change falling heavily on country schools.

Mr. Fisher.—I will explain all that in due course. With regard to the question of raising the school-age, possibly many honourable members have not yet had an opportunity of reading the evidence given before the Education Committee. I do not propose to read any of that evidence, or even to discuss it, but I propose to put before the Committee the net results of the investigations of that Committee as far as they have gone, and I shall state briefly the opinions of some most experienced men—gentlemen of high educational standing in this colony—who have forwarded to the Education Committee their opinions generally upon the subject of education the answers given by experts in regard to the question of raising the school-age to six numbered thirty-nine. Of the thirty-nine, twenty were in favour of raising the school-age, sixteen were against it, and three offered no opinion at all. Of course it is fair to analyse these opinions, and it is fait also to say that, while twenty witnesses, principally School Inspectors, were in favour of the age being raised, the sixteen against are mainly gentlemen interested in the maintenance of the system as it is. I should mention that all these gentlemen have given opinions upon other questions submitted to them by the Education Committee, and, as their opinions, being the opinions of experts, are interesting and valuable, I presume I need make no apology for placing them before the House. In addition to being interesting and valuable, they also show how diversified are the views of those best qualified to express opinions upon the question how and in what manner retrenchment should be effected. The names of the witnesses, their opinions, and their educational standing are as follow:—

Name of Person or Hoard. Ah to raisins School-to Six Years. Ah to Payment of Fees for high or Standards. In favour of *Mr. Hodson, Insp., Nelson and Marlb. Yes ... Yos *Mr. O'Sullivan, Insp., Auckland Yes ... Yes *Mr. Smith, Insp., Wostland ... ... Yes ... No; special rate †Mr. McDonald, Waitaki Br. Ed. In.,Otago ... No Yes Mr. Gibson, Grad. Lond. Univ., Taran. Yes ... Yes Dr. Brown, Chairman Ed. Board, Otago Yes ... No *Mr. Hogben, Insp., North Canterbury Yes ... No Mr. Wood, Insp., Cliristchurch ... ... No No *Mr. Fidler, Insp., Auckland ... ... Yes ... Yes, for Standards V. and VI. *Mr. Murray, Insp.. New Plymouth ... Yes ... Yes Mr. Anderson, Insp., North Canterbury ... No No *Mr. Petrie, Insp., Naseby ... ... Yes ... No *Mr. Robinson, Greymouth ... ... Yes ... Uncertain *Mr. Gammell, B.A., Southland ... Yes ... No Mr. Smith, Sec., Ed. Board, Hokitika ... ... No No Mr. Voale, Ed. Board. Taranaki ... Yes ... On all if on any Mr. Brown, Sec., Ed. Board, Wanganui Yes, in popu-... lous districts †Mr. Whitelaw, Hon. Sec., Taranaki ... No Small fee above Teachers' Inst. Stand. IV. †Mr. Just, Hon. Sec., N. Cant. Teach. Inst. ... No No †Mr. Purdie, Sec., Wellington Ed. Inst. ... No No †Mr. White, Pres., Otago Ed. Inst. ... ... No No †Mr. Cowles, Hon. Sec., Nelson Dist. ... No Above Stand. IV. Teach. Association Scholarships to be provided Mr. C. Hulke, Newtown, Wellington ... Yes ... No Mr. Pryde, Sec.. Ed. Office, Dunedin ... Will not state ... No Mr. Hain, Hon. Sec., Southland Ed. Inst. Yes ... Not stated †Mr. Aitken, Pres., S. Cant. Ed. Inst. ... ... No No Mr. Neill, Sec., Ed. Board, Southland... ... No No †Mr. Murdoch, Hon. Sec., Canterbury ... No No Midland Branch Mr. Kelly, Chairman, Ed. Bd., N. Plym. Not

given ... Not given *Mr. Taylor, Insp., Dunedin ... ... Yes ... Only Stand. VI. Mr. P. Goyen, Ed. Office, Dunedin ... ... No No †Mr. Matheson, Sec., Wanganui Branch ... No No Ed. Inst. Mr. Rico, Sec., Ed. Board, Auckland ... Yes ... No Rev. W. Tebbs, Auckland ... ... Yes ... Yes Rev. G. Barclay, Timaru ... ... No Not given Mr. Worthington, Wellesl. Str. Sch., Au. Not given ... Not given Mr. Mowbray, Wellington ... ... No Yes Mr. Stead-Ellis, Sec., Ed. Office, Nelson Yes ... Yes, over St. VI. *Mr. Goodwin, Insp., Auckland ... Yes No Suggestions for Retrenchment. Cannot suggest. Doing away with Hoards. Sweep away Hoards and Committees. Abolish Boards. Reduce number of Inspectors; make them inspect only. Abolish either Boards or Committees. General reductions in salaries, bonuses, grants to Committees. Abolish Boards. Fewer Inspectors. Enlarge districts. Larger classes for teachers. Reorganize classes. Reduce number of subjects in smaller schools. Abolish Boards. Reduce salaries over £150. Country Committees to have larger districts, each Committee to have charge of several schools. Abolish Committees and Boards. Reduce numbers of members. Advertise in Gazette. Inspection and examinations to be done by department; salaries on fixed scale. Abolish Boards. Equalise districts. Local contributions to buildings. School-buildings to be a burden on reserves. Change in duties of Insp.; place under Dept. Districts to bear part cost of buildings. Abolish Hoards and limit powers of Committees. Not stated. Small rate, not to exceed Is. per child. No suggestion. No suggestion. Inspectors and teachers to be under department. Uniform rates of salaries. Plans of buildings to be made by a central architect. Percentage reduction on grants for primary, secondary, and higher education, and general cost of working Act. Reduce capitation-grant. Reduce vote for school-buildings. No school-books at Government expense. "Teas" and prizes not to be provided by Government. Abolish schools for separate sexes in country districts. No grants to secondary schools. Fix rate of maximum expenditure per scholar in small schools. Abolish training-schools. Place Inspectors under the department. Not given. Combine small schools. Reduce grants. Abolish Committees. Smaller districts to Boards. Local rate for buildings. Elective Boards. Inspectors under department. Abolish present capitation-grant. Make fresh regulations for salaries, Parliament to vote sums for scholarships. Enlarge school districts. Place teachers on Civil Service list, with colonial scale of salaries. Abolish Hoards and Committees, and make Education Department do the work. School-buildings to be partly paid for by districts. Not given. Reduce Hoards. No allowance to Committees. No State aid to secondary schools and colleges. Inspectors to be under Dept. Abolish scholarships and district high schools. Teachers to examine and classify scholars in Standards I. to IV.; Inspectors, V. and VI. Reduce capitation allowance on children under seven and over thirteen. Merge all reserves into reserves for primary educ. Dispense with High School Boards. Make savings in salaries of stall". Reduce capitation-grant. Discourage small schools. None given. None given. * School Inspectors—in favour of. † School Teachers' Associations—against.

Now, Sir, in discussing the question of raising the school-age it has to be remembered that the children enter the school at five years, and, as a rule, they pass the First Standard at about nine years. Therefore the Question which the country as well as this Committee has to consider is this: Is the country in a position to pay for a period of four years £4 a head for somewhere between forty and fifty thousand children while they are passing through a number of infantile exercises which do not advance them very much in any proper scholastic sense? I think it a sufficient demand upon the resources of the country that it should be asked to begin to pay this £4 a head at six years of ago. We have the opinion of Dr. Brown, Chairman of the Otago Education Board, that it is positively injurious to the physical system of the children that they should be sent to school at this early age; but, he says, being Chairman of an Education Board, "we are interested in getting them into the schools for the purpose of obtaining the funds. Therefore," he says, "I do not speak so strongly as I otherwise would about the necessity of keeping these children from the schools." That is refreshingly candid. One sees plainly that, while these gentlemen—medical men as well as educational experts—hold these rigid opinions in regard to the necessity of preserving the physical systems of the children, their view is modified or altogether obliterated by the other consideration that the Boards want the money which the presence of these children produces. I come now to the point raised by the honourable member for Nelson. He wishes to know whether we intend to carry out the proposal that a pupil who has passed the Sixth Standard shall not continue to be educated at the public expense. I may say that I was not aware, until I assumed the office of Minister of Education, that there was a Seventh Standard taught in the public schools. The common impression throughout the country is that the standards end at Standard VI.; but the Education Report for the year shows that there are 1,667 pupils in the public schools who are in a Seventh Standard, and that the cost to the country of their education in that standard is about £7,000. It is therefore a question for Parliament to consider, whether these pupils should obtain this higher education gratuitously and at the cost of the country. I hold that it was never intended they should. Why, I have learned from reading some Inspectors' reports that the headmasters of certain schools are not engaged in teaching Standards I., II., III., IV., V., or VI. They are exclusively engaged in teaching Standard VII., while the rest of the school is neglected. Now, I am quite aware that, in connection with the education of children of tender years, the kindergarten system is highly approved by men like Professor Huxley and Matthew Arnold, and I should like to see some such system introduced into this country. And while speaking

upon this branch of the subject I should like to mention that, while I am not in favour of denominational education, it is a singular thing that one religious body—the Anglican Synod of Auckland—should be in a position to offer to educate all our children of tender years at a cost of 30s. per head per annum. Now, if that can be done, is it right that we should be asked to pay £4 per head per annum for children five years of age? I think this is the proper place to mention, in connection with this proposal to raise the school-age, that the Government give an undertaking that no country school shall be closed in consequence of the adoption of this proposal, should it be carried. We give that distinct undertaking. The Government will provide whatever money may be necessary: but, at the same time, I think the expense of these schools might be very considerably reduced if female teachers were appointed, as is the case in many other countries. I do not think it at all necessary to employ high-class teachers for the work of going through the infantile training of these young children. Now I have said all I have to say in regard to the first of our proposals. I come now to the second: the proposed reduction of 4s. in the capitation. In discussing this, or any other proposal which touches the cost of the education system, I hold that Parliament is bound, as a matter of right, to take into consideration that large proportion—one-seventh of the population—who labour under a serious & advantage because they are unable to avail themselves of our educational system. It is our duty to make that disadvantage as lights possible by reducing the cost so long as we take care not to weaken or lessen the efficiency of the system. That is the point which I have to urge in regard to the necessity for making reductions. Common justice demands that we should have some regard for the feelings of that large section of the community who, on conscientious grounds, object to avail themselves of our education system, and who object to the high rate of expenditure incurred in keeping it up. That is the position. On the one hand stand a large and important section of the community who quite rightfully demand that the cost of the educational system, from which they derive no benefit, shall be minimised. On the other hand stand a great and influential scholastic guild who regard education, and the education system, as a fetish to which aught else should be sacrificed. But, Sir, above and beyond all this, we have to consider the interests of the taxpayer as a whole. It will be the aim and object of this Government, as much as it was the aim and object of any Government which preceded it, to maintain the efficiency of the education system; but at the same time I say that, taking into consideration the financial condition of the country, we are bound to see whether any reductions can be made without weakening or breaking down the system. We say such reductions can be made. I hear an honourable member, in an undertone, say, "Show us how this can be done." In answer to that, I say that it hardly devolves upon the Government now to show how that can be done, for it has already been done by several Education Boards in the colony. The Hawke's Bay Education Board has frequently made known its willingness and its ability to carry on the education system at a less amount than the sum now voted. The Auckland Education Board has also frequently discussed the question of making reductions; and on a recent occasion it voluntarily showed a reduction in its expenses to the extent of £1,000. But there is a Board in the colony, the name of which I do not care to give, which shows, by its own estimates, that on its ordinary maintenance account it will have in December, 1887—at the end of the present year—a surplus balance of £5,601 13s. 4d. Indeed, the difficulty with some Boards has been how to spend their surplus money, and some of them have spent it in a manner similar to the manner mentioned by the honourable member for Dunedin South a few evenings ago, in his reference to the expenditure on high-school buildings in Dunedin.

Mr. Dodson.—Will the Minister give us the name of the Board?

Mr. Fisher.—I would rather not give the name of the Board, but I will give the name of another Board which has taken up a very creditable position. It is the case of the Otago Education Board, which has voluntarily offered to meet the exigencies of the country by reducing its expenditure by a sum of nearly £9,000 a year. Now, this proposal of the Otago Education Board is to be found fully explained in the *Otago Daily Times* of the 18th November last, in which paper will be found a very able speech by Dr. Brown, the Chairman of the Board, from which I take this businesslike sentence:—

"The total estimated reduction, calculated on these lines, would come to between £8,500 and £9,000, giving a fair margin over the estimated loss of revenue."

In connection with this subject I may be permitted to read a letter which I subsequently received from a member of the Board, who says,—

"Dunedin,

18th November, 1887.

"Dear Sir,—

You will have received yesterday a telegram from our Chairman giving the result of the financing of a Committee of the Otago Education Board, convened to consider the question of retrenchment. In moving for

the appointment of this Committee, I considered I was simply discharging an obligation that now lies upon every public body in the colony to support the Ministry of the day in their effort to bring about radical retrenchment. In my opinion we can come down to £10,000-per-annum reduction, if necessary, without in the slightest degree impairing the efficieney of the service; and, if we can do this in Otago, the colony can surely reduce £100,000. The most pleasant feature of the whole business is the cheerful co-operation of the teachers themselves, who, as a body, are perfectly satisfied to have their incomes shrunk to meet the exigencies of the situation. I feel certain that you will appreciate our spontaneous efforts to assist you, and that our action will greatly strengthen your hands in dealing with other Education Boards.

"I simply took action on the broad ground of retrenchment, and from no other reason: indeed, as a matter of fact, I cannot be classed as a supporter of the present Ministry.—I have, &c.,
"JOHN F. M. FRASER,
"Member of Otago Education Board."

I ask honourable members to specially mark that part of the letter which refers to the willingness of the teachers to assist in the retrenchment scheme, because it has been said that the only result of our proposals will be a reduction in the salaries of the teachers, and a feeling of antagonism has been set up on that account. Some Education Boards have taken up a distinctly antagonistic attitude the Wellington Education Board has thought proper to send out to the teachers a definite intimation that the proposals of the Government mean a reduction in the salaries of the teachers, and that only. I do not think that is at all a creditable manner in which to meet the proposals of the Government. It would have been much better if the Board had taken time to consider the subject before sending out such an intimation.

Dr. Newman.—It was the Chairman who sent that circular, not the Board.

Mr. Fisher.—Then I think the Chairman took upon himself a function to which he had no proper claim. Now, Sir, with reference to the salaries paid to teachers in New Zealand, it has been said that they are much lower than the salaries paid elsewhere. That is a question upon which the Committee should have full information before it comes to a decision on our proposals, in view of the statement having been broadly circulated that those proposals involve a reduction of the teachers' salaries. The following table will show the salaries paid in New Zealand and in other colonies:—

The Victorian salaries are very much the same, and the Victorian Minister of Public Instruction has stated in Parliament that the Victorian teachers are the highest-paid teachers in the world. It should also be remembered that, in addition to their salaries, many teachers in New Zealand receive liberal bonuses. Especially is that the case in the Otago Education District. And further, the greater proportion of teachers in New Zealand are provided with residences. I do not say that these residences are given free in all districts, but in many they arc. In making these comparisons, I desire to illustrate the further point as to the necessity for the adoption of some more general plan for the payment of teachers. For what do the figures in regard to the salaries show? They show this inequality: The highest salary paid to a headmaster is £495, in Hawke's Bay. The lowest, £272, is paid to the headmaster in Taranaki—who, it may be presumed, is a man of equal scholastic attainments. The highest-paid headmaster in Otago gets £483. The highest assistant-master at Hawke's Bay receives £353; the head assistant at Wanganui receives £177. In Otago the highest head assistant receives £287, as against £353 in Hawke's Bay; and in other parts of the colony the payments are as follow:—

Columns A 1 and 2 give highest and lowest salaries for headmasters in the several districts; columns B 1 and 2, highest and lowest for assistants; and columns C 1 and 2, highest and lowest for solo teachers.

There is another instructive feature about this. In Table M, attached to the Education Report, we find that Otago pays £64,002 to 510 teachers, or an average of £125 per teacher; while Auckland pays £54,359 to 610 teachers, or an average of £84 per teacher. These figures, I say, point to the necessity for the adoption of some better general plan, under which men of equal attainments, of equal standing, men who are equally studious, and who devote themselves with equal earnestness to educational pursuits, should receive salaries proportionate to their attainments and ability. I now come to the third of our proposals, which is the substitution of the strict average for the working average. The working average is arrived at by making allowance for what one might call extraordinary circumstances, allowances being made for absence on account of weather, sickness, and other causes. If we adopt the strict average we shall pay upon the average of the number of children who have actually attended school. That is all I need say upon that point. And now with regard to the fourth proposal—namely, the proposal to abolish the vote [*unclear:* foe] training-colleges. I am bound to say, with regard to these colleges, that the results [*unclear:* ob] tained from them in different parts of the colony differ very widely. There are four of these colleges, located in the four principal cities, and the vote of £8,000 is divided amongst them. One is bound to admit that the results obtained in the Otago Normal Schools are very much better than those [*unclear:* ob] tained in the other districts. I cannot speak with any authority with regard to the results obtained in Canterbury, beyond saying [*unclear:* th] they do not equal those of Otago; but, with regard to the North Island, I feel justified in saying that the results do not in any [*unclear:* sens] justify the

expenditure. It is also worthy of remark that, while the four principal education districts have had the benefit of these training-colleges, the Education Districts of Hawke's Bay, Taranaki, Marlborough, [*unclear:* West] land, and Southland have got on [*unclear:* just] well without such institutions. In fact, [*unclear:* th] general experience is this:that those teachers who have not been trained at the training colleges turn out to be more efficient [*unclear:* public] teachers than those who have received their training at these institutions. The principal upon which these colleges are conducted is this: The students or pupils attend a two years' course, during which term they receive at the different institutions from £40 to £[*unclear:* 60] year; so that on the average they receive, say £100 for the two years' attendance, and, in addition to that, they receive their two yeas tuition. It happens also that the pupils [*unclear:* an] mostly females, many of whom, having received a hundred pounds and two years' education decline for various reasons to take up the [*unclear:* w] of teaching. Then, with regard to the make pupils, they do not prove to be more successful than other teachers not trained in the training colleges:in fact, they are less successful [*unclear:* thu] those brought up in the ordinary schools. But take it that upon this point the House would prefer to have the opinion of an expert. I will therefore read the opinion of Mr. Fidler M.A., Inspector of the Auckland Education District. Having spoken of the schools in his district, and of the work sometimes being very mediocre, he expresses this opinion:—

"Some of the schools classed as very mediocre were in charge of certificated teachers from the Training College, and I regret to have to say that in them either the work or the discipline was not what was to have been expected in schools conducted by those who were supposed to have gone through a thorough course of training in the art of teaching."

That is the experience of Auckland. When we come to Wellington the experience of members of the Education Board is that the [*unclear:* soc] the Training College is abolished the better Having mentioned that, I need say no may with regard to Wellington. I think it much better that we should adopt the Victorian system, namely, that of training our [*unclear:* teachers] the public schools, which is more likely to [*unclear:* giv] them experience in the work they will be called upon to perform when they come to occupy the position of teachers. The instruction given in the training-colleges is purely of a literary character, and is not calculated to enable the teachers to carry out the duties which afterwards devolve upon them. And, even if we speak of literary training, I am bound to say that the literary training imparted in the training colleges is much below the standard of that which could be obtained in the universities of the colony; and I believe the highly-paid Professors in these institutions are absolutely starving for want of pupils. What better function, then, could these Professors take upon themselves than that of training teachers for the public schools? Many of the headmasters and assistant masters of the public schools are gentlemen who have taken university degrees, and they have proved the best qualified and most able teachers. I would suggest that our teachers for the public schools should undergo a properly-graduated course of training or apprenticeship in the public schools, and that at the end of a four or five years' course they should be granted the E certificate, which would give them a fair standing as teachers. In this way we could provide an ample supply of efficient assistants. Sir, I might detain the Committee much longer in discussing this branch of the question, which is to me a most interesting study. It is a portion of our education system in which I take a great deal of interest: but I do not wish to take up the time of the Committee longer. I have only occupied time sufficient to explain the proposals of the Government, so that the Committee may clearly understand them, and the form in which they will be put to the Committee. An honourable member asks me to say something in regard to the Syllabus. That is a subject on which very strong opinions are held, and I do not feel justified in burdening the general question with the consideration of that branch of the subject now.

Mr. Seymour would like to hear the honourable gentleman's views on the subject of higher education, as that was a subject of very great importance in this country.

Mr. Fisher.-—I wished to confine this discussion exclusively to the question of primary education, and to the proposals submitted to the House by the Government; but, since the question of the cost of higher education in New Zealand has been raised, I feel bound to say that the cost of higher education in New South Wales forms a very strong commentary upon the cost of higher education in New Zealand. For instance, the income of the high schools in New Zealand for 1886 was,—

The average attendance of pupils was 2,213. It follows therefore that the cost per head was £21 Is. 10d., of which—

In New South Wales there are six high schools, with an average attendance of 688 pupils, who cost a fraction over £10 per pupil.

The figures relating to the cost of high schools in Now South Wales are taken from the "Special Report of the Assistant Inspector-General of Victoria on Public Instruction in New South Wales." Mr. Brodribb, the officer named, was specially instructed by the Victorian Minister of Public Instruction to visit Now South Wales and report upon the school-system of that colony. His report was extremely interesting, and was rather a surprise to the Victorian people, for it showed that in many respects the school-system of New South Wales

was superior to the Victorian system. As I have shown, the cost per high-school pupil in New South Wales is £10, against £21 1s. 10d. in New Zealand.

Mr. Fitzherbert asked if the Minister would say something about industrial and Native schools.

Mr. Fisher wished to inform the Committee that he had specially excluded all questions from this discussion which did not directly affect it. He thought this was not the time for entering into questions relating to the Native schools or the industrial schools. He was sure if they once touched upon the industrial schools they would open up the whole question of the administration of charitable aid.

Sir J. Vogel asked if the Minister considered school-buildings beyond the limits of the present discussion.

Mr. Fisher did not say that the expenditure upon school-buildings went beyond the scope of the present discussion, but the expenditure upon school-buildings was a question already disposed of, having been discussed on the public-works estimates.

Mr. W. P. Reeves said the Minister had told them that the saving proposed by reason of the school-age being raised to six years had been estimated to come to about £26,000. On the other hand, the Minister of Education told honourable members that a certain sum would be required to keep the country schools open. Had any estimate been made of the sum that would be required to keep the country schools open?—because that would materially interfere with the saving to be effected.

Mr. Fisher said an amount would be taken in the Appropriation Act to cover the necessary cost of keeping the country schools open.

Mr. W. P. Reeves.—What amount?

Mr. Fisher asked whether it was not sufficient that the Government gave a pledge, understanding, or undertaking that the country schools should not be closed. Might it not he left to the Government to adopt the very simple process of taking an amount which would be sufficient to keep the country schools open?

Mr. Seddon said that, if the matter were left to the Government, one Board might be treated liberally and another might be treated in a contrary manner. It was giving too much power to the Government.

Mr. Fisher hoped the honourable gentleman would accept the assurance that the Government would take the view that they were dealing with the system of education, and not with a particular district or with a particular Board or with a particular member. They would take the large view of the matter.

Mr. W. P. Reeves said the reason why he pressed the question was that it distinctly ought to have weight with the House as to whether they should adopt the proposals of the Government. There was only one reason why they should adopt their proposals—namely, that this large saving was to be made; but, if a considerable portion of it was required for keeping country schools open, then there was no reason why the proposals should be adopted.

Mr. Fish said that, in any event, there must be a considerable saving if the plan of the Government was carried out. It would not affect large schools or suburban districts, but small country schools, and he imagined then that not many country schools would be affected. There would be a very large saving; and, if they desired to make any attempt to save on the education vote, they should leave a considerable discretionary power with the Government until the experiment was fairly tested. He was disposed to place the fullest confidence in the Government in this matter.

Mr. Cadman said there was one thing the Minister had not explained, and that was with respect to opening new schools in the country districts. This was a very important matter, as in a few years a number of new schools would be required all over the colony.

Mr. Fisher would like the honourable gentleman to understand that, although they were endeavouring to curtail expenditure, the Government would not fail to make provision for new schools. He hoped the honourable gentleman was as clear in his mind on that point as he (Mr. Fisher) was.

Mr. Levestam said there was another matter on which the honourable gentleman had not spoken at all, and that was as to withholding the capitation for any boys or girls who had passed the Sixth Standard, irrespective of age. What he wanted to know was this: Did the Minister of Education intend to adhere or not to what was stated in the Proclamation, that capitation money would no longer be paid for children who had passed the Sixth Standard? The Minister had carefully avoided to state that, although he had asked the question very distinctly. He should like the Minister to reply distinctly to that question Another statement made by the Minister was that, out of thirty-nine gentlemen who had been asked to state their opinion as to the school-collage, nineteen were in favour of raising they school-age and sixteen were against it; and he then went on particularly to tell honourable members that these sixteen were all interested in continuing the age as at present. [*unclear:* But] did not toll them who the nineteen were, and whether they had any interest the other way.

Mr. Fisher said they were mostly School Inspectors.

Mr. Levestam would like the honourable gentleman to explain what his intentions [*unclear:* wer] with regard to children who had passed [*unclear:* th] Sixth Standard but who were not of the [*unclear:* age] fifteen.

Mr. Fisher said the answer was that [*unclear:* as] rule the pupils were close up to fifteen [*unclear:* wh] they passed the Sixth Standard he could understand the honourable gentleman's objection coming from the members from the We Coast, where there were no training colleges and yet the children on the West [*unclear:* Coa] passed the Sixth Standard a year earlier [*unclear:* th] those in any other part of the colony. [*unclear:* H] opinion was that, where a bright or intelligent child, male or female, distinguished itself [*unclear:* a] got to the Sixth Standard below the age, [*unclear:* th] child ought to be taken up by the Education Department and educated as a pupil-teacher and, whether made a pupil-teacher or [*unclear:* not], ought to have the right to go forward and [*unclear:* tak] a scholarship if it could do so. That [*unclear:* was] point to which he should pay special attention. But there were children of well-[*unclear:* to] people—he would not say wealthy people because he did not wish to raise class distinctions—who were kept in the schools after [*unclear:* th] had reached the age-limit and had [*unclear:* passed] Sixth Standard; and what he said was this that if those people wished to give [*unclear:* th] children a higher-class education [*unclear:* which] children of the mass of the people did [*unclear:* not] they ought to pay for it. If they [*unclear:* desired] reach a higher standard of education [*unclear:* than] generality of children attending the commend schools, they ought to attend the [*unclear:* colleges] district high schools, and the Education Act section 56, said that for the education give at district high schools those who [*unclear:* received] should pay.

Mr. Smith thought that, if the [*unclear:* school] were raised, it would be wise at first [*unclear:* to] it apply only to the boroughs, and let [*unclear:* coun] schools be entirely exempted. There would they be a chance of carrying the proposal; but [*unclear:* he] not think that country members would [*unclear:* ag] to their schools being affected. In [*unclear:* his] district there were a large number [*unclear:* of] schools, mostly in new settlements, and [*unclear:* ab] a third of the children attending them [*unclear:* v] under the ago of six. Therefore, if these children were shut out, the schools [*unclear:* would] starved. There was also this confederating The parents of these children were mostly [*unclear:* P] people, and even the mothers had often [*unclear:* to] absent from home at work, and it [*unclear:* was] better that these children should be safe in schools than running about uncared-for. Even if no capitation were paidon them they should be allowed to attend the schools. He hoped the whole proposal as to raising the school-age would be abandoned; but, if not, it should certainly be confined to the borough schools.

Mr. Fisher said that, representations having been made to the Government by members on both sides of the House as to the strong feeling existing faith regard to the school-ago proposal, the Government had determined to modify their proposals he did not say that any communication or representation to the Government made by a section of members should be regarded as binding on the Committee; but the honourable members to whom he referred, speaking for themselves, had suggested that, if the Government did not press the proposal for raising the school-age, they would not object to the other proposals of the Government. He did not know how far that might be in accord with the views of the Committee as a whole, but, speaking for the Government, he was disposed to accept the agreement.

Mr. Seddon disagreed with the other proposals. He could understand that members representing large centres should be indifferent on the question of school-age; but a large number of country schools would be affected, even were the proposed compromise agreed to. With a view to saving time, he had prepared certain questions to put to the Minister; and he would ask the honourable gentleman, first, if he would place on the table the opinion of the Crown Law Officers as to the power to raise the school-age by Order in Council alone. If the honourable gentleman thought it was not advisable to lay the opinion on the table, would he give some idea as to the clauses relied on by the Law Officers as giving that power? The Education Board of Otago had put certain queries to Sir Robert Stout, one of the ablest lawyers of the colony, in regard to this matter, and that gentleman had replied,—

"I am asked to advise the Board generally on their position—(1) the position of the Board regarding their teachers; (2) the position of the Board relative to the Normal School pupils—and also regarding the circular that has been issued by the Education Department, of the intention to pay a less amount towards the Board's expenses than has been paid formerly.

"This circular states that the amount to be paid, beginning in January, 1888, will be £3 15s. for each child in average daily attendance; but that no children under six years of age, and no child that has passed the Sixth Standard, will be paid for.

"I assume that the Parliament will be asked to sanction these proposals by Act, as, in my opinion, the Governor in Council has no power to make regulations to give effect to them. The power of the Governor in Council to make regulations is limited to nine things: see section 100, which is as follows:—

"'Tho Governor in Council may, subject to the provisions of this Act, from time to time alter and repeal regulations and orders—

"'(1.) For the organization and management of the Department of Education:

"'(2.) For defining the principle on which daily average attendance shall be calculated:

"'(3.) For the examination and classification of teachers:

"'(4.) For the employment, education, and examination of pupil-teachers:

"'(5.) For the issue of certificates of competency to teachers:

"'(6.) For the establishment and management of normal or training colleges:

"'(7.) For defining the standards of education which, under the provisions of this Act, may be prescribed by regulations:

"'(8.) For prescribing the times and manner of auditing the accounts of Boards and Committees.

"'(9.) For making such other regulations as may be necessary to secure the due administration of this Act.

"'And all such regulations shall fix a day on which the same come into force, and shall be published in the *Gazette*, after which they shall have the force of law, and shall be laid before both Houses of the General Assembly as soon after they are passed as circumstances will permit.'

"If it were contended that under subsection (2) there was power to alter the school-age I might point out that this subsection refers obviously to subsection (2) of section 8, which is as follows: 'In payment to the Board of every district of a sum of £3 15s. for each child in average daily attendance at a public school, such average daily attendance to be computed in manner proscribed by regulations.'

"The regulations to be made under subsection (2) can only define how this average daily attendance is to be computed. It makes no provision for either fixing the age or the standard the child has reached as a test of payment.

"The Act makes two provisions regarding the age of pupils. (1.) the school-age, under section 83, is defined as being between five and fifteen; and I submit that the obvious meaning of the Act was that all children were to be admitted free who were between those ages. (2.) The other provision of the Act dealing with school-age or attendance is that called the compulsory clauses. In these—89 and 90—there is provision that the children must attend between seven and thirteen. Their parents or guardians may apply for exemption, *inter alia*, if the child has passed a certain standard; but there is nothing compelling a guardian or parent to do so, and I am of opinion that, if the exemption were not asked, a parent or guardian would be bound to send the children between these ages. If the new regulation is carried out sections 83 and 89 of the Act would be altered or modified. Of course the Government may expect School Committees and Boards to receive children in the schools for which there is to be no capitation-allowance. But surely this would be a positive alteration of the Act. I am of opinion that regulations for defining the principle for calculating the average daily attendance cannot declare that children of school-age are not to be deemed to be enrolled, and that the regulation is *ultra vires* of the Governor in Council.

"I mention these points, and I assume that, though the Governor in Council has, on the advice of his Ministers, made a regulation, the Parliament will be asked to validate it by amending the Education Act. If the Act is not altered, and the proposals are attempted to be carried out, then they will be given effect to without the sanction of the law, and I should hardly think such a step will be taken by any Education Department.

"Obedicnce to the law is the important thing to be observed in a country with institutions like ours; and a Department of Education, whose duties are onerous and important, will be the last to disregard the law and set an example that cannot help being baneful.

"1. The position of the Board regarding teachers.—I am of opinion that the Board have no power, without the consent of the teacher, to lower any teacher's salary unless three months' notice of the intention to do so is given. The teachers are practically three-monthly servants, and their salary cannot be lowered at a week's or a month's notice.

"2. The engagements entered into by the Board with Normal School students are binding on the Board. They have been made under the sanction of the Act and of the regulations approved by the Minister under the Act, and I do not see how the Board can refuse to carry them out. It may be said if the Board are sued they have no funds. That would mean, however, that all the assets are exhausted; and that cannot well be said. If the true position of matters was pointed out to the Minister I cannot believe that he or the Parliament will ask the Board to repudiate contracts solemnly and legally entered into, unless indeed it is thought desirable to destroy the education system altogether. I cannot believe this is desired, and I am of opinion that the alterations have been proposed without a knowledge of the position in which the Education Board are placed.—ROBERT STOUT."

It was true that the attendance of children under seven or over thirteen could not be made compulsory; but, if the parents chose to send them, had not the Board legal power to claim from the Government capitation in respect of them? The Government had told them that the Crown Law Officers were of opinion that the Boards had no legal remedy in such circumstances; but, seeing the opinion given by a gentleman of such standing in the legal profession as Sir Robert Stout, it was only right the Committee should have the fullest and most certain information possible on the subject. While the general rule against the production of the opinions of the Law Officers might be a good one, he thought the Committee should be told what clauses the Law Officers had relied on as to the power to issue the Order in Council. On that point he wished to have clearly defined what the position of the Government was and what was the position of the Education Boards. Unless the matter was

cleared up there might be a lot of money wasted in litigation. If there was any doubt as to the power of the Government, would they, if the House decided that the school-age should be raised, bring in a Bill to give effect to the wish of the House?

Mr. Pyke thought the last speaker was under a misapprehension. Schoolmasters were not paid by capitation. He knew a school is which there were only twenty children, and the master received £145 salary and £20 bonus As a general rule, the salaries came to less than the capitation in the boroughs and more in the country. He must enter his protest against the compromise proposed by the Minister, for he was most strongly of opinion that the school age should be raised. He thought, in the first place, that it was a waste of public money to send children between the ages of five and six to school. Why should the State school become State nurseries? If it was necessary to keep schools open for these children, ley kindergärten be established. To send a boy of five years to school was an act of cruelty to begin with; both mentally and physically the child would be injured thereby, and there was no patriotism, no common-sense, [*unclear:* b] humanity in doing that which would tend to ruin a child body and mind. He remembered a long time ago a song very popular in England, of which a verso ran thus:—

There's a pood time coming, boys,
A good time coming:
Little children shall not toil
Under, or above, the soil
In the good time coming,
But shall play in healthful fluids,
Till limbs and mind grow stronger.
And every one shall read and write.
Wait a little longer!

We ought to allow our children to play in "healthful fields" a little longer. It might be said that these were sentimental reasons; but there was a good deal of truth and philosophy in sentiment sometimes; and, apart from that aspect of the question, any one who knew [*unclear:* any] thing of the matter would know that there would be a good deal of saving by raising the school-age as had been proposed: and every [*unclear:* ou] must know, too, that the colony was not [*unclear:* in] position to any longer keep baby-farms. For these reasons he should be compelled to vote against the Minister if he allowed the school-age to remain as it was at the present time.

Mr. Fish regretted to say that he found himself in a most unfortunate position. During the whole of this session every measure which the Government had brought forward up to the present time he had felt it his duty to oppose and now, when a matter came up on which has could heartily support them, he found that [*unclear:* th] Ministry were weakly ready to accept a compromise. If there was anything good in [*unclear:* th] proposals of the Government as laid before [*unclear:* th] House by the Minister that morning it was with regard to this question of the reduction of the capitation-grant, paying upon a [*unclear:* sti] average instead of a working average, the abolition of the training-schools, and the increase of the school-age. The last, to his mind, was the most important of all; and yet that was the proposal which the Minister was willing to give up! He felt so strongly upon this point that he should divide the House upon it and take a vote against the withdrawal of this proposal if he had no one to follow him in the lobby. None of the proposals which the Minister had brought forward could have so much commended itself to the good sense of the House and the country as that one. He agreed with the last speaker, who said that children should not be sent to school who were under the age of six years. Parents who had any sense of responsibility as to the future welfare of their children would not send their children to school at so early an age. It was only those who were desirous of getting rid of the responsibility of looking after their children who were so anxious to send them to school between the ages of five and six years. He was therefore very sorry, after the excellent reasoning which had been given to the House by the Minister of Education—and he could heartily compliment the honourable gentleman on the very clear manner in which he had put his statement to honourable members—that he should recede now from the most tenable grounds that he had for the position he had taken up. If they were to have retrenchment, if this was not an idle cry, in what better way could they retrench than by taking something from the people which was of no value to them? One argument that he admitted to be reasonable against the proposition of the Government was, that it might be injurious to the country schools; but, when the Minister of Education met that objection in the very fair manner in which he did by saying that under no circumstances should a school be closed on account of this increase of school-age, he (Mr. Pish) thought all objections to the proposition should be withdrawn. The propositions were practically of a tentative character. It was an experiment that was being made; and the experiment ought to be proceeded with, because it was worth trying, and, if in the course of a year or two it was found that it did not

work well, it could very easily be abandoned. He was afraid that the Minister of Education had not had sufficient time at his disposal since accepting office to go thoroughly into the questions which related to his department; nor did he (Mr. Fish) intend to raise those questions in their broader aspect at this period of the session. He hoped that by next session the honourable gentleman would have grasped the whole question in relation not only to primary education but also to secondary education. The Minister should approach that subject with a view to seeing whether, in his opinion, a secondary system was necessary at all in this colony; and, if he found that it was, he should I go still further into the matter, and see that it was conducted in a way that would lead to a great improvement in the relations between the primary and secondary systems. He should sec that there should be no such loss of teaching-power as there was at the present time, owing to the absence of relationship between the two systems. The honourable member had cursorily said that it was a scandalous thing that secondary education should cost £24 per head in New Zealand, while in New South Wales it cost only £10. There was no doubt that was a scandal, and it was a subject well worth the consideration of the Government and the House. The House had too long neglected this very important question, and it had been neglected owing to the local feeling which had been engendered in consequence of the endowments which had been made in one place and another for educational purposes. The Province of Otago had most weakly and, he was justified in saying, most shamefully wasted money derived from these reserves, mainly owing to a fear that the reserves would be wrested from them at some time or other. It was so in other parts of the colony, he had no doubt the people in the localities where the reserves were situated would not grapple with the question for fear of losing something that they at present possessed. So things were going on from day to day, and the evil was increasing. It was time that that feeling was given up, and that the House should attempt to deal practically and seriously with the whole question of education, both from a primary and a secondary point of view. With regard to the reduction of the capitation by 4s., he thought that that ought to be carried by the House unanimously he was not inclined to argue out the details and show how it would affect this one or that one; but he wished to say this: that, from his experience of local bodies, which had been considerable, he knew that when any reform of this sort was raised there was always an outcry that this, that, or the other would be injured, and that the local body could never get on; but, when the reform was carried out in spite of all protests, it was found that things worked very well, and that people then came to wonder how it was that they had not carried out the reform long before. So it would be in this matter. If the House said to the Boards that they must get on without this 4s., it would soon be found that the system worked very well, and that the Boards carried on very well notwithstanding the loss. Whilst on this question he should like to say he should be glad if the Minister would consider the question of doing away with Education Boards altogether. If there was one department more than another of government action in connection with which it was possible to centralise, it was this matter of education. It was a matter which essentially concerned the whole colony, and he had no doubt that, whatever Ministry came into office, no matter to which party they belonged, they would deal fairly and justly with the whole colony he did not say for a moment that the Education Board of Otago had not done good work; but, judging by what he had seen of that Board, he had no doubt that all over the colony there was a good deal of money being wasted by these Boards; thou- sands of pounds annually could be saved to the colony if these Boards were dispensed with. Look at the officers they employed, look at the paraphernalia employed and the expense incurred,—which could be got rid of if the whole thing were centred in the Government. In connection with this question they saw, in Otago, that the Committee of one of the largest suburban schools were anxious to retain the services of a teacher whose conduct and service they considered satisfactory, as did also a large majority of the inhabitants of the district, as expressed in a public meeting; and yet they found the Education Board arbitrarily dismissing the teacher notwithstanding these emphatic protests! Such a thing showed that there was something wrong with the machinery, and that it should be altered in some way. He was certain that, if the various district Committees had larger powers given to them, and the Boards were done away with, great good would be done to the cause of education generally. Then, there should be no hesitation in doing away with the extra capitation-grant. That strict average should be taken also appeared to him a good suggestion. That might affect the question of teachers' salaries, but the Minister should deal with that point also, and he had promised that the subject should engage his attention. The better equalisation of salaries of various teachers was desirable. In Otago the teacher who had been fortunate enough to get a large school would be receiving a salary of £550 or £560 a year, whilst other men, who were equally competent but who had small schools, would only receive £130 or £150; and this difference, he thought, was too great. He was not quite sure as to the wisdom of abolishing the training-schools. In Otago that school worked remarkably well, and it enabled the children of poor people, if they passed a certain examination, as a matter of right to become trained as school-teachers; whereas without such an institution it might be only those who could bring influence to bear that would get appointed pupil-teachers in the schools. The statement by the Minister, that the average age at which children passed the First Standard was nine years, had come upon him as a surprise. He should have thought it was nearer seven or eight years.

Mr. Fisher said the Education Report of 1887, Table F, showed—"Average age at which children pass the

standards—Standard I., age 8.8"—that was eight and four-fifths.

Mr. Fish said even if that were only approximately correct it showed distinctly that there was no necessity to send children to school between the ages of five and six. He hoped the Minister would adhere to his proposal, and take a vote on the question of raising the school-age. Regarding the Seventh Standard, the Minister showed clearly, by the return produced, that there were only 1,600 children in the Seventh Standard; and these cost the country £7,000! He held that that money was thrown away. The standards, he thought, should be reduced to five, and the system of scholarships extended, so that by that means bright boys and girls whose parents desired that they should go further could obtain the advantages of secondary education. He thought it was a mistaken idea that it was necessary to give the bulk of the community, nine-tenths of them, an education beyond the Fifth Standard, and that in doing so they unfitted the childred for those avocations of life which they were necessarily compelled to follow. He would strongly advocate giving every boy and girl in the colony a good sound education; but he [*unclear:* di] not think it necessary to give all who would follow various trades and farming and artisan employments education beyond the Fifth Standard. Besides that, at the present time they were taking boys and girls away from useful occupations at which they would be much bitter employed than they were in going to school He said this in the interest of those [*unclear:* whom] mainly represented—the working-classes. [*unclear:* T] honourable gentleman had made a remark [*unclear:* t] the effect that, as the Roman Catholics were non-participants in the State [*unclear:* education], should restrict our expenditure upon [*unclear:* it] far as possible. That argument seemed [*unclear:* fa] enough; but he should like the honourable gentleman to consider whether it was [*unclear:* n] right that the Roman Catholics should have some assistance from the State, as [*unclear:* well] the members of other religious denominations. Why should not that body of our follow-colonists receive some aid towards teaching their children? We saved an enormous [*unclear:* st] owing to the fact that the Roman Catholics did not send their children to the State schools and it would pay better to give them a capitation-allowance than to induce them to [*unclear:* sec] their children to the schools, for if they attended the State schools the accommodation would have to be enlarged, and a large additional expenditure incurred. This question was perhaps not in the line of the present discussion; but it was one that must engage the attention of the House, and, on the ground of fairness, sooner or later the claim of they Roman Catholics would have to be satisfied He hoped the Minister would take a vote upon the question of raising the school-age, and he should be happy to go with him into the lobby on that matter.

Sir J. Yogel was at a loss to know [*unclear:* how] deal with this subject, as it came before them in such a strange fashion. To begin [*unclear:* with] honourable gentleman in charge of the estimates had given a positive assurance, [*unclear:* whe] being elected, that he would neither alter they standards nor the school-age until he [*unclear:* h] absorbed the endowments into the general pool. Therefore it seemed to him that this proposal to alter the school-ago, and to [*unclear:* so] extent to alter the standards, by only educating up to the Sixth Standard, would be they forerunner of the absorption of the endowments. But, putting that on one [*unclear:* side], thought the House was placed in a [*unclear:* m] absurd position. The education system of [*unclear:* ti] colony was one of its most cherished institutions—one of its most important institutions—and large changes had practically [*unclear:* be] made by the Government without the authority of law, and the House was now asked to express an opinion on the subject by a vote of £5. Where would be the record? He was not even aware that a *Hansard* report was being taken in Committee; it was not generally done. Where would be the record of honourable members' opinions on the question, voting whether a sum should be £5 more or less? This was placing the House in a most absurd and unfair position. He contended that the Government had no right to go the length they had gone in the way of making a public announcement to the various Boards, and in that way stimulating those Boards to give notices and make changes, without having previously taken the authority of the House. He contended, further, the taking a vote in Supply as to whether or not the amount should be reduced by £5 was not giving the House a right and fair opportunity of recording its opinions. There were many opinions upon this subject, and these could not find any means of utterance on the question of simply £5 more or less. There appeared to be no doubt whatever that the changes proposed could not be legally made without the authority of an Act. He held in his hand the opinion of Sir Robert Stout upon the subject; and he did not think any one who read that opinion, so clearly and concisely expressed, could have any doubt whatever as to the meaning of the Act which was at present in force, or that it was not going beyond the law for the Minister of Education to have instituted such changes, or to institute such changes in the future without special authority of law. It was clear that the Minister of Education had not power to issue regulations altering the school-age for children, and the Minister was now asking the Committee to concur in an illegality. He now came to the various points of the proposals, and he would first take the question of the reduction of the subsidy by 4s., and the statement that the country schools would not suffer. It was clear that the honourable gentleman was somewhat mistaken as to the conditions under which these subsidies were paid. If they were given in such a manner that the amounts to the country schools as against the town schools were ear-marked, it would be possible to say that the reduction in the subsidies would not affect the country schools; but, as a matter of fact, the Boards had

the whole revenue in their hands, and the result was that the country schools received the surplus after the town schools were provided for. Therefore, if the school-ago were reduced, and also the amount of subsidies paid, the result would be that the country schools would be in a worse position than they were in now. There was no logical manner in which such a proposition could be carried out under the present law. No doubt it was worthy of consideration whether the scheme of capitation should not be so altered as to allow of different amounts being paid to town schools and to country schools; but the figures lately quoted by the honourable gentleman—and which he

(Sir J. Vogel) might say were compiled at his request before he left office—showing the average cost of schools of different sizes, proved the fallacy of the idea that the country schools could be kept intact while reducing the amount of capitation. He believed that at the present time, in the case of schools with an attendance of over a hundred, the average expenditure was over £3 per head; in schools with an attendance of from fifty to a hundred, it was over £4 per head; and in the case of schools under fifty it was nearly £6 per head. It was clear, therefore, that striking off children under six years of age, and taking the exact numbers attending at country schools, would not regulate the amount which those schools would receive from the Boards. The late Government proposed that the reduction should be at the rate of 1s. a year, and he could see no reason why the House should increase that rate of reduction. He was content that 1s. should be reduced for the present year, and another shilling for next year, and so on; but how he was to propose such a thing he did not know, under the proposition that there should be only a general reduction of £5. The mode in which the question was placed before the Committee was preposterous, and only showed the way in which it was sought to fetter the discretion and liberty of the House. As to the reduction in the school-age, he thought, himself, that it was not desirable that children should be sent to school before they were seven years of age; but that was only his individual opinion; and they knew that the practice obtained amongst parents of sending their children to school at as early an age as five years, and, under our boasted free system of education, we should not prevent parents carrying out their ideas in that respect. There was no doubt that a great many parents were in the position that when their children grew to a certain age they required their services, some at twelve years of age, and some at fourteen; and if the age at which those children could be sent to school was raised it would be putting it out of the power of those parents to give their children a proper education. The proposition of the Government was a retrograde step, and one that was opposed to our liberal system of education; and it was not in harmony with the condition of these institutions before the General Government absorbed them from the Provincial Governments. He was decidedly against increasing the school-age unless a very specific intimation were given by the House that it should be done. Moreover, it was a question which should be decided by Act, and not merely by resolution in Committee or even in the House. He had heard it said that some members of the Opposition and some of those who supported the Government had agreed to a compromise; but he was no party to anything of the kind, and had only heard of it when mentioned by the honourable gentleman in charge of the estimates. He would strongly urge upon those who considered themselves members of the Opposition not to be led into any arrangement whatever, even if they approved of these alterations, because an offence would be committed against the law if any action were taken without the sanction of the House by Act. Further, he said that, even if honourable members had agreed to the proposals, they had no right to allow them to be carried out under a vote of a reduction of £5, more or less, but that they should insist upon their being given effect to in a constitutional manner. With regard to the general question, they knew what the effect would be of taking from the revenues of the Boards. The Minister of Education proposed to take some £60,000 or £70,000 from the Boards. He could not say that the honourable gentleman had not authority to do that, and he was disposed to agree with the honourable gentleman in regard to gradually doing away with the training-schools, because he did not think the State had any more right to educate persons to be schoolmasters or schoolmistresses than it had to educate persons to be doctors or lawyers. Therefore he was favourable to doing away with those schools, provided it was done in a legal manner. But let the Committee look at the effect of taking away £60,000 or £70,000 from the revenue of the Boards, and it must be seen at once that that meant a reduction in the salaries of teachers to the extent of 15 per cent. And he would ask, if it was justifiable to force upon school-teachers such a reduction, why should it not be made to apply to the Civil Service generally? As far as he could see, there was not the slightest intention on the part of the Government to do that. The late Government proposed a *pro ratâ* reduction; but he would not discuss that now, and would only ask, why should they, without any notice, force on school-teachers this large *pro ratâ* reduction? If there was any way in which an honourable member could enable him to vote in favour of 1s. reduction this year and another shilling next year, and so on, he would support such a proposition. Otherwise, he took it that, if they voted for the proposition as it now stood, to take off 4s., it would be open to the Government to propose a reduction of another shilling next year. He hoped the House would not sanction the raising of the school-age to six years; and, if it were sanctioned in this irregular manner, he trusted the question would afterwards be tried by law; and the Government would then learn that they could not override the laws of the country without taking the proper constitutional mode of doing so.

Mr. Fisher desired to take advantage of the earliest opportunity to say that the agreement to which he had referred earlier in the day, which was intended to give effect to the wishes of many members on both sides of the House, had proved unsatisfactory to both sides; and therefore he would ask the Committee to vote upon the proposals in the form in which he had submitted them that morning. He wished also to say that if the proposals as a whole were carried the Government would still adhere to the understanding that the country schools should receive full assistance.

Mr. Peacock, confining himself in the meantime to the point before the Committee, thought the position taken up by the honourable member for Christchurch North was certainly inconsistent, and could not be justified. The honourable gentleman said very decidedly that in his opinion seven years was young enough to send children to school; and yet he even objected to the age being made six years. The honourable gentleman should not refrain from carrying out his decided opinion merely for party purposes.

Sir J. Vogel explained that what he said was in regard to his own children; but other parents had a right to their own opinions with regard to their children.

Mr. Peacock thought it might at all events be asserted that those who advocated the raising of the school-age to six years as a means of economy in the education system might claim to be as good friends to that system as those who objected to the change being made. The matter might be viewed from two standpoints—first, the question of precedent for the adoption of that age; and, second, considering our own circumstances in this colony, was there any valid reason against the proposed change? With regard to the question of precedent, he hold in his hand the general report of the School Commissioners of Scotland, in which it was stated that practically the age was six years there. In the United States also the general school-age was six years. And the same applied to Germany. He was, of course, aware that there were some arrangements in the latter country with regard to infant instruction; but, speaking as to the primary schools, the school-age was practically six years. Then there was the other question. It was stated by those who were opposed to raising the school-age that children would be running about in the gutter, and that certain evils would befall them by so doing. He should ask the Committee what it really meant. He presumed honourable members would not dispute that, so far as bodily health was concerned, it was far better for a child at that ago to be breathing the fresh air and developing itself physically than to be cooped up in the close atmosphere of a schoolroom for five hours a day. Surely there could be little difference of opinion upon that point. Very well, what was the evil to be apprehended in case the children were allowed to remain outside between the ages of five and six years? Was it moral contamination! Then, he put it whether the proposition did not refute itself. From whom would they receive evil example or learn bad language? Surely it would be from children older than them-selves. But these children would be in school, and therefore he maintained that the objection had no force. There was thus a decided advantage in receiving physical outdoor exercise at an early age; and contamination from children older than themselves could not take place, because the older children would be in school at the time. He was very glad to hear the Minister of Education say that he would adhere to this point, and that the Committee would take a vote upon it. He thought that considerable advantage would result in the shape of economy by the adoption of the Government's proposition, especially as they were assured that precautions would be taken so that country schools would not suffer if such a plan were carried out.

Mr. Ormond was glad the Minister of Education had decided to adhere to his proposition, and for this reason: that he knew from practical experience that the amount he asked was sufficient, if it were properly administered, to provide everything that was wanted in the district schools of the colony. He (Mr. Ormond) rose for the purpose of quoting the expenditure that took place in the district he came from, and there the expenditure was kept within the amount given under the Act and the 4s. allowance; and, besides being kept within that amount for several years, a large sum had been placed to the credit of the building account after providing for the cost of education. The district he came from was called the Hawke's Bay District, and it was a very large and scattered one. It extended from the East Cape down to Woodville. It included as large and as scattered a population as there was in the colony, and had a very large proportion of small schools. Therefore it laboured under the greatest disadvantages that any district could labour under. As a rule, the salaries paid by the Board would compare with those of other districts, excepting in one particular: that the same large salaries were not paid in schools that had very small averages of attendance; and he entirely agreed with the honourable gentleman that those schools should be provided for by employing certificated female teachers instead of male teachers, and, of course, at a smaller salary. He had been looking to sec how it was that in other districts they could not do as they did in Hawke's Bay—provide for their schools with the amount placed at their disposal; and the reasons were: first, that there was a great difference in the proportionate cost of administration—the Boards were more extravagant with their officers. That was one cause. The other cause was that to which he had referred—it was that they paid in the small schools in the country districts salaries out of proportion to the work to be done, and which could be done more economically. He might give the figures, showing what was done last year in the district which he wished to put as an example before the House. In that district, extending

from the East Cape to Woodville, there were 4,198 attendances, which, at £4 a head, gave £16,792. The allowance for inspection was £300; consequently the total income last year was £17,092. The following was the expenditure: Salaries, including the Board, inspection, and everything, £900; incidental, £200; teachers' salaries, £10,774; bonus on tuition of pupil-teachers, £330; bonus on average results, £1,000; and School Committees, £1,600. That totalled up £14,804 for the last year; so that there was left, out of the moneys allowed by Parliament, a balance of £2,288. That showed, at any rate, that education was carried out as efficiently in his district as anywhere else; and he believed a reference to the Inspector-General would elicit from that gentleman the opinion that the schools there were as efficiently taught and as well equipped as any schools in the colony. They endeavoured to supply small country schools with female teachers, when these could be got, or by giving salaries according to the work; and where good men were wanted they paid them higher wages than were paid in any other part of the colony. He had worked out what would be the position of that district under the allowance of £3 15s., and supposing children between five and six years were excluded from the schools; and he found that then, with some 500 children deducted from the average attendance, instead of having 4,000 odd attending there would be 3,619; and that number, at £3 15s., would give a revenue of £14,116. They would be able to pay every salary exactly the same to all the principal teachers, pay the same bonuses, give the same allowance to School Committees—do everything except provide for the tuition of these 500 children, which would be a very small sum, because they did not cost, on an average, the same sum as older children. He was able to show that in that district they could provide the whole education at £3 15s. with no reduction of salaries, the same allowance to School Committees, and the same average results upon the work of the teachers, and do it for the money the Government proposed; and he saw no reason why that could not be done in other parts of the colony. The question, then, was, Could they assist the Minister in arriving throughout the colony at such a result? It appeared to him that one of the things required to be done was that there should be established one fixed scale on which all teachers should be put in proportion to the attendance at their schools. If that were done, they could at once do something which would establish an average expenditure all over the colony. No part of the colony could then complain, and the teachers would put themselves on a better basis than they were on at this moment. If that were done, they would do away with the anomaly referred to by the Minister when he opened the subject to the Committee. He (Mr. Ormond) took a liberal scale of salaries all through, and payments according to work and results. He would not have the anomaly which the honourable member for Dunedin South had pointed out, that of a man having a school for which he was getting a large salary, and a master alongside getting a much smaller salary, although they had each equal claims. If teachers were paid according to the work done, according to attendance and results, and if a proportionate limit were placed on the cost of administration, and the system assimilated all over the colony, the cost of education would be enormously reduced, and they would be able to carry out what the Minister proposed—provide education at the diminished cost he proposed. He had shown that in one district it was absolutely possible to give effect to the Minister's proposals; and he challenged any honourable gentleman who disagreed with him to get the opinion of the Inspector-General so as to obtain that gentleman's opinion as to the condition of the schools he was referring to he ventured to say that the Inspector-General would state that the schools of Hawke's Bay were as well provided with teaching-power and in every other respect as any other schools in the colony. If he had succeeded in showing this, he thought he had done something towards establishing the principle which the Government were contending for. A word now as to what had been said against raising the school-age to six. It was contended that, if they did this, they would injure the country schools. Those who said this did not remember that in the case of country schools, infinitely more than town schools, children between five and six were in a great number of cases unable to go to the schools. The schools were so isolated, and the children had to travel such long distances, that a large proportion of the children between five and six did not attend these schools. In fact, the number of these children as compared with those of older ages was comparatively small. It was a question open to controversy as to the benefits which children between five and six derived from attending town schools. All sorts of opinions could be got from specialists on that subject, but, as far as he had been able to read and instruct himself, the general belief was that a child under six years of age could get no real benefit from the teaching. That the child got some benefit from having a little order or regularity put into his life was the most that could be contended; but it was all that could be sought by those who were in favour of that principle. But they were obliged to do at the present time what their means enabled them to do; and parents of children of that young age must be told that the country could not provide nurseries for them. Therefore he hoped this limit of the age to five would not be insisted on, but that they would raise the age to six. He would be one of the first to raise his voice against the minimum age being raised to seven, because it would be taking away one of the years when children were beginning to benefit by education, and robbing them, in many cases, of one of the few years during which they could remain at school. He had therefore dealt with the school-age, and with the reduction of the capitation to £3 15s. With regard to the strict average, he was bound to say to the Committee that, if the other reductions were made, that could be allowed, because he had only been able to

show to the House that, in the district he came from, they were able to provide everything on the present scale on the ordinary average attendance, and the Minister told them that the difference between ordinary and strict average would he a sum of £8,000 over the whole colony. Therefore he was unable to contend from his experience that that could be done without making some reductions in the scale of the salaries and the other moneys paid to the teachers. Wishing, as he did, to see the full system maintained, he ddi not see that they could agree to the further reduction proposed. As to disallowing capitation on those who had passed the Sixth Standard, that, he thought, was an illiberal proposal. The parents of 1,670 children, and the children themselves, chose to avail themselves of a privilege now given them of getting further education after they had passed the Sixth Standard, and he did not think they should be deprived of that privilege which the law allowed them now. He hoped that next session they would consider how the primary schools should connect and be merged with the secondary system, and, if proper proposals on that subject were made, he should agree with those who would do away with the Sixth Standard. Then, there should be a system of scholarships, which would give every child in the colony the possibility of getting higher education under the secondary system: the benefits of the secondary system should be open to all alike, even the poorest, which they certainly were not now. However, that was a large subject, which there was not now time to discuss. He agreed with those who thought the Committee was bound to take into consideration the position of that section of the community who did not derive any benefit from our education system—he meant the Roman Catholics. In considering proposals of this kind on the part of the Government it was their bounden duty to remember that section of the community; and, remembering that they did not derive any benefit from our system, it was more the duty of the House than it otherwise would be to make the charge for education press as lightly as possible on the taxpayers, so that the Catholics might feel it as lightly as possible. He went further and said that that section of the community were entitled to some assistance from the colony in the education of their own children: but the present was not the time to discuss that question. He hoped the House would agree to the proposals of the Government; and if they were passed he was sure the Boards would be able to bring down their expenditure to more reasonable limits without in any way affecting their capability of giving a good education to the children of the colony.

Mr. Barron hoped the Committee would not agree to the proposals of the Government. He did not know who those honourable members were who had suggested a compromise to the Government, but he did not agree with any of the proposals. Hero they wore, with only two or three days more to consider a large amount of important business, hurrying through a discussion on such an important question as this, which merited exhaustive consideration and discussion. Early in the session the House appointed a Select Committee to inquire into the whole education question, and that Committee had taken a great deal of evidence, but found that the evidence offered was so voluminous, and the subject itself so large, that it was utterly impossible for it to come to any mature conclusion and make a report of any value during the time at its disposal; and they had therefore recommended that the inquiry should be postponed till next session, and that in the meantime no material changes should be made. Now, he believed it would be very unwise to make now any changes such as those proposed, because they might be making some changes hurriedly that they would afterwards find there was cause to regret. He thought that honourable members would be perfectly justified in saying to the Government, "We have had a useful preliminary discussion, we know exactly the opinions of the Government, but we do not think that any material changes should be made before the subject can be fully considered, and therefore it would be well to let the whole matter stand over till next session, when we shall be able to deal with it and perhaps to dispose of it." Many honourable members had spoken of the great cost of the system. Well, whose money was it? It was the money of the great mass of the people. A glance at the list of our chief sources of revenue showed that it was the great mass of the people who provided the greatest portion of the revenue; and this was one of the most important of the few inadequate returns they got for the heavy contributions they made to the cost of the public administration. No doubt there were extravagances in our present education system, and economics might be possible without affecting the efficiency of the system; but changes should be approached in the most careful manner, and they had not sufficient evidence to warrant them now in making those changes. The Minister of Education was only new to his portfolio, and he could not be supposed to have had time to give that exhaustive consideration to the subject that he otherwise would, and therefore, for the sake of his own reputation, he should hesitate to lay a finger on the system until he was more fully possessed of information than he possibly could be now as to the direction in which reforms should go. If the Minister would make up his mind to leave the system this session as it was, and to make an exhaustive inquiry throughout the colony during the recess, it would be a very good thing. He would benefit by the general and local knowledge so acquired, and he would find that reforms were called for in one part of the colony which might be undesirable in others. For instance, there were the normal schools, which had apparently been a failure in some districts, while in Otago they had evidently been a great success. There were many differences of that kind, which the Minister should carefully consider before proposing any such radical changes as these now before the Committee. He (Mr. Barron) should not support any of the changes now proposed, although he should be very

glad the next session, after getting full information, and giving the subject long and careful consideration, to consider each proposal on its merits, and possibly to support some of them.

Mr. Skddon would remind the Minister that he had not answered a question put by him (Mr. Seddon) some time before with reference to the legal power of the Government to raise the school-age except by amending the Education Act. It was most undesirable to give any possibility for wasting public money in litigation over such a matter. He would ask the Minister to decide that the school-age should not be raised in the country districts, and that capitation payments on working average should continue, the capitation not being decreased. He would show that the proposals of the Minister would have the effect of closing schools in the country districts, and therefore that the reductions should certainly not apply to country districts. That was the only fair way of meeting the contingencies that were bound to arise. Those who had passed the Sixth Standard should not be excluded from the schools in districts where there were no means of secondary education; because to allow them to continue at the primary schools was the only way by which they could prepare for the Civil Service examinations. It would be grossly unfair to withdraw the capitation in such cases in districts in which there were no means of secondary education. He had been connected for twenty years with the working of education in Now Zealand. Before the general system was started, and when means for schools had to be obtained in the best way available, he had taken a part in it, and since the system was established in 1877 he had been closely and intimately connected with its working; and he would state to the Committee how his experience caused him to regard the present proposals. It would be less unfair to the Westland District if the Government raised the school-age and did not persist in their other proposals than *vice versâ*. There were, say, seventy children under six attending school in the Westland District, and the Board would reccive as capitation for them about £270, and therefore to exclude them would mean so much loss of revenue. But the effect of adopting the other three proposals of the Government would be a loss to the Board of £900 a year, the two sums together being just one-fifth of the Board's present yearly revenue. It would therefore be preferable for that district that the school-age should be raised to six, and that the Government's other proposals should be negatived. Now, to bring the expenditure of the Board within the reduced revenue, the Board would have to reduce the salaries of its teachers. The total amount paid away by the Board was £6,000, of which £4,238 was paid to teachers, so that if the revenue were reduced by one-fifth there must be a reduction of teachers' salaries. But already the teachers in Westland were paid less than they were in any other part of the colony, and if they were further reduced the result would be that the best of the teachers would be lost to the district, and a great blow would be struck at education in that part of the colony. And he might say, in reply to a remark which had been made by the Minister of Education, that in the Westland District the value of the residences was taken into account when the teachers' salaries were fixed, and so were the payments of bonuses for teaching pupil-teachers. Then, lot the House look at the figures as to the salaries paid to teachers in different education districts. In Taranaki there were forty-one teachers receiving £100 a year; in Westland there were thirty-five receiving under £100; in Taranaki there were twenty who received between £100 and £200; in Westland there were twenty receiving between £200 and £300, in Taranaki one, in Westland five. In Hawke's Bay sixty-five teachers received under £100, thirty-nine received between £100 and £200, nine between £200 and £300, two between £300 and £400, and one over £400. In Westland there were none over £300. These proved that the salaries now paid in Westland were very small; and how was it possible for the Board to further reduce them? Then, as to the attendance. Table J of the Education Report of 1886 showed that the average attendance in Hawke's Bay was 95 7 per cent., whilst in Westland it was 68.9 per cent., and in North Canterbury it was 70 4 per cent. That would show how much would be lost by Westland if the strict average were to be taken. Owing to an adverse climate, and the distances pupils had to travel in Westland, the attendance was very likely to be interfered with, and what would not be felt in Hawke's Bay would be very seriously felt in Westland. The honourable member for Napier should have remembered that when he was speaking; and it was owing to those influences that, while Westland would lose £280 or £300 if the school-age were raised, it would lose £900 if the capitation were reduced, and if the strict average were taken instead of the working average. As to the size of the schools, Westland showed very poorly by comparison with others. In Westland there were five schools where there were under 20 pupils, two in which there were less than 25, six in which there were less than 50, three in which there were less than 100, one only where there were 150, two where there were 250, and only one where there were more than 300. Whereas in Hawke's Bay there were five having 15 pupils; one from 15 to 20; two, 20 to 25; cloven, 25 to 50; four, 50 to 75; four, 75 to 100; five, 100 to 150; six, 150 to 300; seven, 300 to 500. Of course, where there were so many of these largo schools, it was possible to make reductions to meet a reduced capitation-grant, and, so far as Hawke's Bay was concerned, he indorsed everything that had been said by the member for Napier in reference to the possibility of reducing expenditure; but it was not possible to do that in districts like Westland, where there were so many small schools. This all went to prove that the whole thing should be in the hands of one central department, so as to secure equality in the payment of teachers. If they looked at the cost of administration they would see that the charges in Westland were very low as compared

with those in other places. The cost of inspection in Hawke's Bay stood at 3s. 9d., whilst in Westland it was only 2s. 10d.

Mr. Ormond.—Take the whole cost of the executive staff.

Mr. Seddon said the number of schools in Hawke's Bay was 39; Westland, 22; Taranaki, 62. The average attendance was—in Taranaki, 1,611; Hawke's Bay, 3,264; West-land, 1,467. And the cost of management pet head was: Taranaki,4s. 11d.; Hawke's Bay, 2s. 3d.; Westland, 4s. 3¼d.

Mr. Ormond.—Hear, hear.

Mr. Seddon said, if the honourable gentleman would take the average daily attendance into consideration, he would sec that really the cost of management in Hawke's Bay was just three times what it was in Westland, for of course the large number of pupils reduced the rateable amount in Hawke's Bay. Taking the cost of inspection, it was—in Hawke's Bay, 3s. 9¼d.; in Westland, 2s. 10¾d.; while in Taranaki it was 5s. 3d. That showed that the cost of inspection in Westland was much less than in Hawke's Bay, and was only one-half of that expended by Taranaki. As to maintenance, the cost in Westland was £3 8s. 10d., and in Hawke's Bay it was £3 13s. 8d. In this matter, again, the Westland Board was managing more cheaply than that of Hawke's Bay. Now, the totals showed as follow: Hawke's Bay, £3 19s. 8½d.; Taranaki, £4 8s. 1d.; Westland, £3 16s. 1d. It could not be said that they were extravagant in regard to inspection, management, or payment of teachers. Then, coming to the current expenditure on buildings in Westland, it was only £4 11s. 2d., and in Hawke's Bay £5 11s. 4d.; so that Hawke's Bay again was favoured considerably more than other districts. He had forgotten to mention that in Taranaki the total was £4 5s. 4d., as against £3 16s. 1d. in Westland. He put this table before the Committee to show that the carrying of these proposals meant the stopping of the whole system in districts like Westland, Greymouth, and Taranaki, unless they took the profits from the more favourably situated districts, like Hawke's Bay, and applied them to the other districts. Then, as to the children attending the school after they had passed the Sixth Standard, was no credit to be given to districts like Westland and Greymouth, where, labouring under the difficulties he had pointed out, the pupils passed the standards at a very much earlier age than in other parts of the colony? He would undertake to say that that was the case, and that children going from the Auckland District to Westland were always put back a standard. What were they to do with their boys who passed the Sixth Standard at twelve years of age? Were they to be refused permission to attend the school any longer? There were no scholarships for them. It was a crying shame that in the whole Education District of Westland there were only two scholarships—he believed now only one scholarship. That being so, there was no chance for the boys to enter the professions, to become teachers, or to pass the Civil Service examination, unless they were allowed to attend school after passing the Sixth Standard, for there was neither high school nor university on the West Coast. Why should they in one session say that the Civil Service of the colony should be open to all the people of the colony—to the child of the poor as well as to the child of the rich—and then in the next session render the law a dead-letter and say they would reduce the standards, or not grant the capitation for any child who had passed the Sixth Standard? The Minister of Education had had to admit that in Westland children passed the Sixth Standard at the age of thirteen; and if a boy passed the standard at that age, and there was no scholarship open to him and no secondary school he could attend, how was he to pass the Civil Service examination, or have a chance of becoming a teacher? This was, he thought, one of the worst proposals made by the Government. Then, to take the proposals made by the Minister. He had told them that he expected to save £26,000 by raising the school-age, £16,000 by reducing the capitation grant, £8,000 by paying on the strict average instead of the working average, and £7,000 by doing away with the subsidy upon pupils attending the school after they had passed the Sixth Standard. Taking the promise which the Minister of Education had definitely made, that no country school should be closed owing to these proposals, he thought that only one-half of that amount would be saved; that, instead of the total saving being £57,000, it would not be more than £27,000 or £28,000. If that were so, would it be worth while disturbing the existing system to effect that paltry saving? He contended that it would be far better for the Government to allow this question to stand over till next session, and then to deal with the master in a comprehensive way, sweeping away the Boards of Education entirely, making the wealthier districts of the colony contribute to the cost of education in the more sparsely populated districts, and having a general system of inspection, so that there could be no difference in the standards, and a comparison could be instituted between the different districts. In some districts the standards were much below—a full standard below—what they were in other districts. It was also necessary that there should be greater equality in the payment of teachers. He could say unhesitatingly that teachers who were producing results that were unequalled in any other part of the colony, who were giving every satisfaction, and were performing their duties in an heroic and patriotic manner, were getting smaller salaries than others who were not doing anything like such good work; and the sooner this phase of the question was faced by the Minister of Education and dealt with the better. Then, the proposals before them plainly meant the closing of the schools to 6,500 children. What would the parents think of the Parliament, or of the representatives, who would close the schools on such a large number of children who were at present being educated in them? No

provision whatever had been made, no warning given; but these 6,500 i children were to be turned adrift. He thought this would cause much bad feeling, and that the people of the colony would rebel against such a high-handed proceeding. They should bear in mind that the mass of the people paid through the Customs something like £1,500,000 per annum, and that all they got for that large amount was simply the amount recouped to them by way of education, which was less than £500,000. He could prove conclusively that in Westland they could pass the children through the six standards between the ages of five and twelve; and that those standards, as the papers would show, were higher than the standards in any other part of the colony. These children had a chance for the Civil Service, the professions, and scholarships, if they were kept at school two or three years more, between the ages of twelve and fifteen; and they should not be deprived of that chance. The children were passed through the standards without any injury to them physically, as could be seen by any one who would pay a visit to any of the State schools on the West Coast. You could go to the galleries of the schools on the West Coast and hear the children between five and six years of age singing their little ditties, learning three or four verses and singing them to music, saying their alphabet from A to Z, and showing such memory as many members of the House could not show. Then, they were brought under discipline in marching and in their classes. It was absurd to say that these things should be taken away from them because it was doing them an injury. You could not keep them away from the schools, and to compel them to stay away would be doing them an injury in after-life. The bulk of the people were paying a million and a half every year through the Customs, and all they got in return was this education. Having established the system it should not be swept away, as was proposed to be done under the Government proposals, for they meant sapping the whole system. If it were put to the people of the colony, they would rather pay this paltry £28,000 which it was proposed to save than have their education system interfered with. Before now the people of Westland had paid £1 a head, and even the miners who had no children paid it willingly rather than have the education system destroyed. What did property contribute to the revenue? A paltry £300,000. Yet property, and the Government, which represented property, were trying to prevent the education of the masses by sapping the present system of education. The Civil Service was now thrown open to competition, and the children of poor people had a chance of getting into it, and it would be grossly unfair for the House to shut that door to them. Those who were in favour of the Government proposals were those who wanted to keep the Civil Service and the professions to themselves, and to keep the poorer classes down as hewers of wood and drawers of water. He, for one, must resist any such proposal. Let the Government carry their proposals *in toto*, with a pledge that the country schools should not suffer; and he would prefer that to the compro- mise proposed by the honourable member for St. Albans and other honourable members. He was glad to think that there were only some five or six persons who had joined in that compromise, because it was purely in the interests of the rich and against the education of the poorer classes. He would like the Minister of Education to give a distinct pledge to the Committee that during the recess he would consider the question of having the whole thing centralised, and making the wealthier parts of the colony pay for the poorer; also of equalising the payment of teachers, and making education more generally equal.

Mr. W. P. Reeves moved, That the vote be reduced by £5. He would have liked to discuss the whole question at length; but, owing to the action of the Government in putting this the most important question of the session off to so late a period, and taking it in Committee, instead of having a full discussion in the House, he felt that the Committee did not desire a long discussion, as it was anxious to bring business to a conclusion. He hoped, however, that before the discussion was over some honourable member would reply to the speech of the honourable member for Napier, which was really the only good speech in favour of the Government proposals. Of course every one knew the difference between Hawke's Bay and Canterbury, and no doubt Canterbury could run its education system as cheaply as Hawke's Bay, if it chose to reduce the salaries of its teachers; but the people in the country there thought that £120 a year was quite as little as ought to be paid to teachers, and therefore a reduction could not be made. He understood that if his motion were carried it would be taken by the Government as an indication that the school-age should be raised.

Mr. Fitzherbert thought the remarks of the honourable member for Hawke's Bay showed that if School Committees husbanded their funds and dealt with other matters in a businesslike way there need not be the enormous expenditure which at present was incurred for education. The honourable gentleman had shown that in his district, after paying their teachers good salaries and meeting all other expenses, they could make a saving; whereas the honourable member for Kumara put an entirely different aspect on the question in regard to his district. No doubt there was a waste of money in some districts, and if they looked at the report of the Inspector-General for the year 1886-87 they would find that, although the Education Board for Hawke's Bay had made the most of their funds, that had not been the universal practice in New Zealand. By that report it would be seen that there were eighty-six buildings not belonging to the Government in which school was held, and that meant that buildings would have to be erected for those schools. Therefore some Education Boards did not spend their money on school-buildings. Then, there were 271 teachers' residences not built—not in Hawke's

Bay, but in other parts of the country. Again, it would be found from the report that there were a number of School Committees who were over head and ears in debt, which showred that they had not made the [*unclear:* mo] of the funds at their disposal. Then, they were told by the honourable member [*unclear:* f] Napier that there was plenty of school-account modation; but that was absolutely incorrect as far as the rest of the colony was concerns According to the report there were 46,000 children of school-age who were not attending schools, and those attending school had absolutely only six square feet allotted to each them. Out of the 46,000 children not attending the schools, 22,000 were Roman Catholics and, as the honourable member for Dunedin South had pointed out, if the Roman Catholic had chosen to take advantage of the State schools it would have been necessary to expend £100,000 to accommodate them. Therefore, notwithstanding what the honourable member for Napier had said on one side [*unclear:* a] the honourable member for Kumara had [*unclear:* sa] on another, the fact remained that the [*unclear:* fur] at disposal were not sufficient to meet [*unclear:* th] liabilities and to give every child in the colonel an opportunity of getting education. So [*unclear:* th] something must be done, and the question was In what direction should it be done? He [*unclear:* w] glad the Government were going to make as education, for he had always told his constituents that there must be a reduction; [*unclear:* as] he thought it was right to leave it to Minister to say where it could be made. In towns was right that the minimum age [*unclear:* should] six instead of five; but he thought in country districts the five-years age should be retained. But, with regard to the remark of [*unclear:* th] honourable member for Kumara that children, as a rule, in his district passed at each age, he thought they would find that [*unclear:* that] depended on the master who had charge [*unclear:* of] school. Some masters placed children [*unclear:* at] very early age in the First Standard; other would not put them there until they [*unclear:* we] older. He thought the test was the tercentenary of children who passed the different standardly If the honourable member for Kumara would look at the statistics on the subject he would see that his district was one of the last. [*unclear:* H] district showed only 10.5 per cent, of passage whereas Auckland showed 14. The only dioptrical below the honourable member for Kuman showed 9.6; but, so far as passing was our corned, his district was a long way behind other districts, and was only the second worst in the colony. The honourable gentleman [*unclear:* need] tell them about the intellectual ability of [*unclear:* th] parents and children, for, apparently, [*unclear:* th] ability was not equal to that of [*unclear:* parents] children in other parts of the colony. [*unclear:* It] necessary that something should be [*unclear:* done], he (Mr. Fitzherbert) must support this redaction of 4s. of capitation. What he should have preferred to see was, that children [*unclear:* should] for teaching in the Fifth and Sixth Standard According to the last statistics, if these children paid 1s. 6d. a week each the sum of £52,000 would be derived from that source. The children in the Fifth and Sixth Standards were, generally speaking, children of well-to-do people. The children of the labouring people were generally taken away, after they had passed the Fourth Standard, to assist their fathers and mothers in their daily labour. Those who could keep their children in the Fifth and Sixth Standards should be made to pay 1s. 6d. a week, which was not a great sum for the education they would receive in those standards. Therefore he should have liked to see the Minister of Education frame his reductions in that form. He should vote for the proposed reduction of 4s., because he thought it was a step in the right direction. He should also vote for making the minimum age six instead of five years, because he thought a child of ordinary intelligence could get through the remaining standards in the time placed at its disposal. There were some children whom all the education in the world would not make clever. If they were made to pay in the Fifth and Sixth Standards, they should then give a number of good scholarships, so that the children of the poorer people should have every opportunity of getting the best education the State could give them. Such a system would be beneficial to the children and their parents, and would be a great saving to the country, because the parents would know that their children would not be kept in idleness in the schools at the cost of the colony. He should vote for the reduction, and was only sorry to say that the proposals of the Government did not go far enough.

Mr. Izard would have great pleasure in; supporting the raising of the school-age if the Government had made provision for kindergarten schools, or provided for the education of young children in some other way; but, inasmuch as no provision was made in this direction, the Committee should not agree to the proposal of the Government. He had consulted with the chief of the Education Department and with several others who had to with schools, and the almost unanimous conclusion was that, unless children were sent early to school, they ran about the streets and contracted habits that were afterwards fatal to them. The universal opinion of those connected with education was, that this was the inevitable result of children being allowed to run about in that way. The same argument did not apply to country schools as much as it did to town schools, because in the country the children did not get into the same habits as they did in the large cities of the colony. In the towns they did not get into habits of obedience or discipline, and it was very hard indeed to keep them in order at all. There was another objection to this proposal, which was this: that the Education Act distinctly stated that the school-age should be from five to fifteen; and nothing could be plainer than that. Now the Government proposed to raise the school-age from five to six; or, in other words, they proposed to do by vote what could

only be done by statute. They said they would not give capitation to children between five and six, and the result would be that the provisions of the Act would not be complied with. This would practically repeal the clause in the Act, which was binding on the Government. Moreover, there was this further difficulty in the matter: He doubted very much whether the Government would save anything at all in the way they proposed to do it. According to the report of the Minister of Education, there were 21,025 between the ages of five and seven attending school. There were no means of finding out how many there were between five and six; but, assuming that 10,500 was the number, the 10,500 would be deprived of education, and the saving would be £3 15s. on 10,500, or about £39,000. The Government pledged themselves that no school should be allowed to stop for want of funds. There were 1,054 primary schools in the colony. How many of these were in the towns and how many were in the country he could not say. The returns did not enable one to arrive at any distinct conclusion on that point; but he would suppose there were two-thirds in the country and one-third in the towns. It amounted to saying this on the part of the Government: that, at any rate, they would undertake that two-thirds of these 1,054 schools should be practically—he would not say maintained, but—supplemented by the Government; or, in other words, that 800 schools should receive an additional payment from the Government. How much such payment amounted to they were not told. The Government did not say how much they proposed to give this or that school. But he could sec it was not at all a large estimate to imagine that they would have an average to pay £50 for each school. If that were the case, the saving effected by raising the school-age vanished or almost entirely vanished; and they had 10,500 children absolutely deprived of that education which the Legislature distinctly said they were entitled to have. Although he was opposed to this first item in the Government programme, yet he thought the Committee should agree with the Government on the other items. He thought it was quite right that they should make a reduction of 4s. a head. He was perfectly well aware that in some districts there was great difficulty as to the capitation allowance. The schools in the towns might be worked very easily for less than the capitation, and the balance saved devoted to schools in the country; and this fact came in aid of his argument that the saving effected would be very little indeed. With regard to the normal schools, he should like to say that there were only four of them in the colony, and they cost £8,000 a year. The Wellington Normal or Training School was kept up last year for the sole benefit and instruction of seventeen students. In 1886 the number of students attending the Wellington Normal School was two males and fifteen females, a total of seventeen, for which the whole machinery and teaching staff of a normal school were kept in operation. They might very well do without the normal schools at all, and other and more economical arrangements could be made in the secondary schools by which those who desired to become teachers could receive necessary instruction, while the machinery of the University might be used for examining them. He therefore agreed with the proposal of the Government to abolish the normal schools. He would express his agreement with a great deal that had fallen from the honourable member for the Hutt. He presumed that a great many honourable members, while willing to support the maintenance of the education system, would be willing that a small fee should be charged for pupils in the Fifth and Sixth Standards. He believed that idea had taken considerable root in the public mind, and he knew that during the late election it was much discussed in this part of the colony, at any rate; and he thought the opinion generally arrived at was that the parents of children in those standards should be asked to contribute a small fee towards the cost of the education system. There were 11,333 children in those standards, and a very small payment for each would very considerably reduce the cost of education to the Colonial Exchequer. He was in favour of the abolition of Education Boards. There were thirteen of those bodies in the colony, each with its separate staff, and the total cost of these Boards was £10,000 a year. He thought their functions might very well be conducted by the Minister of Education, with the assistance of a small staff; and he would very much like to see that change carried out. He believed there would be no opening for him in accordance with the forms of the House to move an amendment in that direction, and therefore he had to content himself with expressing his opinion. He should support the proposals of the Government.

Mr. Seddon said the honourable member for the Hutt had stated that Westland was in the second worst position among the education districts of the colony as regarded passes. The real fact was that Westland was only lower than two other districts, that it was equal to one other, and above all the rest. This would be seen from the report of the Education Department presented to the House during the first session this year, where the relative percentages of total passes in the six standards of pupils attending the State schools in each of the education districts in the colony were shown to be—Nelson, 49.9; Wellington, 40.0; Marlborough, 45.5; Otago, 44.7; Westland, 43.7; Hawke's Bay, 43.7; Auckland, 43.1; South Canterbury, 41.1; Grey, 40.0; Southland, 39.0; North Canterbury, 38.6; Wanganui, 38.2; Taranaki, 34.3. It would thus be seen that Westland held fifth position, was equal with Hawke's Bay, and ahead of Auckland, South Canterbury, Grey, Southland, North Canterbury, Wanganui, Taranaki. In the total percentage of passes Wellington headed Westland by less than 3 per cent., and these advantages were only gained in the First and Second Standards; in the Third, Fourth, Fifth, and Sixth Standards Westland headed Wellington. The following were the relative [*unclear:* percentages]

passes in standards:— —the total being, as he had said, Wellington 46.0, and Westland, 43.7. In all [*unclear:* f] standards except the two first, Westland showed an average of nearly 2 per cent, above that of Wellington. Knowing these [*unclear:* figures] in existence, he was naturally [*unclear:* surprised] the honourable gentleman made the assert he made. If the honourable [*unclear:* gentleman] not more correct in the advice he [*unclear:* gave] clients than he had been in this matter [*unclear:* th] could be no wonder if they got into [*unclear:* troubl] he could not let the honourable gentleman statements go unrefuted, for they were catenated to give very little encouragement to [*unclear:* th] teachers and to the pupils in the State school-age of Westland. There was also this fact: [*unclear:* th] the cost per pupil was nearly £2 a year less Westland than in Wellington.

Mr. Loughrey said that in common with many other members of the House he was pledged to retrenchment; but at the same time he was also pledged to [*unclear:* support] present education system, and to use his best endeavours to prevent the school-age as at present fixed, and the curriculum of the [*unclear:* Ste] schools, from being interfered with; [*unclear:* th] from one end of the colony to the other the mass of the people had stated in the plains possible manner that the ages at which [*unclear:* th] children should be permitted to attend [*unclear:* th] State schools should not be altered, and [*unclear:* th] a large majority of the members in the House were pledged to support the present Education Act to that extent. It was one of the [*unclear:* bur] questions during the late election, whether [*unclear:* th] present education system should be present in its entirety, so that its efficiency should [*unclear:* n] be interfered with; and he believed there [*unclear:* w] not one candidate who, when questioned, had not replied that, though in favour of retrenchement, he would support the education system as it stood. The people generally were produced of the system and of the results it had produced, and he thought any interference with it would be most injudicious, and would be objected to throughout the colony. It was [*unclear:* th] mass of the people who contributed the cost of the system; and it was the mass of the people who had questioned candidates during the [*unclear:* la] election and made them pledge [*unclear:* themselves] support the system in its integrity; [*unclear:* and] was quite sure that if any candidate [*unclear:* h] ventured to say he would interfere with [*unclear:* th] efficiency of the system he would have [*unclear:* had] chance whatever of being elected. He [*unclear:* w] surprised, seeing how strong the expression of opinion on this question had been all over [*unclear:* th] country during the election, to find so [*unclear:* may] honourable members in favour of altering [*unclear:* th] system materially. A good deal had been said as to the physical disadvantages which would result from children under six years of age attending school. He had had considerable Experience in the management and working of State schools, and he had never been able to see any physical disadvantages follow from children of that age being taught in these schools. The opinion of one medical man had been quoted to show that it was very disadvantageous indeed for children to have education forced on them at an early age; but, notwithstanding this opinion, he thought the best judges of whether attending school at an early age was physically injurious were the parents themselves, and he ventured to say that, if you travelled the country over, not a single parent would be found to say that a child had been known to suffer physical injury from attending school too young. On the contrary, the evidence of parents would be that young children attending school and being made subject to discipline and receiving the elements of education made them brighter and smarter; and the experience of teachers and Inspectors was the same. Erectly these young children began to attend school, and mixed with the older scholars and with each other, they began to pick up all kinds of information unconsciously, just as they had learned to speak unconsciously from listening to those who spoke near them; while if they kept away from school till they were seven, or eight, or nine years of ago before learning anything in this way, it would be much more difficult for them to begin to acquire the rudiments of knowledge. It was surprising to find how much information children could acquire before they were seven—they learned to read pell, to write fairly, and got some knowledge of prithmetic; and by that time they were strong tough, mentally and physically, to continue at school, and to go on to more advanced work without any strain. There was no real strain on children up to fourteen or fifteen in going through the primary-school course. Those honourable members who could remember their own schooldays would know that they had felt no strain in those times; and that it was only when they became adults and had to face the struggles, difficulties, and problems of life that they began to feel conscious of any strain. Very few, if any, children in the State schools were strained, either mentally or physically, even those in the highest classes; Sand he thought it would be the greatest misfortune to raise the school-age. He entirely agreed, too, that those who had passed the Sixth Standard, and who had not reached the limit of school-age, should be allowed to remain at school if they chose. Many children passed that standard by the time they were twelve, They might not be able to get employment; and why should they be turned into the streets, where there was a great probability of their acquiring very undesirable knowledge? the law said that these children might attend school till they were fifteen, and he thought, in those circumstances, those whose parents wished them to be more thoroughly grounded in the higher parts of the subjects they had studied should be allowed to remain at school. It was at that very time that children were likely to derive the most advantage from attending school, and, so far from excluding them, he thought they should be encouraged to remain after they had passed the Sixth Standard;

but, as honourable members knew, in many cases, owing to the position of the parents, it was not possible for them to remain even till they had reached the Sixth Standard. He believed our system had been copied from the Victorian, and he knew that there the children, after reaching a certain standard—after being well grounded, in fact, in the three Rs—might leave school; but, notwithstanding such children had received a certificate showing that they had passed the standard required by the Education Act in that colony, they were not only permitted but even encouraged to remain in the schools until they had attained the age of fifteen years. Many passed the compulsory standard at eleven years of ago, and they could then leave school if their parents wished; but many of these children, unfortunately, were compelled to leave school at an early age, in order to assist their parents to obtain the means of living. It was seen even in this colony that parents were often in such straitened circumstances that whatever could be earned by their children was of great assistance in helping to supply the wants of the family; and for this reason children of tender years were often found at work who should be attending the State schools. He therefore thought that every inducement should be given to encourage the children being kept at school as long as possible, and every effort made to secure that they should, while at school, be given a suitable education. It was unnecessary for him to say anything in favour of the State system of education. People of all classes who had inquired into it carefully believed that it was doing a great amount of good, that education of a most thorough character was being imparted, and that a youth who had passed through the various standards of a State school in this colony was so thoroughly grounded in the rudiments of an ordinary English education that he could, if he were studious and desirous of proceeding with his studies after leaving school, be able to obtain the highest honours that could be conferred by the universities. He believed it was a fact that those pupils who had taken the highest positions at the universities were those who had been primarily educated at the State schools. He felt very strongly on the subject, and was sure that no greater mistake could be made than to increase the school-age, or to exclude children, as had been proposed by Ministers. With reference to the next question, that of reducing the capitation by 4s., he was, as he had said at the commencement of his remarks, in favour of retrenchment, and, if the Ministry thought that they could get the children educated for £3 15s. per head with as much efficiency as at present, he would give his hearty support to their proposal. With regard to the substitution of strict average for working average, he could not agree to that. So far as his knowledge went—and it was some time since he had anything to do with State schools—the allotment of staff was made in accordance with the average attendance at the schools, and that average was made up by dividing the total attendance by the number of days on which the school was open, after deducting the number of days on which the attendance had fallen below a certain number, and upon the result so obtained teachers were allotted to the school; but under strict average the total number would be divided by the actual number of schooldays, making no allowance for the attendance having fallen owing to sickness or from any other cause. If the basis suggested by the Minister of Education were adopted it would lead to an inadequate staff being employed, and to the teachers' salaries being reduced. There might be many wet days in the year, and epidemics sometimes very materially interfered with the attendance; and he feared that evil results would follow from making the allotment of teachers to the schools on strict average instead of working average. He would therefore be unable to support that proposal. With regard to training teachers, he was wholly in favour of training-institutions being carried on by the Government; but in his opinion there were too many of these institutions in the colony. One for each Island would be quite sufficient. In Victoria the practice was that, after children had passed a certain standard or a certain examination, they received appointments as pupil-teachers, going through a course of three, or four, or five years. They were then sent to a training-institution, and remained there for two years; and while there they were taught by professors—university men—and they were also given practical experience in the State schools, receiving the salaries usually paid to assistants, to help in their support. He believed that there should be some system of that kind by which the State could train its teachers; but he thought there might be substantial reductions in the expenditure now incurred in this direction. With regard to the reduction of expenditure in the State-school system, he thought considerable retrenchment might be made without touching the school-ago, without interfering with the working average, or without materially interfering with the training-institutions; and it might be made by abolishing the Boards. It would have been seen, by what had fallen from several honourable members in the course of the debate, that some Boards were not conducting their affairs upon economical principles. The honourable member for Napier had shown that some Boards were not worked cheaply, and that, in fact, where Boards were disposed to be economical, they could make considerable savings. In the honourable gentleman's own district, he understood, they had saved £2,000 out of the allotment during the past year, which had been put by for building purposes, though the honourable member did not say that it was required for that purpose. He (Mr. Loughrey) was in favour, therefore, of abolishing the Boards. Each of these bodies had a staff consisting of Inspectors, a secretary, clerks, *et cetera*, which to [*unclear:* a] extent might be done without if the system were worked from one centre. If the [*unclear:* B] were dispensed with the teachers would appointed in a proper manner; they [*unclear:* w] be more independent, and not be at [*unclear:* the] and-call of the Committees

of the district which they might be situated, and for this person they would do their duty better [*unclear:* and] efficiently. The Minister had already [*unclear:* st] that, though he proposed to increase the school-age, he would sec that the country [*unclear:* school] not interfered with; but he should like to the honourable gentleman what average intended to take on which to keep the [*unclear:* cos] schools open. He believed that they [*unclear:* we] present kept open when there was an [*unclear:* av] of twenty. If that average should be [*unclear:* re] in consequence of the exclusion of the child mentioned by the Minister, what [*unclear:* adva] would be gained? The same [*unclear:* expenses] be incurred in working the school, [*unclear:* not] standing the reduced attendance; and [*unclear:* the] advantage—if it were an advantage—would that a number of children would be [*unclear:* depria] the means of being educated. It was [*unclear:* no] trouble to teach twenty than it was [*unclear:* to] twelve. The teacher had a certain [*unclear:* ne] of classes to instruct, and it [*unclear:* would] no difference to him whether [*unclear:* there] five or six children in a class, or [*unclear:* tw] three. In conclusion, he had to say [*unclear:* th] was prepared to support the second [*unclear:* por] of Ministers—that was, to reduce the caption-allowance—he had no doubt it [*unclear:* had] carefully considered—and he could supper reduction of the grant in aid of [*unclear:* tram] colleges; but he was not prepared to [*unclear:* sw] the other proposals.

Mr. Walker felt sorry that the [*unclear:* Mini] had not adopted the same course with this [*unclear:* ject] that they had adopted with other [*unclear:* of] estimates—that was, to state to the [*unclear:* House] inability to make definite proposals, and seek from the House confidence that [*unclear:* they] do their best to effect economy [*unclear:* where] could. It would have been asking a [*unclear:* good] from the House, but he believed that the [*unclear:* H] was prepared to grant them that confident He was sorry that in this the most import part of our expenditure, a matter [*unclear:* which] quired the most complete knowledge and most delicate treatment, they should [*unclear:* have] so precipitate as to rush in where angels [*unclear:* f] to tread, and to propose to do something [*unclear:* w] might seriously affect the excellence [*unclear:* and] working of the education system. It [*unclear:* would] been much more wise if Ministers had [*unclear:* been] radical in their proposals, and more caution the reductions which they proposed [*unclear:* to] Although pledged and persuaded that [*unclear:* the] sent education system must be [*unclear:* supported] entirety, that was, so far as work was [*unclear:* conca] he was not averse from economy: in fact was prepared to follow Ministers or anywhere else where it could be shown that [*unclear:* eocc] could be secured without a sacrifice of [*unclear:* ciency]. But what he felt was that it had yet been shown that economy [*unclear:* could] be effected in the direction proposed by Ministers. The fact had already been referred to by the honourable member for Caversham that a Committee was appointed at the beginning of the session to consider this matter; and he regretted that that Committee had not been trusted so far as to have effect given to its report. That Committee stated generally that it had not had time to complete its investigations, and candidly confessed its inability to brings down any report that could exhaustively and thoroughly deal with the question. Why, then, should the Minister, unless he was prepared to say that he had more information than that Committee—which he could not have after but one fortnight of office—come down and say that he saw his way to alter the whole system? It would have been infinitely more creditable to say candidly that he was unable to recommend at the present time any specific reduction, but that, if the House would leave the Matter in his hands, it might safely trust him—declaring that he valued the system too much to injure it, but, at the same time, he would endeavour to effect such reductions as were possible by next session. If the honourable gentleman had said that, the House would have extended to him its confidence.

An Hon. MEMBER.—What would the Opposition have said?

Mr. Walker said the Opposition never refused reasonable advice from any Minister, nor refused to extend to any Minister reasonable confidence. So much for the general question, He was sorry indeed that the Government had altered their tactics on this particular point of their policy, because he considered it would; Have been much wiser not to have done so. So far as the House had heard from the Minister, the only specific point he really brought up that required serious consideration was that which had been also dealt with by the honourable member for Napier, which was that there was a good deal of difference of administration in different districts. That was the most important point that had been laid before the House that day. And what did it prove? Not that any particular part of the system should be reduced all over the colony, but that the administration should be improved where it was faulty. The Minister, however, had not shown exactly how it was to be improved, even in districts where he thought there had been a lack of good administration. The whole circumstances only pointed to this: that more mature deliberation and consideration of the whole subject was, in the first place, necessary before the Minister could presume to guide the House in this most important matter. He trusted the Minister would take into consideration all he had heard that day upon the subject, and endeavour, next session, to lay before the House better and more matured recommendations. He ventured to doubt whether, at present, the Minister had any data upon which to found his proposals; and the fact that he was prepared to accept a compromise showed that he was acting upon insufficient data. The exact nature of the compromise he (Mr. Walker) did not know; but the fact that the Minister was willing to accept a compromise showed that he was not quite clear himself, for if he had seriously considered the matter he would have been the last person to

accept a compromise. He did not sec how the Committee could arrive at any distinct issue on any one of the matters submitted to it. They were really working in the dark, and the Minister would not be fully assured as to what the real opinion of the House was upon any one of the four points. However, he trusted that before the debate closed the Ministry would gather the opinions of a good many of the members. As to the first question, the school-age, the Committee which had been appointed at the beginning of the session was able to gather some evidence, and he was not astonished that the evidence which was procurable was certainly not of a character to support the Government proposals. When the Committee was appointed some members, during the course of the light debate that took place on the question, said that they would not send their children to school before the age of seven. That was exactly a point upon which there was much misconception. It was all very well for honourable members who had nurseries and governesses not to send their children to school at the age of five years; but, then, their children were under governesses, receiving most important training and discipline, though, nominally, they were not going to school. Then, there was this point he wished to emphasize: that the younger children who went to school were receiving most valuable instruction and discipline in habits and manners. At the same time that they were not subjected to anything which could hinder their physical development, as regarded their mental development they were receiving most perfect training, which would enable them, when the proper time came, to learn the different subjects which would come before them. The evidence placed before the Committee was most conclusive on that point. The evidence of Mr. Habens certainly went to show that in his opinion it was a fallacy to suppose that the education in the lower classes in the public schools did anything more than train the children in habits of discipline and obedience: it also showed that, more than that, the training they had to undergo was absolutely pleasant and agreeable, and had all the advantages that the kindergarten system possessed. Then, as regarded the inclusion of these children in the schools, that affected in the most prodigious manner the cost of the whole system. It was by these children being included that they were enabled to support so many country schools. The education of the children in the infant schools did not cost more than £15s. or £1 10s. per annum, and the money that was saved by their capitation enabled the Boards to keep up the country schools. As against that, the Minister proposed that, if these children were kept out of the schools, not a single country school should be shut up; but, as had been shown by the honourable member for Wellington Suburbs, the saving thus proposed to be effected would be merely nominal: the money that would have to be sent to keep up the country schools would be precisely the same amount as that saved, and, in addition, the children would be turned from the other schools into the streets. He thought they should get the children into the schools as soon as possible. It would do them no harm, but good; and under the present system the country would not be a penny the better for the proposed change, while the education of the country would be a great deal worse. For these reasons, he maintained that, so far as the question of school-age was concerned, the Minister of Education had not made out a case, and he would be prepared to vote for the retention of the school-ago as at present. Regarding the children who had passed the standards before they arrived at the other limit of the school-age, if clever, hard-working children did that he should be very sorry to see them excluded. At the same time, he admitted that this was one of the branches of the subject which showed the necessity for exhaustive consideration, not only with regard to primary but also with regard to secondary education. He therefore desired that the Minister, who was evidently desirous of making good the old proverb about a now broom, should look into this matter during the recess, and endeavour to show what he could do with regard to the whole system. If he could bring down to the House a system which would save all overlapping, and enable every link in the chain to be well welded and to do its work efficiently—primary education doing its work, and secondary education not overlapping, but also doing its work—he, for one, should be exceedingly glad: and he trusted the Minister would devote his energies to this during the recess. Then, with regard to the normal schools, the Minister laid a great deal of stress on the fact that two of our normal schools were not doing good work. The honourable gentleman admitted that the Otago Training-school was doing good work, and he said nothing about the North Canterbury school; therefore it was to be presumed that silence gave consent, and that it also was doing good work. He should be very sorry to see all these normal schools done away with. He admitted that, in the interests of economy, there might be only one for the South Island and one for the North Island; but it was wrong to suppose that any economy or assistance would come to education by doing away with them altogether. He therefore could not agree with that proposal. One of the arguments of the Minister of Education was that some of the districts which had no normal schools did very well without them; but what happened in those districts? Simply that they got the teachers they wanted to fill important positions from the districts which had normal schools. That certainly did not show that normal schools were not necessary to the colony. With regard to the averages, he was not sufficiently acquainted with the working of the system to say whether the proposal of the Minister was right or wrong; but he learned enough from the speech of the honourable member for Linwood to know that it [*unclear:* w] work very unfairly in some instances, and [*unclear:* th] fore he would urge on the Minister [*unclear:* to] that back for further consideration. As [*unclear:* gards] the capitation, he would not be [*unclear:* a] from its being reduced to the

statutory [*unclear:* am] because if they had learned one thing [*unclear:* du] the debate it was this: that there [*unclear:* had] a great deal of difference in the administration by different Boards, and that [*unclear:* some] ducted their education system for [*unclear:* much] than others. His own experience in [*unclear:* Canter] had been that the Board had for [*unclear:* some] been managing their affairs in an [*unclear:* exceed] extravagant manner. They had [*unclear:* been] in putting up school-buildings in [*unclear:* places] they were not wanted, and the style of building they had erected was much more [*unclear:* palatial] the circumstances of the [*unclear:* neighbourhood] quired. They had not even considered [*unclear:* wh] the district was one that was likely to be imminently settled, or one which was [*unclear:* m] stuffed with little children for the moment so enabled to appeal to the Education Board a school. He therefore thought that [*unclear:* a] enforced economy in their case and [*unclear:* in] cases would have a salutary effect. He listened with a great deal of pleasure [*unclear:* to] of the remarks of the honourable member Napier, which tended in the direction of [*unclear:* ing] that some of the Education Boards administered their affairs with a great [*unclear:* de] economy, and without any bad effects to cause of education. For these reasons would vote for the reduction of the [*unclear:* capi] to the statutory amount. It had also hinted that Boards were an expense and upon the system. Why that should [*unclear:* be] did not know. The members of those [*unclear:* B] were certainly gentlemen who [*unclear:* devoted] selves to the work for no other cause [*unclear:* tha] they loved it and wished to do their best [*unclear:* S] The expenses of these Boards were [*unclear:* not] great, and it would not be fair to do away them all over the colony. That [*unclear:* would] the central expense in Wellington at least times as great as it was now. He wool sorry to see that change effected, [*unclear:* because] would be nothing that would tend may destroy the sense of self-reliance of the [*unclear:* p] than to have to apply for [*unclear:* everything] central office in Wellington. [*unclear:* Proper] ministered, the district Boards [*unclear:* ought] valuable adjuncts to the cause of education and valuable advisers to the central [*unclear:* off] Wellington. In conclusion, he would upon the Minister, if only for the [*unclear:* sake] own reputation, to pause a little [*unclear:* longer] he pressed these radical changes on [*unclear:* the] try. If the honourable gentleman would take three months to consider he would bably bring down a scheme [*unclear:* which] more advantageous to the colony, and conservative of the good parts of the system now had. He believed in the [*unclear:* prudence] delay, because the system of [*unclear:* education] immense advantage to the future, [*unclear:* and] children of the colony; and it [*unclear:* was] which every taxpayer of the colony paid, and every taxpayer had a right to get his full value from it.

Mr. Allen must commence by saying a few words on the general question, so that the attitude he took up might not be misunderstood. He yielded to no man in his desire to see the whole population educated in the very best possible manner, and he said that because he believed the danger of the future, the danger of competition, was not from pauper labour, but lay in the competition which would take place between us and highly-educated labour elsewhere. At the same time, knowing the position we were in, it behoved us also to see that our education, while being as efficient as it was now, was managed economically. That was a question which was prominently before the electors during the recent electioneering campaign,—and, in connection with that, he might answer one argument brought forward by the honourable member for Linwood, who said that every candidate was pledged to support the school-age at five years—

Mr. Loughrey had not said anything of the kind.

Mr. Allen understood the honourable gentleman to say that if any one had dared to propose that the school-age should be increased from five to six years he would have lost his election. As far as he himself was concerned—and honourable members knew whom he had to oppose at the election—he boldly stated to his constituents that he thought the raising of the school-age from five to six was necessary under our present difficulties. Then, they were told by the last speaker that the physical strain on children attending school at five years of age had no evil effects. The honourable gentleman was not present at the meeting of the Education Committee at which medical evidence was taken which tended to prove exactly the contrary. Dr. Brown gave evidence to this effect before the Committee:—

"If I am to give an opinion, speaking as a medical man, I think that children in the majority of cases are sent to school too early. I do not think that for the purposes of real education the majority of children derive much Benefit from schooling under six or seven years of age. During the early years of childhood I relink that the best use that can be made of a child's time is to help him to get as sound and healthy a bodily organism as possible."

Then he was pressed minutely on this point, and he said he thought that under any circumstances a child would be better in the open air enjoying any healthful form of recreation, and that his opinion was based on experience and observation. That evidence came from a gentleman who was not only a medical man, but also Chairman of an Education Board, and one who took a great interest in the work; and some weight ought to attach to his opinion. What, then, was there in favour of raising the school-age? They should also take into consideration what was done in other countries which were in the van of progress in regard to education. In Switzerland, which was in the very front rank in educational progress, the children were bound to go to school

at seven years, and could go at six; in France the compulsory ago was from six to thirteen; in Hamburg the children could not enter the schools before they were six; and in America the legal minimum age was six: the compulsory age was from eight to fourteen. He would admit that there were variations in the school-ago in America, and that the average was from five to six years; but in nearly all of the countries of Europe the lowest age at which a child might enter a school was six years. He thought that, taken with what he had mentioned before, should also have some weight with the Committee. It would be seen, then, from what he had said that he was quite prepared to vote for the raising of the school-ago from five to six years; but he should have been qui to prepared to' accept the report which came down from the Education Committee, not because he personally wanted much more evidence in favour of the raising of the school-ago, but because he thought it wise, when a largo reform was being made, to take time to consider it. If, however, a division were called for he was pledged to vote for the raising of the age to six. Then, with regard to the reduction by 4s. of the capitation-grant, he was also quite prepared to vote for that; and, as far as he could gather from the speeches in the Committee, most members were prepared to vote for the 4s. reduction. At any rate, he should vote for it himself; and he was not afraid to say that he saw no reason why the salaries of the more highly paid school-teachers should not be reduced. The late Government proposed reductions in the Civil Service, but none in the salaries of highly-paid school-teachers; and the late Colonial Treasurer based his argument for the reduction of the salaries of Civil servants on the fact, as he said, that the purchasing-power of money was far greater than it was a few years ago. If that argument had any weight with regard to Civil servants, certainly it had the same weight with regard to highly-paid school-teachers. Oil that ground alone he should be prepared to vote for the reduction of the 4s.

Mr. Seddon.—What is your definition of a highly-paid school-teacher?

Mr. Allen.—£500 a year.

Mr. Levestam.—How many of those have you in the colony? Only three or four.

Mr. Allen said there were several. He must candidly confess that not sufficient evidence had been adduced to enable him to make up his mind on the third proposal of the Government, relating to strict average, and he should therefore prefer that that question be left over until next session. With regard to the normal schools or training-colleges, he felt that it would be advisable to leave the question open until next session. He knew from the evidence that had been brought before the Committee that in some cases the training-colleges had proved more or less failures; but he was not prepared to accept that judgment in regard to the normal schools in the district from which he came. He thought everybody coming from that part of the colony would admit that they had been to a very great extent a success. But it involved a very largo question of policy. The training of school-teachers was a large question they could hardly make up their minds upon in one day or evening. He should prefer it to be left over until next session, when they might discuss it under more favourable conditions. An honourable member made a remark that afternoon that in Hawke's Bay they had got no training-college, and yet got on quite as well without it. Now, that might be quite true; but, from the evidence he had before him, Hawke's Bay had been drawing her teachers from the Otago training-colleges. He had before him a letter to Mr. James Fulton, M.H.R., from Dr. Stuart, a gentleman who, he supposed, was known to everybody in the House. Dr. Stuart said,—

"I have had the opinion that our Normal School does good work. Its trained men are in demand in South Canterbury, Hawke's Bay, and Taranaki, and in such demand that at this moment there is only one trained man who is not in a situation. When its students go up to the University they take a full share of the honours."

He had also before him evidence from the head-teacher of the Normal School in Dunedin very much to the same effect. He said,—

"Were the school training only for the Otago District there might be reason even in this [i.e., reduced expenditure on the Normal School]; but it trains teachers for Southland and South Canterbury, for Hawke's Bay, Taranaki, and Wanganui, and for other education districts as well. The teachers of these districts would not be burdened with the cost of training. Why should the teachers of Otago?"

Well, with evidence of that kind before him, he could not make up his mind to vote for doing away with normal schools and training-colleges, and he hoped that question might be held over till next session. Of course the whole question was a large one. He supposed they all very much regretted being obliged to make any reductions whatever in the education system; but they had to admit that the time had now come when they were sorely pressed for funds, and, if it were possible to make economies in the education system without impairing its efficiency, why, then, it was their duty to do so. However, he would not go into the whole question now. He supposed that next session the question would crop up again, and they would then have the full evidence of the Education Committee before them, and perhaps those who had been unable yet to come to any conclusion would then be able to make up their minds more readily.

Dr. Fitchett had a good deal to say on his subject, but would mercifullly refrain from saying most of it, because the matter had already been pretty exhaustively argued. But he could not content himself without

saying something, because he thought that, from every point of view, this was the most important matter they had had to discuss this session. Now, he was a very loyal friend of the [*unclear:* prese] system of education, and, as far as [*unclear:* possible], would allow nothing to touch it that, [*unclear:* in] judgment, would injure it. It was [*unclear:* because] was so loyal a friend of the system [*unclear:* that] would cordially assist every effort to intelligent economize. There were enemies on all side and the friends of education could best [*unclear:* sust] it by showing no vulnerable point of [*unclear:* attac] Therefore he was strenuously in favour of [*unclear:* ev] attempt to economize the education system But he was not going to economize at [*unclear:* the] pense of the system, and he was very sorry [*unclear:* to] that, so far as three out of these four proposer went, he was emphatically against [*unclear:* them]. thought the Ministry had been [*unclear:* altogether] mature in this matter. They appointed a Committee, and voluminous evidence was taker and yet the House was now asked to deal [*unclear:* r] this great question while honourable member generally were in a state of ignorance as to [*unclear:* t] evidence adduced and the result of the [*unclear:* labou] of the Committee! Ignoring the labours [*unclear:* of] Committee, the Government came down [*unclear:* w] a series of isolated lines on which they proposed to pursue their retrenchment. [*unclear:* Inde] the interim report presented by the Committee was directly in the teeth of the Government proposals. He thought this was a mistake would be noticed that in the discussion, [*unclear:* tho] every speaker had urged retrenchment, [*unclear:* th] were by no means in accord with the Government. One honourable gentleman [*unclear:* decl] that Boards should be abolished, [*unclear:* another] the standards should be revised, another [*unclear:* th] the high schools should be [*unclear:* abolished]. these things went to show that the Government were premature in endeavouring [*unclear:* to] trench before they knew where to retreat and therein lay the danger which the system ran at the hands of the Government. [*unclear:* He] tested against tinkering with so important question as the education system of the [*unclear:* colo] He thought they should have time [*unclear:* during] recess to exhaustively analyse the whole [*unclear:* aff] and at the beginning of next session [*unclear:* co] down with a complete and exhaustive [*unclear:* sch] of retrenchment. In that he would [*unclear:* assist], he believed that not only would the [*unclear:* loss] sequent on the delay be very trifling, but believed retrenchment to the extent of nearly £100,000 could be achieved, and [*unclear:* that], without injuring the system—in fact, it might heighten the efficiency of the system. During with the Government proposals, and taking first the school-age, the onus lay on the Government to establish the advisability of change. The Government had pledged the selves to do nothing to injure the efficiencies the system. The onus rested on them to system that raising the school-age would not [*unclear:* injure] system. That view had not been suffices urged on the Committee. What [*unclear:* evidence] adduced in support of the proposed [*unclear:* cha] The Minister of Education told the Committee that, of thirty-nine reports or answers, [*unclear:* nine] wore in favour of raising the school-[*unclear:* age], teen were against it, and four were [*unclear:* silent] (Dr. Fitchett) took it that the four [*unclear:* who] silent were really in favour of the present state of things; so that, from the Minister's own figures, there were nineteen in favour of the change and twenty against it. Thus the balance of evidence was against the Minister. That, however, was perhaps a narrow way of looking at it. Honourable members had not before them the evidence given before the Committee, but he would briefly refer to one or two points that had already been touched on. The Minister of Education laid emphasis on the evidence in favour of raising the school-age given by Dr. Brown, and therein he was followed by the honourable member for Dunedin East. Now, in considering that evidence they must remember one thing: that Dr. Brown was not a specialist in education at all. He had no practical knowledge of it. He was a specialist as a medical man, but not as an educationalist. But his evidence did not support the contention of the Minister of Education, or of the honourable member for Dunedin East, who carefully omitted an answer given by Dr. Brown that put his evidence in an altogether different light. He would read the question and answer:—

"You say that you think the children are sent too early to school. Does not that depend upon the sort of instruction they get and the sort of accommodation that exists?—Yes; but, assuming the instruction to be intelligent and the accommodation fit, I consider that at the present school-age children would get no harm from attendance at school and the form of instruction they get there—supposing the hours are not too long. I lay great stress on that point. I put special emphasis on this point so far as it relates to the school-hours. I think they are at present too long for infants. I fail to see what benefit is derived from an [attendance of four hours—two hours in the forenoon and two hours in the afternoon—for very young children."

There he surrendered the whole position, for if the instruction were not intelligent or the accommodation fit they should be made so. If the hours were too long, that was a matter of detail to be remedied by the department; it was not a reason for raising the school-age. Again,—

"Is the present accommodation fit?—It has been made as fit as possible—that is, as fit as we could make it in Otago.

"Do you not think that a child would be better off even if kept in premises not exactly adapted to his use than if he were running in the street?—I do not."

That was a matter on which each honourable gentleman could form a judgment. He (Dr. Fitchett) submitted

that it was far better that a child should be kept in a well-regulated school Shan be allowed to run about in the back-lanes of a city. Then, the Minister asked, "You think that under any circumstances the child would be better in the open air enjoying any healthful form of recreation?" Dr. Brown answered, "I do." The doctor was under the delusion that if a child was not at school it would of necessity be enjoying healthy recreation outside. Now, had young children, particularly the children of poor people, who formed the mass of the population in cities, any opportunity of enjoying healthful recreation outside? They had not.

Mr. Fisher.—Why necessarily in the gutters?

Dr. Fitchett said, in the cases of the poor, the fathers being away at work, and the mothers engaged in their domestic duties, the children were left to their own sweet will, and they went to the gutter naturally—it was the only place open to them. He would draw attention to the evidence of a witness of greater authority than Dr. Brown, or, indeed, probably than any other witness—the Rev. Mr. Habens, Inspector-General of Schools. In one answer he put concisely and conclusively the whole position of those who contended that the school-age should not be raised. He was asked, "What do you think is the general effect of discipline and teaching on these younger children?" and the answer was,—

"Considering the early age at which the children of the artisan and the labourer ordinarily leave school, I am of opinion that it is necessary to admit such children to school at an early ago, in order that their school-course may be of reasonable length; and that, in schools which are sufficiently organized to provide instruction upon proper methods for children between five and seven years of age, such children derive a very great benefit from the discipline and instruction which they receive, and are thereby prepared for the severer methods of instruction that will follow in the more advanced classes. I think it should also be remembered that the children of the same class, if they are not at school at an early age, are likely to receive a practical education out-of-doors that, however advantageous it may be to them from a physical point of view, is perhaps very detrimental from a moral and intellectual point of view. I may add that, if we regard the example set by England in this matter, the English Government recognises the attendance of children just above three years of age as entitling the schools they attend to grants from the Treasury."

This was what Dr. Brown said about school-age and capitation:—

"At the same time, I must say that, having gone carefully into this question of capitation-allowance and its bearing on the cost of education, I fail to see how, as long as the State continues to have the control of education in its hands, this system can be maintained unless the school-age is retained pretty much as it is or the capitation-allowance is increased."

Yet the Government actually proposed to reduce the capitation-allowance. He would not appeal further to authorities, but he would appeal to the common-sense of the Committee as to whether it was not reasonable and right to let children go to school at the age of five. As it had been well put by one honourable member, raising the school-age would, paradoxical as it seemed, be imposing a tax to keep the children out of school. The country schools would suffer from the decreased capitation, and would have to get assistance from the Government to keep open; so it would be really imposing a tax to keep children from the schools. It had been said that children between five and six were too young to undergo a steady course of instruction—that they were physically and mentally too weak, and that therefore they should not be permitted to go to school. But honourable members could see, and the evidence would show, that these young children were not instructed in the sense spoken of at all, but that they were kept at school subject to discipline, where they learned habits of order and attention, and unconsciously absorbed, through their pores, as it were, a large amount of information. They acquired a habit of noticing things, and in all these ways they fitted themselves for learning more quickly later on. The evidence went to show that children who attended school at an early age learned faster, relatively, than children who had not attended school at an early ago. As to the proposed reduction of capitation, it seemed to him that it would be entirely inoperative. Under the present system the Government gave the money to the Education Boards. The Boards gave a sufficiency to the town schools, and the country schools got what was left. It was like pouring water into a cup; the cup was filled, and then what more was poured ran over. Here the money was poured into the cup of the town schools, and what was over ran to the country schools. If the quantity poured was decreased the cup would still have to be filled before any could run over, and of course it would be the overflow that would be so much less to the country schools, and the country schools would have to come to the Government for enough more to keep them alive. It was as clear as a syllogism. There would be no real saving: the towns would be first supplied, and would absorb all the funds. The country schools would come to the Government for more, and would get it; for the Government were pledged to keep open the country schools. As to the strict-average proposal, the honourable member for Linwood had put that quite out of court. By having the strict average instead of the working average an indefinite punishment would be inflicted on the teacher—it would be making his salary dependent on the weather: salaries would go up and down with the barometer. Anything more absurd could not be conceived. The Minister could not have considered what would be the effect of such a change or he would never have suggested it. The master would have to do the same

amount of work at all times, for it was just as easy to teach six as lour; but, as he had said, the man would get a fluctuating salary, and, literally, it would depend on the weather. Reverting for a moment to the raising of the school-age, he would like to point out that the honourable member for Napier seemed to miss the point of what had been urged in favour of the present order of things. The argument was that, as the town schools did not cost so much per head to maintain as the country schools, if the allowance were decreased there would not be so much to go to the country schools by way of surplice from the town schools; that, therefore, [*unclear:* th] country schools would suffer most. The honourable gentleman said that in the country children under six years did not attend—[*unclear:* th] it was usually too far for them to go, and they were kept away by the weather; that there faces it would be the town schools more than [*unclear:* th] country schools that would suffer. On reflection the honourable gentleman would see [*unclear:* th] the surplus was chiefly created by the attendance in town schools of children under [*unclear:* s] As to closing the normal schools, that was new proposal not indicated in the [*unclear:* Financi] Statement, which gave the general lines of [*unclear:* th] proposed retrenchment. If it was [*unclear:* intended] abolish them, direct evidence on [*unclear:* that] should have been taken by the Education Committee. This was not done, but [*unclear:* sub] evidence as there was was entirely in [*unclear:* favour] the retention of the normal schools. [*unclear:* All] witnesses, both those who gave their evidence orally and those who did so in writing, [*unclear:* we] asked if they could make [*unclear:* suggestions] effecting economy, and not one had suggested abolishing the normal schools. That [*unclear:* w] really affirmative evidence in favour of retaining them. The Minister had quoted a Mr. Fidler as reflecting on the efficiency of the Auckland school; but when Mr. Fidler came to give evidence before the Committee he did not [*unclear:* sa] anything on that subject. But, [*unclear:* because] school was inefficient, that was no argument for abolishing the entire system; it only [*unclear:* pro] that one school wanted improving. In Canterbury and Otago the training-schools has done most excellent work, and had given full value to the country for its money in [*unclear:* th] teachers they had turned out.

Mr. Fisher.—Canterbury?

Dr. Fitchett could speak from his [*unclear:* ow] knowledge of the Canterbury school [*unclear:* and] those conducting it. That school had turned out teachers worth the whole vote to the colon Besides the actual work of training teacher the normal schools also served a most valuable purpose as nurseries to the university. Our system of education encouraged teachers [*unclear:* to] through the University. There was great [*unclear:* ber] fit in that. Those going through the training colleges simply would probably acquire [*unclear:* ca] enough to suit their immediate purpose and enable them to pass the necessary examinations, while those passing through the University acquired a larger and broader knowledge They knew all round the subjects they [*unclear:* taug] and so were better teachers. The system normal schools was a good one. They [*unclear:* to] the cream of the scholars and made [*unclear:* th] teachers. Abolish them, and the supply trained teachers must be imported [*unclear:* from] side. He hoped they would be [*unclear:* allowed] remain till next session at all events, [*unclear:* when] whole subject could receive mature consideration. Indeed, he hoped the whole of the proposals would be allowed to stand over [*unclear:* till] session. He knew that savings could be made in the administration of the primary system and in the cost of higher education; savings could be made in the standards, and savings could be made by lessening the number of Education Boards. There could be also large sums saved and greater efficiency attained in the system of inspection. Not one of these things was embodied in the proposals of the Government. He knew this matter had been discussed apart from party consideration, and he hoped all honourable members would be guided without prejudice in coming to a decision on the different proposals submitted. He was satisfied that, though possibly the reducing of the capitation might not do much harm, yet the raising of the school-age and the abolishing of the normal schools were organic changes of a most disastrous kind—changes that hereafter would be bitterly regretted.

Mr. Peacock would not say much now on the question of school-age, as he had spoken on it before; but, after what had been said and quoted by the honourable member for Dunedin Central, he could not refrain from giving a quotation bearing on this point. The honourable member had referred somewhat disparagingly to the evidence of Dr. Brown, given before the Education Committee, because it happened to be against his own views, and stated it was overridden by that of the Rev. Mr. Habens. He wished to read a few lines from the evidence of perhaps the highest expert on the subject in the world. Mr. Arnold, Inspector-General of Schools in Great Britain, when being examined before the Royal Commission on Education, referred as follows to Germany, a country in the front rank of the nations as regarded education:" In Germany they tell you that it is settled by all the medical authorities that children have no business to begin to learn before they are six years old."

Mr. Duncan said the Committee had heard a great deal of argument from the town point of view, and he would now say a few words on the country side of the question. There were twenty-one or twenty-two schools in his electorate, mostly small ones: in fact, in about seven of them there was attendance about enough to let the teachers be fairly paid; while, as to the rest, if the Government proposals were 'carried there could be no doubt

that further assistance would be wanted to keep them alive. He supposed that the average for seven of those schools would be about 120, and that the average attendance at the others would be about forty, while some of them had as few as twenty-five pupils, so that it would mean that, if this plan were carried out, a number of those teachers would have to come to the Government for assistance—that they would actually have to beg for an existence. That deserved consideration; and another matter which deserved consideration was that nothing should Be done which would reduce educational advantages to the children of those people who Went into the remote parts of the country to carry on the work of colonisation. He did not believe that the Minister of Education had sufficiently thought the matter out. He had no doubt that the honourable gentleman was sincere in stating that he would not allow country schools to be shut up; but there were so many of them that were at starving-point already that any reductions must have the effect of shutting them up. It had been stated that there would be a saving of £26,000 by raising the school-age. He did not know how that was arrived at; but he did not think that it would be so large. At any rate, he did not suppose that raising the ago would very much affect the small country schools, because children under the age of six could not walk any distance to the schools. But reducing the capitation-allowance would affect them to a very large extent, especially where there were a good many small schools in a district. The Boards did not seem to be able to give these schools much for maintenance now, and they would then be compelled to give them less; and he feared that it would come to this: that the cost of maintenance would be thrown upon the people in the neighbourhood of these schools; and they could not afford it. As to the alteration in the average, that would have a very serious effect, because the children in wet weather, when the roads were bad and the creeks were flooded, could not attend. Many of the children had seven or eight miles to travel, and it was certain that there must be many causes to prevent regular attendance which were not to be found in connection with the schools in town. He therefore hoped that the country members would endeavour to see that this change in the average should not be made in the case of the country schools, for, to secure an average sufficient to keep the schools open, the children would have to go in weather and under circumstances that might bring on illness that would do them more harm than remaining from school for a week or two during the year. He did not agree with the proposal made by the honourable member for Napier, if he understood him aright, that female teachers should be appointed to the small country schools. There were lots of grown-up boys, say, of eight or nine or ten years old, who were sent to these schools when they knew little or nothing; and he should like to know what power a female teacher would have of controlling half a dozen boys such as those, especially if, as might often happen, they had never been to school previously, and had not learned any discipline. For another thing, it would not be easy to get females to go into these out-of-the-way places. They must necessarily have parents or some one to protect them. He thought it should be male teachers who should be sent to these out-of-the-way places. Then, it was said that there was no need to have as high-grade or highly-trained teachers for these country schools as for the town schools. But he held a different opinion. If they were to have a national system, then the outlying schools should really have better teachers than were to be found in the town schools, or, at any rate, as good. The primary schools in the country districts were the only schools that the children brought up there would have the benefit of, whereas in the towns the children would have the high schools to go to. That led him to another point, and that was that it was not right, especially in the outlying districts, where there were no high schools, to stop the teaching after the Sixth Standard had been passed, or to call upon the parents to pay for it. There were not many of the pupils who stayed after they had passed the Fourth or the Fifth Standard; and if there were any who could stay till they could pass the Seventh or the Eighth Standard—if there was such a standard—they should be allowed to stay, especially seeing that they could be educated at the cost of £3 15s. per head, whereas in the high schools the education cost on an average £24 for each pupil. That showed the unfairness of the thing. He was unwilling to see the education system touched to any material extent. He did not say that there could be no savings effected, because he believed that there might be in some of the higher salaries, and in the reduction of the number of Inspectors, who, moreover, should be made to change districts occasionally. Referring to Otago, he knew that there were three Inspectors employed there; and he believed that they might very well take Southland as well as Otago. But, beyond that, he did not think there could be many changes, and he was quite against any interference with the standards and the school-age, or the alteration of the system of averages now in force. He had explained his views regarding these points very fully during the election, and had told his constituents that the people would be very foolish if they permitted any change in the education system: it was about the only thing that the bulk of the people got for the money they contributed towards meeting the expenditure of the colony. His opponent had expressed approval of raising the school-ago to six years, and had said that he would cut down unnecessary expenditure where he could, pointing to those things which the Government had now proposed. The result was that he (.Mr. Duncan) had been returned. With regard to the normal schools, that was one part of the system that should not be touched, and he would tell the House why. In his early days, in the North of Ireland, the young teachers went to a training-college in Dublin, and they went under a system that might be very well followed in this country. Every teacher commenced as a pupil-teacher, and when he had got

to that stage of efficiency that he could take charge of a school he was given a small school, but he was allowed every year three months free to go to Dublin. A man was put in his place; and he was allowed three months' free education at Dublin College, and if he passed the necessary standards there he could go again for a fourth year. He thought that was a plan which might very well be followed hero. Three months' tuition at the normal school would give pupil-teachers a grasp of the subject which they could not get otherwise, and make them more efficiency teachers.

Mr. Fisher said experience had not proved that they were the best teachers.

Mr. Duncan said his experience was different. In his district they had had teachers from the normal school, and they had proved most excellent; but he believed practical trailing in the schools in the art of teaching andnormal-school tuition were both required, and that then they would get the best teachers. Best teachers were not the M.A.s, but men [*unclear:* wh] had a grasp of human nature, who could conduct a school mildly, intelligently, and strictly without harshness. If the normal schools were done away with the clever youths of [*unclear:* ou] poorer classes would be crowded out [*unclear:* fr] becoming teachers, because they wore [*unclear:* not] the same position as the rich to obtain out side tuition; and the schools of the colony would be the losers. With the [*unclear:* exceptions] had mentioned, he could not conscientiously support the proposals. Of course, all unnecessary expenditure should be done away wit and he had no doubt there was such expenditure. He hoped the present Minister of Education would find these things out during [*unclear:* th] recess, and come down with a comprehensive measure next session. It would be far better to do that, to remodel the whole Education Act, than to bring proposals down in the [*unclear:* fo] of resolutions at this late period of the session However, since economy was the order of [*unclear:* th] order of the day, he would not be [*unclear:* against] 4s. being taken off the capitation-grant, [*unclear:* to] if it could not be done without, as no great injury could be done by taking that away [*unclear:* for] year or two, at any rate.

Mr. Tanner said it was evidently the intention of members to discuss the whole [*unclear:* of] questions mentioned by the Minister of Education. Some honourable gentlemen oppose who had spoken had said that this subject should not have been brought on [*unclear:* at] late period of the session: but much valuable time had been wasted in useless [*unclear:* par] discussions, instead of being occupied [*unclear:* w] the consideration of the great question submitted by the Ministry; and for this did not think the Ministers were to [*unclear:* ble] When he heard the honourable [*unclear:* member] Dunedin Central he could not help thinking that he must be a bachelor, for he showed [*unclear:* sa] a want of knowledge of the habits of children That honourable gentleman seemed to [*unclear:* th] that of necessity if children were not at school they were in the gutters. He ventured to [*unclear:* th] that parents would resent such an imputation The children in New Zealand were [*unclear:* well] ducted, and when not at school were [*unclear:* by] means necessarily in the gutters or in [*unclear:* misch] In proof of this, he would ask honourable members to look at children during the vacating when there were no schools open. If [*unclear:* they] along the streets during the holidays [*unclear:* th] would not find the children in the [*unclear:* gut] but would find them behaving [*unclear:* respectably] quietly. The argument he had made [*unclear:* use] was certainly drawn not from facts, but [*unclear:* fu] imagination. When he heard the honourable member for Kumara descanting upon the merits of the children on the West Coast he could not help thinking that they must be very precocious there—perhaps living where there was a great deal of moisture caused them to spring up more rapidly; but, still, he thought that the children who had been heard singing their little ditties must have been between six and seven years of ago, and not between five and six.

Mr. Seddon.—No.

Mr. Tanner said of course he would accept that statement; but the children in that part of the colony must be very precocious. He would like to have brought on the floor of the House a child who was between the ages of five and six to show what infants such children were. He had found one of that age; but its mother would not let it out on exhibition. He asked the child's mother if it had Iearnt its A, B, C, and she replied that she thought the child should not begin to learn even its A, B, C before it was six years old. The honourable member for Napier had said that the question of the school-age would not affect the country schools so much, but only the town schools—with which he (Mr. Tanner) agreed. In his own district, he might say there were a large number of country schools, but only one of them would be affected by the alteration of the school-age; for the families whose children attended the other schools were so scattered that children between the ages of five and six could not attend the schools. But they might put that question on one side, for they had the assurance of the Minister of Education that the raising of the school-age should not interfere with any of the country schools. He regarded the raising of the school-ago to six as proper, and the saving that would be effected by it as a genuine saving, and in that respect different from the savings subsequently proposed. The school-age, he believed, should have been raised to seven. There were twenty thousand children between the ages of five and seven years receiving education at the present time, and it would have meant a saving of £80,000. That was a direction where the saving would have been real. Then, again, he thought the secondary-education reserves ought to be taken and used for the purposes of primary education. He would begin with the Auckland Girls' High School reserve. That

reserve was originally dedicated to primary education, and was then taken for secondary education; and so he would like to make a beginning with it. He would like to see an Act brought in next session handing it back to the purpose for which it was originally dedicated. Excepting by way of scholarships—and scholarships were paid for out of primary-school funds—the children of the poorer classes could get no advantage from these secondary schools. Parents were required to pay fees amounting to £9 a year at these schools; the poorer classes could not do that, and therefore the secondary schools were not available for them. For this reason the reserves should be taken away from the secondary schools and handed over for the benefit of the primary-school system. He did not think the capitation should be reduced by 4s., as proposed, but that the saving should be effected by raising the school-age. The average age of children who passed the First Standard was very nearly nine years; and, as he was convinced that if they went to school at seven they would be able to pass the First Standard at nine, he thought the saving should be made by raising the school-age; but the reduction of the capitation-grant by £26,000 seemed to him to be in the wrong direction, and likely to injure the system. Many who had spoken in favour of the proposed reduction of the capitation had said that, above all things, the primary-school system should be supported in its efficiency; but the reduction of the capitation-grant would certainly go in the opposite direction. The complaint throughout the whole country was want of funds; and even in Hawke's Bay, where things were so well managed, when applications were sent down to the Board for more accommodation or appliances the answer had to be, "No funds;" and yet it was proposed to reduce the vote still further, and that in face of the fact that the population of the colony war, increasing! There were twenty thousand children who were receiving no education at the present time, and the School Committees could not put the compulsory clauses into force, because they had no accommodation; and yet honourable members spoke in favour of reducing the means of affording accommodation! He hoped honourable members would pause before they voted for that. In order to test the question, he would move, when the proper time came, that the vote be reduced by £5, and would press it to a division. There were some honourable members who said that they desired to see assistance given to that section of the community who carried on education at their own expense. He would ask how they proposed to give that assistance. By reducing the capitation-allowance? If assistance was to be given to that section of the community, the only way to do it was to make a saving on the general system by raising the school-age to seven, which would effect a saving of £80,000, and by appropriating the secondary-education reserves, which would give another £20,000; and then those claims could be met without increased expenditure. One word with regard to Education Boards. He was one of those who thought that a saving would be made by abolishing these Boards, and that if the business were left in the hands of the Inspectors and School Committees the work would be better done. There was no doubt that a great many Education Boards had gone to great expense in their management, and the fact that the Hawke's Bay Board had managed well was no test of the general management. The honourable member for Napier, who was Chairman of that Board, was a prudent man and a good administrator, and it had been mainly through his management that there had been no extravagance. It had been just; the same when that honourable member was Superintendent of Hawke's Bay, and that was almost the only province which, on the abolition of the provinces, showed a credit balance. He believed that savings could be made without cutting down the salaries of the teachers, and he agreed with the honourable member for Napier that the best plan would be to have a scale of salaries which would not be subject to any change. That would be the only way to got efficient teachers, because those who undertook the education of children would know that they would receive such an allowance as would warrant them in going to some expense in their own education. With regard to the Seventh Standard, which meant that those who had passed the Sixth Standard might remain at the schools afterwards, he thought they should be able to do so if their parents could spare them. Fourteen was the average age for passing the Sixth Standard, and the school-age terminated at fifteen; and he did not think it would be wise to drive these children away as long as their parents could allow them to stay.

Mr. J. McKenzie thought that most of the arguments of the honourable gentleman who had just sat down were scarcely worth answering; but there were one or two points he would like to touch upon. The honourable gentleman first of all deprecated the waste of time there had been this session, and blamed the Opposition for that waste: but that was scarcely fair. If they considered what had caused this subject to be kept so far back they could not help seeing that it was caused very much by the Government side of the House. The House was here for seven or eight weeks before it got the Government policy. He did not say that the Government were to blame for that, because they had a great deal to do before they could bring down their Bills, particularly as so many of them had to be so constructed that they would meet the wishes of the Government supporters. Then, again, the House was asked to do in two months work that ought to occupy Parliament for at least six months; and that was the reason why, at the last moment, honourable members were called upon to discuss such large questions as that of education without time for proper consideration. The honourable gentleman said it would be a right thing to increase the school-ago to seven, and that a saving of £80,000 would be made by that. That would be a very bad way to save money. No doubt it might suit the honourable gentleman and some others to

reduce the taxation by £80,000; but the people of the colony would not have that justice done to them to which they were entitled if the school-age were raised. It would mean that the children of poor people—who had to leave school at ten years of age to help to support their families—could not get proper education, and would in many cases only be able to pass the Third Standard. Then, the honourable gentleman referred to the Education Boards; but his knowledge of Education Boards must be confined to that of Hawke's Bay, which no doubt the honourable gentleman thought perfect. However, it [*unclear:* wa] not necessary to follow the honourable gentleman further. Coming to the real question [*unclear:* a] issue, he believed that the proposals of the Government would seriously affect the education system of the colony; and, if there was an question on which the people at the last elections gave a decided voice, it was [*unclear:* on] question that the system of education should not be seriously interfered with. It was a [*unclear:* pity] that the House had not a better opportunity [*unclear:* o] expressing its opinion on this question, and [*unclear:* he] thought that the Minister of Education should have brought distinct resolutions before the House, and not brought on the discussion on a question of money, He could then have tests the opinion of the House on each subject separately. A large number of honourable members objected to a reduction in the vole and yet they were asked to vote for a reduction in order to enable the proposals to be carried out. He was sorry that the Government had not seen their way to leave the question over till next session, with the exception of the capitation-allowance. They might have asked the House to express an opinion on that point, and that would have compelled the Education Boards to review their expenses and the salaries they paid to their teachers; and then the House would be in a far better position next year to deal with the whole subject. He believed they could make a largo saving in the education expenditure without doing any injury to it, and he would be prepared to vote for the reduction of the capitation-allowance. Coming to the question of raising the school-age, he might say that he was opposed to that, because he thought it would do a great injury to country schools He was surprised to hear some honourable members talk on this subject. It appeared to him that they did not understand it. With regard to raising the school-age, it would mean that the Boards would be unable to derive the surplus funds which they now obtained from the large town schools to assist country schools and that the country schools must suffer to a very large extent. He did not know anything which induced people to go into the country and settle upon the land more than the fact that they were aware that, as soon as a number of children were in the district, schools would be established; but if they interfered with country schools they would put an end to this inducement. Of course the Minister had told the House that he would take case that no school was closed in the country by reason of this reduction. That might be right enough so far as existing schools were concerned, but when they came to consider the establishment of new schools it must seriously interfere with them. Then, as to the normal schools, it would be a serious matter to [*unclear:* d] away with thorn. Any one who knew anything of the subject must have come to the conclusion that a large number of the[*unclear:* presec] teachers could not possibly have been trained but for the normal schools. What was the face when the system was first established? [*unclear:* w] were unable to get teachers until such time as they had been trained in the normal schools, unless they were obtained from Victoria, whence the principal supply came; and it would be a poor thing to again have to depend on Victoria.

Mr. Fisher.—How does Victoria train her teachers?

Mr. J. McKenzie said they were trained there in the same way as they were trained here. There were 323 students trained in the Normal School, Dunedin, from its establishment up to the end of 1886; of whom no less than 227 remained as teachers in the employ of the colony, and the rest had done good service to the colony before they left the service. That was clear proof that the system had been a good one. There were now sixty-seven students in the Normal School at Dunedin, and about a hundred and fifty pupil-teachers, with whom they could not carry out their engagements unless they kept up the Normal School. If the Government reduced the vote they could not keep their engagements with the pupil-teachers and students. He thought it was a very bad thing to force the Education Board to close their normal schools. He was told they could aid those pupils by giving them scholarships—by teaching them in the college; but in the college they would have no chance of being trained for teaching. No doubt they would get a very good education in the college and be able to pass a degree—they might come out with high qualifications from a degree point of view, but they would be utterly ignorant of how to teach children. He hoped the Committee would seriously consider the subject before they did away with the normal schools. This reduction meant a reduction to the Otago Board of £14,000 a year. A committee of that Board considered how far they could retrench without seriously interfering with the system, and their proposition would be to reduce the expenditure by £7,000. The proposition of the Government now was to reduce it by £14,000. This reduction, if carried out, would very seriously interfere with the education system in that part of the country. As far as raising the school-age was concerned, and doing away with the normal schools, he would oppose the proposals of the Government, believing that those proposals would injure the education system.

Mr. McGregor had supported the Government up to this particular question; but now he said, "Hold! enough." The extraordinary proposals of the Government were to him quite staggering. The idea of at once

cutting off £60,000 from the education vote, and still carrying on an extravagant expenditure in connection with defence and Native matters, was something which the people in his part of the country could not possibly understand. Another matter which struck him was that the Minister came down with a proposal, and was not prepared to state what would be the effect of it. They were aware that the number of children at the public schools between the ages of five and seven was 21,054. It was, of course, a question which was open to debate how many of these were between five and six. They had no statistics to guide them on that part of the subject. He had before him the last report of the Victorian Government, which he believed was the most reliable in the colonies, and one that was looked up not only in the colonies, but by the educational authorities at Home. There were no less than 2,809 children at the public schools of Victoria between the ages of three and four; 9,70ft between the ages of four and five; and 15,428 between the ages of five and six,—clearly giving an indication that in that Australian colony in which probably education was best managed they adhered to the idea of sending children to school at a much earlier ago than was here proposed. The educational system of Victoria was conducted by the Minister, who had a seat in Parliament, and was supported by a secretary and staff. There were no buffers like the Boards of Education in this country, which, in his opinion, was one great fault in our system, because these Boards were frequently the cause of deadlocks and trouble. The opinions of Dr. Brown and others, who were supposed to be experts, as to the in advisableness or otherwise of sending children to school when they were five years old differed very much on this particular question. Almost every member of that House was returned pledged, directly or indirectly, to support the present educational system. He was thoroughly and distinctly of opinion that the school-age ought to be kept exactly as it was; and he was also in favour of children being sent to school at an early age, so that they might undergo a certain amount of discipline, and be under control when they got older, and thus be more apt to profit by the system of education that was provided for them in the public schools. The passing through the schools of the cider children of a family at an early age would often enable the younger ones to go to school earlier than they otherwise would, because in some cases it was necessary to keep one or two at home. He was sure the Minister could not have thoroughly thought out the whole question, and it would be a very advisable thing for him to hold his hand now, and to devote his time and energies during the recess—to which Ministers had now become so fond of alluding—to thoroughly weighing, considering, and inquiring into the whole question. The honourable gentleman should think the whole thing thoroughly out, and in the meantime let the whole matter remain in abeyance. They knew that the honourable gentleman believed in good education—they had proof of it in the classical quotations with which he delighted the House, and which showed that the honourable gentleman sympathized with all that was great and noble in the matter of education. That being so, the honourable gentleman should during the recess devote all his leisure to education. Though great in higher education and classics, the honourable gentleman was rather weak in his decimals, as was shown that day, when he referred to children being, on an average, nearly nine before they passed the First Standard, whereas it was really only eight and a small decimal. As bearing on the question of expelling the children from the schools as soon as they had passed the Sixth Standard, no matter what age they were, he might mention that he had that day received a telegram saying a girl of his own, aged twelve years and a half, had passed the Sixth Standard with high honours, and under this proposal she would be compelled to leave the school, however much it might be desired she should stay on. As to making the reduction of 4s. in the capitation, that was a matter for fair consideration and argument; but he thought the whole subject should be left till next session. With that delicious vagueness of which he was so consummate a master, the Premier had said in the Financial Statement that the proposals of the Government would not involve the closing of any country schools. What did that really mean? Were all the small country schools to be made dame schools at £25 a year?

Mr. Fisher.—No, no.

Mr. McGregor said he should like to know distinctly what it did mean before giving his vote. He should like to see nothing at all done this session, but that next session they should give the subject exhaustive consideration, and then adopt the Victorian system. In a country like this, where the institutions were democratic, it was the duty of every citizen to see that his children were properly educated. They might well consider the benefit of the system they had in this country. Scotland was one of the poorest countries in the world, but a country in the front rank as to education. There they had a system of bursaries or scholarships which drew out the cleverest children in an admirable manner, and gave them a university education at no cost to their parents. That, he thought, was the most perfect and cheapest higher-education system devisable. As the twig was bent so did the tree incline, and he believed in children beginning to attend school young, and was against the proposal of the Government to raise the school-age. He should be compelled to vote against their other educational proposals.

Dr. Newman said he was very much surprised when he found it stated in the Financial Statement that the education estimates were to be reduced by £61,000, because he had been carefully through the expenditure, and failed to see how that could be done without seriously interfering with the salaries of teachers and with the

efficiency of education. He was still more astonished when the Minister came down and said he would reduce the vote by £65,000. He was satisfied that, if the reductions were made as proposed, no Education Board would be able to carry on without incurring an overdraft or taxing the school-teachers' salaries in all directions. He was prepared to vote for a large reduction of the education vote, because he believed it was absolutely necessary; but to take £65,000 off one vote at one fell swoop was too much and too serious. If the Minister would kii.dly look at the items that made up the £381,000 he would see that there was plenty of room for retrenchment. He could take £2,000 off the library vote; £2,700 off the higher-education vote, which would be a great saving to the colony—

Mr. Fisher.—Take the Wellington portion?

Dr. Newman.—Certainly; take it [*unclear:* alc] with the rest. He did not wish to see the Wellington College exceptionally treated. The [*unclear:* v] for higher education in this colony [*unclear:* was] enormously large one. Then, there was the college for deaf-mutes—there was gross extravagance in connection with that. There in the college from thirty-seven to forty [*unclear:* pup] and they cost £3,250, or upwards of £80 pepupil. That seemed to be extravagant. [*unclear:* Th] if the Minister wished for reform, there was [*unclear:* th] Native Schools Department, where there [*unclear:* th] a very large expenditure. To go back to [*unclear:* th] reforms proposed by the Minister, he thought it was wise to raise the school-ago to six years To keep the children under six years out of [*unclear:* th] schools was a fair and wise proposal. If [*unclear:* th] Boards were dealt with in the ruthless fashion proposed, within six months every Board in [*unclear:* th] colony would be unable to carry on for [*unclear:* want] funds. He would urge upon the [*unclear:* Minister] adhere to the agreement which he had acceptation in the earlier part of the day. It was said [*unclear:* th] the young children were taught in the kindergarten fashion, and that the kindergarten children were taught for £1 10s. a [*unclear:* head]; he would call attention to the fact [*unclear:* that] children in the infant departments of [*unclear:* th] Wellington schools were taught at £1 10s, [*unclear:* pe] head, and that the difference between that and the capitation went to make up for the [*unclear:* cost] the higher-standard education. If they [*unclear:* took] from the lower they must put it on the higher education. With regard to the abolition of [*unclear:* th] normal schools, he might say the Wellingtion Board had zealously tried to do its best with the Normal School; but there [*unclear:* was] doubt that these four schools were not wanted and that if they tried they could [*unclear:* train] pupil-teachers at very much less [*unclear:* cost]. would, however, like to see this vote [*unclear:* kept] for one season longer. He would [*unclear:* tell] Minister how he might retrench, in [*unclear:* addition] the items he had already [*unclear:* mentioned]. might abolish some of the Education Boards There was no doubt that, with the [*unclear:* mean] communication that now existed, some of the Boards—half the Boards—could be done with out and half their cost saved; though [*unclear:* he] not think that if they did away with [*unclear:* all] Boards the saving would be so great [*unclear:* as] honourable members seemed to [*unclear:* imagine], cause in that case the expenditure [*unclear:* of] central department would have to [*unclear:* be] creased. The districts should be amalgamates Then, the Minister might, with the [*unclear:* aid] experts, revise the syllabus, and in [*unclear:* that] make the school lives of children [*unclear:* shorter], thus save a good deal of money, for there [*unclear:* w] a good many things that might with advantage be left out of the curriculum. The propositions of the Government were [*unclear:* ruthless] sweeping; and, though he would approve of the others if the school-age were retained, if the proposal affecting that question were carried he should feel bound to vote against all the other proposals. He spoke from a thorough knowledge of the question when he said that he was sure the Boards would not be able to carry on if these sweeping reductions were made.

Mr. O'Callaghan would not keep the Committee long, particularly as most of his views had been so well expressed by the honourable members for Linwood and Dunedin Central: in fact, perhaps the most effective speech he could make would be to quote those gentlemen and say he indorsed their opinions. He also approved of the suggestion of the honourable member for Thorndon for the amalgamation of education districts. There were also one or two other points he wished to take notice of. The Minister had, he thought, somewhat disingenuously quoted one particular Board in New Zealand, the name of which he had declined to give, which he said had this year a balance of over £9,000. Any person who heard that statement would naturally suppose that that Board had saved within the financial year a sum of over £9,000. If the honourable gentleman had looked at the figures he would have known that the Board he referred to—the North Canterbury Board—had commenced the year with a balance of somewhere about £9,000, and that the actual expenditure within the year had taken up the whole of the receipts. Surely it was not right for the honourable gentleman to make that statement; for it was misleading the Committee. He would not give way to the honourable gentleman, as he had been waiting to speak all the evening. He had been greatly struck with the statement the honourable gentleman had made, for he knew the figures perfectly well. In 1884 there was a balance of £9,062; in 1885, £9,741; and in 1886, £9,701. Well, it must be seen that the statement was not quite fair, and it must have been made in order to give the Committee the idea that certain Boards were putting by money.

Mr. Fisher.—I did not make any such Statement.

Mr. O'Callaghan said that was what the Committee must have decided was the object of the statement. As to the proposal affecting the normal schools, he thought the Minister would make a mistake in endeavouring to make such a sweeping reduction. He (Mr. O'Callaghan) looked upon the normal schools as one of the most important parts of the educational system. It was not because the Wellington Normal School had been a failure that it was to be gathered that all the normal schools had been failures, for certainly that was not the case in Otago or Canterbury. In Canterbury they had a number of excellent teachers from the normal school, and the effect of these teachers passing through the Training-College was to make the system more uniform than it would be otherwise. Though the Wellington Normal School had failed, yet the number of teachers in the State schools turned out of the normal schools of the colony was very respectable, the number being no smaller than 546 out of a total of 2,721. That proved that the system was not a failure, for the schools had been in existence only about ten or twelve years in the South and seven or eight years in the North Island. He thought it far better that this small expenditure of £8,000 should go on, and that they should obtain really well-trained teachers, than that they should revert to the old system, under which every man who had a smattering of education was foisted into the employment of the Boards.

Mr. Fisher said that, as the honourable gentleman had not had the grace to allow him to make an explanation, he wished to say that he had not referred to the North Canterbury Education Board, but to another Board, the credit-balance of which was £5,000, not £9,000.

Mr. Dodson thought it must be admitted that this discussion had been rather disappointing to any one who looked to the House for retrenchment. Honourable members had come pledged, and the Ministry had taken office, to effect retrenchment; but on no question of retrenchment that the Ministry had brought before the House had they been sufficiently backed up by the House. In no question had this been more apparent than in the present one. Throughout the discussion there had been a disinclination to do anything in the way of retrenchment. The Minister of Education had certainly received no encouragement to effect retrenchment at present, or to consider the question during the recess. The question of the school-age had been referred to, and he might say that ever since he had had a seat in the House he had always contended that the State had no right to pay for children until they were fit to acquire the education the State was willing to pay for, and he thought the ago of six was quite early enough for the State to pay for children. Previous to that they were far better at homo with their mothers. Any one going into any of our schools would see these little children set up on the forms like dolls on a shelf, and just about as usefully employed. He was glad the Minister was going to give the House an opportunity of recording their votes on this question, and he would certainly record his vote in favour of the age being raised to six years, for that was amply early for the State to commence paying for the education of a child. He was very much pleased to hear the honourable gentleman admit that there was one section of the community which had not been fairly dealt with, and he understood him to say that he would take the matter into consideration, and see what he could recommend next session. That section had not received anything approaching justice, and had a great claim upon the House; and he only regretted that so little reference had been made to it. However, now, whenever any reference was made to it, member after member echoed the feeling that justice had not been done; and that gave him hope that, when the question was fairly discussed next session, that section would receive the justice duo to it. The honourable member for Lincoln said that our system of education was one that we ought to be proud of; but he (Mr. Dodson) could not be proud of a system which shut out two-thirteenths of the population from sharing in the benefit of the State schools. Indeed, it was rather a scandal on this free country that we should so manage our schools as to shut out so large a number of the population from the benefits of education, while at the same time we paid for our education out of funds which were equally contributed by them. Various honourable members had referred to the Education Boards in their own districts, and he might be excused for referring to the Board of his district, which, although it was one of the smallest districts in the colony, would set an example to some of the extravagant Boards which they would do well to follow. If every Education Board in the colony managed its affairs as economically and carefully as the Marlborough Board had done there would be no necessity to do away with them. The Marlborough Board conducted its operations for some£200 a year in salaries and advertisements, and it maintained some thirty-three schools, with 1,200 pupils. And, more than that, the work done by the schools would compare favourably with the work done by any others in the colony. Its pupils were first or second in the various standards in which they could be compared with others. That being so, it was a great feather in their caps that they had been able to manage education so cheaply and well. The honourable member for Linwood had made a most interesting speech, and his sentiments were so well put that he should like to hear the honourable gentleman speak more frequently than he did. However, he must take issue with the honourable member on one or two points. The honourable gentleman said that parents were the best judges of the age at which their children should be sent to school. In that he entirely differed from the honourable member, for parents were only too anxious to press on their children and make them precocious, and these were not the children which succeeded best in life or passed through the higher standards most rapidly. Parents were not the

best judges in this respect, for they always thought their own children were fit for anything, and it was well that other people should form an opinion for them. It was urged that children should be sent to school at five so that they might be able to pass the First Standard at nine; but, in his opinion, the child who was sent to school at six would pass the standard sooner, while the child who was kept at school between the ages of five and six was much more likely to have an injury done to it than any good. He could have wished that the Minister had given more particulars; but he thought each heading which the honourable member had mentioned the Committee could very well agree to without doing any injury to the system of education. He did not, himself, believe that the country schools would be injured if the school-age were raised to six, for very few schools would be closed [*unclear:* consequent] that, and a very small sum would compensate them for the children taken away; [*unclear:* and] supposed that was the idea which passed through the Minister's mind when saying that he would take care that they should [*unclear:* not] injured. He did not think the colony had any right to pay for any child after it had passed the Sixth Standard. If a child were so cleaved as the child of the honourable [*unclear:* member] Akaroa, and could pass that standard at thirteen years of age, of course there [*unclear:* should] facilities for its going on to acquire higher education, for which it was so eminently fitted But did any one imagine that the honourable member would keep his child from school because the State would not pay for that higher education? Of course not; and he would is mediately send it to a higher school; [*unclear:* and] only difference would be that he would [*unclear:* pay] it—and would feel a pride in paying [*unclear:* for]—instead of calling on the State to [*unclear:* pay]. parents could not afford to pay for their children at the higher schools—children who has shown a special aptitude by passing the [*unclear:* Sixi] Standard at an early age—of course provision should be made for cases of that kind. He [*unclear:* d] not wish to deprive any child of higher education; but he wanted to see some finality [*unclear:* in] matter, so that they might know [*unclear:* where] State was to commence and where it [*unclear:* was] leave off. In his opinion, when it commenced at six years of ago and educated the child up to the Sixth Standard, [*unclear:* nothing] was required of the State. So far [*unclear:* as] normal schools were concerned, he [*unclear:* was] to see that they were to be stopped. They system was only partial in its operation, any as usual, those who had these institute near them were all in favour of their continuance. He thought this was a [*unclear:* matter] which they might very well follow the example of Victoria and leave it to the question of demand and supply. If teachers were require they would come soon enough, and he was [*unclear:* gal] the Minister was going to do away with these institutions, and that the colony [*unclear:* would] longer have to pay so high a sum as £[*unclear:* 8,000] year for their maintenance. Again, the question of reserves for higher education [*unclear:* should] dealt with, and he hoped the Minister would turn his attention to it during the [*unclear:* recess]. these reserves were applied, as they ought to be to primary education it would be a very great relief to the taxpayer. He trusted the Minister would bring down a Bill next session dealing with the whole question, and providing [*unclear:* th] these reserves should be for the benefit of the colony as a whole, and not be allowed [*unclear:* to] main solely for the benefit of the province districts in which they had been set [*unclear:* apa] while other parts of the colony could [*unclear:* get] benefit from them simply because they [*unclear:* we] at a distance.

Mr. Wilson had a few figures which might be interesting to the Committee on the question of school-age. But he might say at [*unclear:* ca] that he was entirely in favour of raising the school-age to six years, and he did not think it would affect the country districts so much as some honourable members appeared to think. The following was a return of schools in the Otago Education District in charge of one teacher only, with particulars of attendance and ago of pupils in October, 1887: Total number of schools having from fourteen scholars to sixty-one, 106; total children on roll, 3,797; total under six years, 183. The Education Committee sent out to the various Boards and educational institutes asking them for their opinion, as well as to the various Inspectors. Naturally, the School Boards were entirely against any reduction in their votes, and nearly every one of them sent in a reply that it did not wish the school-age to be raised. The educational institutes did the same; but the Inspectors—who were the most impartial people to deal with this question, and were best able to judge the matter—were all, apparently, in favour of raising the school-age. That was a very important thing, and should not be forgotten in considering this question. He agreed very much with what the honourable member for Kumara had said regarding Boards. He (Mr. Wilson) thought the Legislature might very well abolish them altogether; but it ought, at the same time, to set up something in their place. He did not approve of the Minister of Education taking entire charge of the system. He should like to see a Council set up for the whole of New Zealand, composed of gentlemen well educated themselves, and who had opportunities of observing the state of education in New Zealand. The Minister should be the administrator of the system, and might have lender him the Inspectors, and might fix a scale of salaries applicable to the whole of New Zealand. Such a Council would not cost anything like the sum at present spent in management. With regard to the reduction of the capitation, he was certainly in favour of it. He did not understand the strict-average question, and would like a little more time to consider the subject. He should also be in favour of reducing the £5,000 for normal schools down to £4,000.

Mr. Levestam said there was no doubt the country was clamouring for retrenchment; but he did not believe the country wanted retrenchment in this direction, because the education of their children was about the only thing the poorer class of people got from the country. It was said that this raising of the school-age did not affect country schools as much as was represented. Now, the Education Board received the whole of the money paid in capitation, and doled it out to the country districts. It followed that, if the number of children attending town schools decreased, the funds of the Boards would decrease correspondingly. Therefore it was no argument in favour of the change proposed that country schools Would receive assistance to keep them open, because it followed the same amount would be paid to the country schools as was taken away from the town schools. With regard to Education Boards, he thought it would be far better for the colony as a whole if those Education Boards were abolished, because teachers were now treated very unfairly. In many instances teachers with similar qualifications to those possessed by others were receiving about one quarter of the salary those others received; and so it would be as long as each Board had the entire control of its own schools. If a vacancy occurred, an able man who might happen to be in a small district would have no chance of obtaining a mastership in a largo district, because he had no friends who would assist him into that position, no matter how good his qualifications might be. As to the raising of the school-ago, there was more embodied in the proposition than appeared at first sight. The proposal of the Government not only entailed the raising of the school-age, but also the withdrawal of the capitation-grant from every child who had passed the Sixth Standard, irrespective of age. When children passed the Sixth Standard at twelve, as many did, they would not be entitled to attend a public school any longer. That would be an injustice, to which he, for one, would never consent. It was said that some children were better at home with their mammas: but that depended upon the kind of mammas they had, and he was sure that in many cases it was far better that they should be at school. They were told that in other countries children were not admitted into public schools before they were six years old. That was true. But he know that in those countries most of the children before they wore that age were sent to private schools. Here, where that was not the case, the children should be admitted as soon as they were fit to go to school. It was a well-known fact that children sent to school at five passed the Sixth Standard much earlier than children who were sent later to school. The next proposal of the Government was to do away with the 4s. He should not oppose that; but he thought it was hardly fair to say that it would not inconvenience the various Boards, because it must be remembered that, in addition to the £26,000, there would be taken away the capitation for those who had passed the Sixth Standard. The present system of education, being purely secular, could be participated in by persons of all denominations. No one had a right to complain, as one might have if religion were taught in the public schools. The moment a grant in aid of one denomination was made, another could claim the same consideration with equal right, and therefore it would never do to interfere with the system in that direction. He thought the normal schools could be done away with altogether. He did not exactly know what was meant by the "strict average," but his chief objection to the proposals of the Government was to the taking-away of the capitation from children who had passed the Sixth Standard, irrespective of age. They were told that scholarships were open to them:but these scholarships would have to be obtained in the year following that in which they had passed the Sixth Standard. If the capitation were taken away as soon as the child had passed the Sixth Standard, he would not be able to go in for the scholarships. A child of twelve, though he might have passed the Sixth Standard, was generally quite unfit to go out and earn a living; and it was absolutely necessary they should be allowed to remain a few years longer—till they were fifteen. In that part of the Continent of Europe from which he came, boys were compelled to remain at school till they were fifteen and a half, and girls till they were fourteen and a half years old; and it was enforced in this way: Employers were not allowed to engage children till they were of that age, nor parents to employ them; so the inducement to parents to remove their children from school unduly early was removed entirely. There was no such thing as remaining stationary in this world—we must either go forward or go backward; and he regarded these proposals as going backward. He particularly protested against taking away capitation from children as soon as they passed the Sixth Standard, if they were within the limit of the school-age. If the Minister would assure him that that should not be done he would vote with him, but without such an assurance he must vote against the proposals of the Government; and he was sure the majority of the people of the country were not in favour of such retrenchment as was foreshadowed in these proposals.

Mr. Grimmond thought the proposals of the Government inopportune, coming at a time when the whole question had been submitted to a Committee, and inapplicable, because the Government were attempting to deal with questions which had been submitted for the consideration of that Committee, which, in the circumstances, could not report till next session. It had been stated that the raising of the school-age would not affect the status of education in the colony; but, if that were so, how was it that the school-age in other countries was less than here? He would give the following figures to show the school-ages in different countries: Great Britain, three to eighteen; New Zealand, five to fifteen; Victoria, three to sixteen; Queensland, five to fourteen; New South Wales, four to fourteen. So, in none of these cum tries did the grant-earning age start later than five.

Mr. Fisher.—What is the cost of different ages?

Mr. Grimmond said it was about £1 5s. for the lower ages: but, take them right through, the average in these colonies was:New South Wales, £6 4s.; Victoria, £5 9s. 5¾d.; Queensland, £6; South Australia, £5 5s. 3¼d.; New Zealand, £5 2s. 4¼d. We were therefore lower in average cost than the other colonies, and our minimum age was higher—in only one case was it as high as five besides here. The Minister had read some evidence in support of his proposals, but none against them, and had therefore placed a one-sided statement before the House. He would read briefly from the opinions of some gentlemen of as much authority probably as those quoted by the Minister. Mr. Aitken, the Chairman of the South Canterbury Educational Institute, wrote [*unclear:* e] closing the following resolutions passed by [*unclear:* th] body:—

"That this institute is of opinion that [unclear: th] proposed raising of the school-age to six years undesirable for the following reasons, [unclear: viz].: Because such a course cannot fail to [unclear: result] serious injury to small and country schools unless the allowances to larger schools be [unclear: cu] tailed to a degree which will injure education in the centres of population. (2.) [unclear: Because], though raising the school-age from five [unclear: to] may seem to be cutting off only a year [unclear: at] beginning of a child's school-career, it is in reality the last and best year of which that child is deprived by such a course, seeing [unclear: th] children are in most cases removed from school at a given age, and not on passing a give standard. (3.) Because under nearly all [unclear: gra] educational systems school life begins [unclear: at] years of age or earlier; and, if New Zealand interferes with her system in this respect will place herself in the rear of contemporise civilisation. (4.) Because a child [unclear: enter] school at six years of ago will not pass a [unclear: gis] standard as early or as well as one who [unclear: ente] at five years of age. A very sharp child [unclear: wh] enters at six may surpass an ordinary or a child who enters at five; but sharp children must by no means be taken as types, (5) because the idea is a mistaken one that, as [unclear: reg] physical health and mental vigour, [unclear: children] to the age of six or seven years are [unclear: better] from school, and that they learn [unclear: nothing] that ago is reached. Children are always learning; and if they are not at school they are learning elsewhere many things which were [unclear: bet] not learned at all, and which will have [unclear: to] unlearned when school is entered. But [unclear: in] year from five to six children at school learn the important lessons of obedience, [unclear: order] reverence for law, and these, too, at [unclear: a] when they are not likely soon to be forgotten (6.) Because it is only the best home-circus stances that can make up to the pupil [unclear: for] want of school discipline and [unclear: restraint]; here, as elsewhere, it is wrong to take the [unclear: b] as types."

The Rev. Mr. Habens, the Inspector-Genera of Schools, and probably the highest author on the subject, was asked before the Committee the following question:"What do you thinking the general effect of discipline and [*unclear:* teaching] these younger children?" to which he plied,—

"Considering the early age at [unclear: which] children of the artisan and the labourer ordinarily leave school, I am of opinion that it necessary to admit such children to school an early age in order that their school-[unclear: oc] may be of reasonable length; and that schools which are sufficiently organized provide instruction upon proper [unclear: methods] children between five and seven years [unclear: of] such children derive a very great [unclear: benefit] the discipline and instruction which they [unclear: ceive], and are thereby prepared for the [unclear: se] methods of instruction that will follow [unclear: in] more advanced classes. I think it should also be remembered that the children of the same class, if they are not at school at an early age, are likely to receive a practical education out-of-doors that, however advantageous it may be to them from a physical point of view, is perhaps very detrimental from a moral and intellectual point of view. I may add that, if we regard the example set by England in this matter, the English Government recognises the attendance of children just above three years of age as entitling the schools they attend to grants from the Treasury."

He knew from his own practical experience that attending school at an early age had no injurious effect on children physically or mentally. There was a member of this House who matriculated at thirteen and took his B.A. degree at eighteen, and in physique he was quite equal to the Minister of Education. The Educational Institute of Otago had given the mowing reasons against raising the school-age:—

"(a.) That in almost every country where there is a State system of education the Government encourages attendance at an earlier age than in New Zealand.

"(b.) Haising the age will materially affect small schools in outlying districts, where they are least able to bear retrenchment.

"(c.) To raise the age practically means depriving large numbers of a year's schooling, as they are usually withdrawn to work, to assist in maintaining the family at a given age, irrespective of their educational acquirements.

"(d.) As practical educationists we are decidedly of opinion that, as a rule, pupils entering school at six would not pass Standard IV. at the same time as those entering at five; and this applies with still greater force

to the proposal to raise the ago to seven.

"(e.) It is quite a common mistake to suppose that children are as well out of school as in it until they are six or seven. Where the home-influences are good, where there are facilities for learning in the home-circle, the disadvantages are not so obvious; but, where these do not exist, if the school-ago be postponed till six or seven the children will undoubtedly be 'acquiring habits not in the least degree conducive to sound conduct and character. "(f.) the work in the initiatory department of the schools is often misrepresented:on the one hand it is said to be mere nursery-work, and on the other it is said to be work injurious to young pupils. Neither of these statements is correct.

"(g.) The educational work of the first two years has a most beneficial influence both on the physical and mental condition and health of the pupils, and gives pleasurable and systematic training in habits of regularity, punctuality, obedience, and a liking for school, at an age when these things are of great disciplinary value. Rational methods of instruction, well-ventilated schools, an excellent climate, and the good physique of the children, are all in the highest degree favourable to' beginning school life at the age fixed as at present."

Mr. Mowbray wrote on the question thus to the Committee:—

"I do not think the school-age can be raised without disaster both to children and teachers. The children will suffer, because they will be deprived of a large portion of that early training which every experienced teacher recognises as invaluable. The difference in intelligence and progress in standard work of a child from a kindergarten or good infant school, as compared with that of a child without such training, is immense.

"The teachers will suffer, because not only must a large number be dismissed, but those who remain must undergo a cruel diminution of income. The number of children under six years of age in the schools is, as nearly as I can ascertain, over 12,000, which, at the late rate of capitation, represents a revenue to the Boards of £48,000 per annum. These children are taught by 300 pupil-teachers, whose joint salaries will not amount to £10,000; and the difference between that sum and £48,000 represents the loss to the Education Boards by raising the school-age one year. Take the Thorndon Infant School as an example. There are 190 children, under a mistress and four pupil-teachers. A third of the children are under six years. Supposing that they be debarred from the school, one, or at most two, of the pupil-teachers could be dispensed with, the other expenses continuing as before. The Board would thus save £50 per annum, and lose £250 on this school alone."

Enough had been said by other honourable members to show that raising the school-ago would have a bad effect on the educational status of the colony. As to reducing the capitation, it had been contended by some honourable members that the Boards would be able to carry on with the reduced sum, for they had got on fairly well with the present capitation; but he knew—speaking from some experience—that in Westland the Board had had very great difficulty in maintaining a high standard under the present capitation. The district was a very largo and sparsely-settled one, and was as long in one direction as the distance from Christchurch to Invercargill. If it was argued that, under the present capitation, some Boards had had more than enough money, that was an argument for the abolition of the Boards. He thought that was a right thing to do, because the excessive money now given to the Boards of thickly-populated districts would then be available for poor districts which wanted it badly—some Boards now had to endeavour to get through their money by going in for luxuries, while others could not provide the barest educational necessities. In his district, even with the present capitation, the people in the outlying districts had often to supplement it to pay the teachers decent wages, and had even to subscribe for the erection of school-buildings. The settlers in the outlying districts in that part of the colony already had to help to build school-houses by sawing the timber, &c.; and if the means at the disposal of the Board were still further reduced they would be able to get no schools at all. It was very unjust, too, to class the Boards on an equal footing, and such action showed that the time had come for the abolition of the Boards. No doubt they had done good service in the past in establishing schools, but they had now become very expensive distributing bodies, and the work which they did could be centralised with great advantage and cheapness to the colony. He said that as one who had been connected with Education Boards and Education Committees for a number of years. As to training schools, there were none in his part of the country, and he could say nothing about them; but he would say the non-payment of capitation for children above a certain age would also act very badly in the part of the colony he came from, where there were no high schools, because it would result in the children getting no higher education at all unless their parents were rich enough to send them away to places where there wore high schools. A child might pass the Sixth Standard at ten years old. What were the parents to do with it then? There was one other point which he wished to bring out, that had been omitted by the honourable member for Kumara—namely, that the percentage of passes was very high in Westland, the second highest in the colony. Marlborough came first, with 92.5 per cent, general average of passes; Westland came next, with 86 per cent.; Nelson came next, with 83 per cent.; and then came North Canterbury, with 73 per cent. With reference to strict average being substituted for working average, that also would be very injurious to the part of the colony he came from. The children had very long distances to travel, and the climate was not always good, and when it rained it did rain, and children could not attend school, so

that the proposed alteration would weigh very heavily on the Board there. He might say that the Grey-mouth Board was so affected by the proposed reduction that it had, on receipt of intimation of the intention of the Government, given all its teachers three months' notice of dismissal, for it could not see its way to pay them. As to paying fees, that would raise an unpleasant line of demarcation between classes as to parents and children. For the reasons he had given, he should vote against the proposals of the Government.

Mr. Jones said he was of opinion that very large reductions could be made in the general management of education; but it should not be done in the manner shown by the proposals brought down by the Government. He entirely disagreed with the proposal to raise the school-ago. In the first place he did not believe that the children suffered any injury from being sent to school at an early age; and, despite the opinions of doctors who had been largely quoted, he preferred to be guided by his own experience and observation. Any one who had specially visited the schools as he had done, would have seen the children looking rosy and healthy and happy, especially those who ranged from five to seven years of age. He also disputed that they cost [*unclear:* anything] £3 15s. or £4 to educate as had been allege although, as the accounts were made up, the appeared to cost this amount. They really not cost more than £1 5s. per annum; and [*unclear:* f] saying that he had an excellent authority namely, the experienced author of "Retrenchment in Primary Education "—"C. S. R" who, writing on this point, stated,—

"These children below seven do not [unclear: co] nearly as much per head as those [unclear: who] between seven and twelve. Except in very small schools they are taught in an [unclear: infa] room, where the classes are larger than in [unclear: t] upper department. As an example, take [unclear: ti] case of a school in the immediate neighbourhood of Christchurch. In the infant department there is an average of 160. The teachers in this department are paid about £200-the equals £1 5s. per head. If another 5s. is [unclear: add] for incidentals—which is certainly a very [unclear: libe] allowance—the total cost per head is [unclear: only] 10s."

Other equally good authorities stated the [*unclear:* c] to be from £1 to £1 5s. per head. He therefrom thought it was wrong to deprive these [*unclear:* lit] ones of the benefits of education when they only cost 6d. or 7d. per week. That [*unclear:* point] worthy of the consideration of the Minister Education. He thought the item of crepitating might be reduced; but reduction ought to be made gradually. In reference to the next its he agreed with the honourable members Linwood and Dunedin Central that it would be a very unjust thing to some of the school that a saving should be made by [*unclear:* taking] strict average instead of the working average As to the fourth item, the evidence to his [*unclear:* mis] clearly showed that we should [*unclear:* continue] maintain normal schools; but certainly [*unclear:* we] not require so many of them. On the which the conclusion he had arrived at was [*unclear:* th] the Minister had not had sufficient time thoroughly digest his proposals, and he hope that next session the honourable gentleman would come down with a better [*unclear:* plan]. (Mr. Grimmond) should not be able to [*unclear:* s] port the proposals as they stood; but he [*unclear:* m] especially objected to the one [*unclear:* affecting] welfare of the little people and the interested the poorer classes, who were chiefly benefit by the Act as it now stood.

Major Steward said that, as [*unclear:* ev] honourable member was speaking, he felt necessary to say in what direction he should vote. He regretted very much the shape which the proposals had come before the Committee, and thought it would have been better if the honourable gentleman at [*unclear:* the] of this department had seen his way to [*unclear:* br] down to the House—not to the Committee four distinct propositions upon which member could have voted. With regard to the [*unclear:* gen] proposal to reduce the cost of the education system, he took leave to say that [*unclear:* those] the wisest friends of the system who [*unclear:* w] take care to see that its cost did not [*unclear:* inc] to an amount that would raise an [*unclear:* ou] which might lead to an endeavour to [*unclear:* pel] down altogether. In addressing his constituents he had placed that phase of the question before them, and he had found a very general response. He believed that in the district which he represented the education system was as much valued as it was anywhere in the colony; but the people had very fully appreciated the fact that the cost of the system must be kept within such limits that there should not be a cry raised that the system was too expensive to be maintained. The proposal to reduce the capitation allowance was not new. It had previously been reduced by a shilling, and it was proposed that its reduction should be gradual. The reduction now proposed was sharper, but, in view of the circumstances of the colony, he could not think that the Minister was at all to blame for asking that the additional allowance Should be at once discontinued. He regretted that the Minister had not at once proposed to abolish the Education Boards. Although he had been for some years a member of an Education Board, he must agree that it was quite possible to dispense with those bodies altogether; and, if that were done, it would, be Something towards making up for the de-flciency now caused. For these reasons he should vote to reduce the capitation allowance to £3 15s. With regard to the school-age, there had been a proposal to raise the age to seven, and he thought the present proposal was a reasonable one under the circumstances, always provided—and he took it as a distinct pledge from the head of the department—that some special allowance should be made to the smaller schools

that would enable them to parry on, so that they would not unduly suffer by this arrangement. On this point they had a distinct pledge, and he thought the House had right to exact a literal fulfilment of it. With regard to the proposal to take the strict average instead of the working average, he did not see his way to vote with the Government, because he thought it unreasonable to enforce a reduction in that way. Again, he did not see his way at present to vote to abolish the normal schools. These training institutions were a necessary part of our education system, and, though he admitted it might be possible to reduce their number, he did not think they should all be abolished. With regard to the children who had passed the Sixth Standard also, he thought the proposal was reasonable, and that capitation should not be paid beyond the Sixth Standard. He believed, further, that the time would come when it would be necessary to charge a small school-fee in the Fifth and Sixth Standards, at the same time providing abundant scholarships or other facilities for those children whose parents were unable to pay the fees, and who were yet qualified for education in the higher standards, so that the door of education should not be shut against any child however poor. Speaking from experience in his own district, he might say that felt sure that the parents of children who remained to the Fifth or Sixth Standard, certainly the majority of the parents, were able would be willing to pay school-fees. In this way he thought it quite possible to provide, year after year, for the necessarily-increasing cost of education owing to the growing number of children attending the schools. That being so, probably this would be the largest reduction that would have to be made. He should support the Government's proposals with regard to capitation and school-age, on condition that a special allowance was made to smaller schools, so that they would not be injuriously affected. He should, however, not vote for the substitution of strict average for working average, nor for the total abolition of the normal schools.

Mr. Hutchison had waited all day and all night for some good reason to enable him to support the Government on this vote; but he was sorry to say that, though he had waited so long, he had waited in vain. He was sorry that the Government had afforded its supporters, and those who might have been its supporters on this occasion, so little ground for inclining to their side. The Government had backed and filled in a way that rather inclined to shako conviction, even where conviction was more rooted than it was in his case. The reduction of £26,000 was arrived at in some haphazard way by calculating it at one-eighth of the whole sum; but why it was an eighth instead of a seventh or a sixth they did not know. Then, in connection with that amount, they were told that the country schools were not to be closed. Now, he would like to ask the Minister how he proposed to preserve the country schools. As he understood it, the capitation allowance was calculated upon a certain attendance for the preceding period, and was paid to the Education Boards in the various districts, to be distributed by them as they thought proper. He was not aware that the Minister had any control over the administration of these funds, so as to say what schools should be kept open and what should not; and, consequently, it seemed to him that this was a mere delusion, a snare, and a mockery, and that the House had really no control whatever, in accepting such a proposal as this, over the money it was asked to grant. That ill-favoured parliamentary property known as the red-herring was disagreeably high in connection with the false trail which was sought to be brought over this question; for it was really, after all, an attempt to legislate by resolution now, after first of all having been attempted by Order in Council; and it was just as vain for a Minister, by way of resolution, to attempt to alter the Act as it had been for him to attempt to do it by Order in Council. He thought the Minister was probably convinced now that he made a very great mistake in advising His Excellency to put his name to what must admittedly be withdrawn now as a mistake. He was not sure that the House was doing its duty in passing over in silence that attempt at legislation by Order in Council. The words ought to be remembered by members, for it was not, as the Premier and the Minister of Education had said, merely an intimation to the Boards as to the amount of funds that would be available for the future, for that could have been done by circular, but this was an Order in Council: the words were, "It shall not be lawful for any teacher to retain or place on any roll any child of a less age than six years." That was a distinct assumption of legislative power, and no explanation could get rid of it. The position taken up under the Order in Council by the Minister was untenable, and he must retire from it in the same way that he would have to retire from the position in reference to this resolution. He had said he would not have the country schools closed: but he could not keep them open. The vote must be at so much per head, and the administration of it must rest with the Education Boards. There was no safety, therefore, except in voting against the proposal of the Government.

Mr. Blake had listened to the various speakers, but it seemed to him that a great many had simply dealt with details. There was a foundation to be considered, and it required far more consideration than had been given to it—namely, the yearly increase in the expenditure which was continually kept up. In 1877 we had 41,700 children at the schools, and nine years later, in 1887, we had 83,500 or something over. The number of scholars increased from three to four thousand every year, and that meant a yearly increase in expenditure of from £16,000 to £20,000. That was the amount with which they ought to deal, and by doing that they would be much nearer doing good than by merely dealing with the question in this small detail manner. Even supposing that they succeeded in saving £50,000 now, the colony would be in just the same position again in three or four

years' time. Therefore consideration must be given to something deeper than was now proposed to the House. Another proposition which was made was that payment should only be made to the Fourth Standard, and one honourable gentleman suggested that the parents should pay a fee of 1s. 6d a week for every child above that standard. He thought it would be better to pay for it through the Customs at the rate of seven-twelfths of a penny. If the Government could see their way to postpone this question till next session, it would be more satisfactory to the greater proportion of honourable members, and certainly it would be more satisfactory to the country. He could not shut his eyes to the necessity for retrenchment, and he was afraid that if they went on borrowing, as it was proposed to do, for the next two or three years, they would then have to put a sum on the estimates to pay for finding some of those persons who were going about the world lecturing on the lost ten tribes, for by that time we should have borrowed all the money that the known tribes would lend us, and if we could not find another tribe we should have to go to the wall. We should not be in any better position at the end of the three years, and we should have to pay another £150,000 a year for interest on our national debt. These small propositions with regard to education were simply playing with the question, and if something better could not be done it would be better to leave things as they were until [*unclear:* ne] session.

Mr. Moat would not have risen to speak but for the statement of the Minister of Education, and which was repeated by other honorable members, that the Auckland Training College was a failure. From that he [*unclear:* entir] dissented. The honourable gentleman [*unclear:* seem] to have taken, as his ground for making [*unclear:* th] statement, certain remarks of Mr. Inspector Fidler in his report. No doubt [*unclear:* th] gentleman thought that if he had been elected Principal of the Training College he would have obtained better results. However, [*unclear:* th] was not the question. It must be remembered that the students of that college [*unclear:* w] not always allowed to remain there [*unclear:* for] years before being sent to country school Some of them only remained for a few monthly and those who had only been there [*unclear:* for] short time were not likely to turn [*unclear:* out] good teachers as those who had had the benefit of the full course. There was no [*unclear:* don] also, that better results might have been maintained if there had been proper [*unclear:* supervis] over the Training College; but it must be [*unclear:* bor] in mind that members of Education [*unclear:* Boa] were not, as a rule, qualified to supervise institutions of that kind, and it would be better if greater supervision were exorcised over [*unclear:* the] by the central department in Wellington There was no doubt that sufficient time [*unclear:* v] not devoted in these training colleges training students to teach, and it was rather [*unclear:* sp] in imparting higher education to them, [*unclear:* th] consequence being that they acted as [*unclear:* feed] to the colleges, and very successful they [*unclear:* we] in that respect. But the operations of [*unclear:* f] Auckland Training College were not confidant to training the twenty pupils of that [*unclear:* college] whom reference had been made. For [*unclear:* th] days in the week the pupil-teachers within reach attended classes at the Training College and were instructed in their duties, [*unclear:* and] Saturdays all the uncertificated teachers [*unclear:* with] reach attended it, and no less than 170 [*unclear:* pup] attended those classes. Therefore he thought it would be very hard for any one to say that had not done satisfactory work. And [*unclear:* not] that, but through all the country [*unclear:* schools] there were uncertificated teachers [*unclear:* working] to pass their examinations they were [*unclear:* oblig] to correspond with the Principal of the Training College, and he corresponded with till and returned the papers they [*unclear:* forwarded] him, after having examined and corrected them. That had been very beneficial [*unclear:* in] results. If that college were done away [*unclear:* wi] where were they to get their teachers from There were no less than 450 teachers [*unclear:* who] not passed their examination at present [*unclear:* e] ployed in the schools of the colony, and these, no fewer than ninety were in the [*unclear:* Av] land District; and unless there was some [*unclear:* mod] of training them he did not know what [*unclear:* th] should do for teachers. The Minister [*unclear:* said] Government would take care that no [*unclear:* cou] schools were closed, but that [*unclear:* uncertificated] women would be sent to teach in these school and to that he, as representing a country district, most strongly objected. Instead of doing away with the colleges, they should try and assimilate the instruction with that given at the Training College in Dunedin. That would be a much better course to adopt than to abolish them altogether. The general question bad been pretty well threshed out; but, as to the school-age part of it, it was interesting to find that the question engaged the attention of the ancient Greeks as many as two thousand years ago, and opinions on the subject differed then as much as they do now. As Professor Mahaffey justly said in his work on "Old Greek Education,"—

"The disputants never seem to take into consideration the fact that all children are not equally apt, and, while there are many whose education might with advantage commence at five, there are others whom it would be advisable to keep from school till they were a year or two older."

He believed it would be cruel to keep children from school who were in a position to receive education when they were five years old, particularly in country districts, where their services would be required by their parents as soon as they were able to work. He therefore could not consent to the Government proposal to raise the age from five to six. With reference to the strict-average question, he thought it would act very adversely indeed to the country districts, because wet weather and long distances prevented children from attending the

country schools regularly. He could not support that proposal, but he could see his way to support the Government in reducing the capitation grant by 4s.

Mr. Goldie thought the Auckland people desired their members to come to Wellington pledged to reduce the vote for education by £100,000. He was asked to pledge himself to that reduction, but he could not see his way clear to so large a reduction being made. In connection with this subject he would read the following extract from an address delivered by Sir Hercules Robinson at the opening of the Wellington Normal School seven years ago:—

"I must confess that, when I contemplate the expenditure which primary education will entail on the general revenue so soon as the scheme at present established by law is brought into full operation, the prospect appears to me to be appalling. If the present system be maintained the colony will soon find itself face to face with an annual expenditure from the Public Treasury of from £400,000 to £500,000 upon primary education alone, exclusive of the cost of the Department of Education, and of the sums appropriated annually for higher and secondary education. This appears to me to be really a very serious consideration. The expenditure on primary education will soon amount to nearly £1 per head of the whole population, and the consolidated revenue alone will be quite unable to bear such a charge without considerable additions to the general public burdens. Of course, if the people of New Zealand desire education of this expensive class free, and are prepared to submit to the necessary taxation, there is an end of the matter; but I doubt whether the position we are drifting into in this respect has as yet been generally realised."

That was seven years ago; and to-day they found themselves face to face with the serious difficulty which Sir Hercules Robinson at that time prophesied. It was a very easy matter to talk of economy in the abstract, but it was very difficult to apply it. The Minister of Education had suggested four means by which this could be applied to some extent. On the question of school-age he would read the opinion of Dr. Macarthur, late Principal of the Auckland Training College, who, at a meeting of the Educational Institute held in Auckland on the 26th November last, spoke as follows:—

"Coming to the first question—that of raising the school-age on which capitation was paid—it was well to look to the example of other States. In England and Scotland children over the ago of three were allowed to be considered in the returns. This would have been an argument against raising the school-age if the character of the work done excelled that with us; but the work of the New Zealand schools had been pronounced by those who had seen both to be far superior to that of the English primary schools. This showed that the earlier the age the worse the work done; so, on the principle of utility, they should not lower the school-ago. In Germany, Belgium, and the United States the age of admission was six years, and in Switzerland six and a quarter; and yet the intelligence of these nations compared favourably with that of any other. If as good and probably better work could be done by those States whoso limit of age was six years as by those with a lower limit, then surely the latter were paying for that which profited them not. Taking the last report of the Minister of Education they would find that 20 per cent, of the pupils in our primary schools were between the ages of five and seven years, and over 27 per cent, were in the preparatory classes. The age at which those preparatory children passed the First Standard was close upon nine years: that was, children admitted at five did not, on an average, pass till nine. Knowing the small quantity of work required for the First Standard, and the arduous nature of the teachers' work in these classes, it was plain that something was wrong. Either many did not come at the age of five, or, if they did, they were too young to profit by the tuition imparted. Considering, then, the inferior nature of the work done by those States which admitted at a low ago, next the higher character of the work done by those whose limit of age was higher, and lastly the very long period between the ago of five years (our admission-age) and nine years (the passing of the First Standard), he could not but come to the conclusion that, from the standpoint of utility and the greatest good to the pupils, the age for admission should be raised to six years."

That statement was verified by the fact that thirty-five teachers out of fifty voted with it, even although they knew that voting that way meant to them a pecuniary loss. He found that there were 17,800 children between the ages of five and six, and 17,089 between the ages of six and seven, and certainly a considerable saving would be effected if those of the 17,800 who were attending the primary schools were kept out of them; but he thought their first duty was to reduce everywhere but in education, and as soon as reductions had been made to the fullest extent in other directions, but not till then, would he be willing to reduce the education vote. He was not prepared to go with the Minister, and those who were favourable to raising the school-age, and would therefore vote against it. As to the reduction of the capitation, he felt satisfied that £3 15s. would answer all purposes. Then, as to the abolition of Education Boards, he thought those who advocated that made a very serious mistake. If they abolished the Boards they could not do away with the clerks and others employed in that department, because correspondence would have to be answered, and other office-work attended to. If they abolished Boards, they must increase the work in Wellington, and they could not do it as effectively as it was at present performed. There was always a cry for decentralisation and local self-government; and the

administration by Education Boards was local self-government of the best kind, because it was administration without local taxation—in all our other local government there was local taxation with it. It would be a very serious mistake to do away with Education Boards, because if they did their work properly they did very good work, and it would be no saving to abolish them. The work was done well, because a number of the School Committees came in contact with members of the Board with their grievances, and had them immediately redressed, whereas if they had to do everything by correspondence with Wellington they would not get their business done or their grievances remedied nearly so quickly or so effectually as at present. The idea that there would be a saving by abolition was a great mistake. He thought it would be wrong to take away capitation as soon as children had passed the Sixth Standard, because many who passed that standard were still very young, and he did not think they could be shut out from the schools legally till they were fifteen. In Auckland, however, there were far more pupil-teachers offering than were wanted—there were sometimes nearly a hundred waiting for engagements; and, to prevent themselves from rusting while waiting, they continued to attend the schools, so that they might be quite fresh for their work when employment came. He did not support the payment of capitation on that class: if they had passed both the Sixth Standard and the age of fifteen, and still wished to attend school, they should pay for themselves. It had been said by some honourable members that one-seventh of the community were suffering great hardship under the present system because their children could not attend our schools, and that an effort should [*unclear:* b] made to give them some assistance. [*unclear:* But] believed that, as a matter of fact, that evil [*unclear:* w] less by a half than it was said to be, for he [*unclear:* w] convinced that about ten thousand [*unclear:* children] Roman Catholic parents were attending [*unclear:* th] State schools. He arrived at that in this way Of the rest of the community the [*unclear:* children] tending school were 22.73 per cent., while of the Roman Catholics only 10 45 per cent, [*unclear:* were] tending their own schools; so that, [*unclear:* assumi] that the proportion of children to [*unclear:* adults] the same with Catholics as with Protestant the rest attended the State schools, and [*unclear:* th] would be at least ten thousand. He [*unclear:* knew] school in the Auckland District in which nearly all the children belonged to Roman [*unclear:* Cathol] parents, and therefore it could not be [*unclear:* tr] said that Catholic children were [*unclear:* being] out of our schools. If the Roman [*unclear:* Catho] were given capitation allowance they [*unclear:* would] be satisfied with that; for the *New Zealand Tablet* of the 11th November, 1887, says,—

"Mr. Pyke's Bill does not propose to [unclear: do] full justice, or place us on a footing of [unclear: equali] with the other taxpayers of the country. [unclear: T] Bill does not propose to give us building-graft or to allow our children to hold scholarship whilst attending Catholic schools. [unclear: These] serious defects."

This fact, and the fact that at least [*unclear:* half] Catholic children were now attending Government schools, should not be lost sight [*unclear:* of] considering this question. He would [*unclear:* ab] the training-colleges, and thought it a [*unclear:* abol] mistake that they had ever been established In Auckland the Board had been receiving £2,000 a year for the college; and last [*unclear:* w] the Board had decided to ask the Government no longer to pay the £2,000 a year, but to [*unclear:* p] £750 instead, to be used in another [*unclear:* way]. had been said that these colleges offered [*unclear:* falities] for the children of poor parents [*unclear:* to] more education; but that was not [*unclear:* the] perience in Auckland. Dr. [*unclear:* Macarthur], Principal, had stated that during six [*unclear:* years] had not received one young lady-pupil who [*unclear:* h] not passed the E examination and [*unclear:* who] not therefore already qualified to be a teacher Most of the pupils in the college were [*unclear:* yo] ladies, and the college drew to it some of [*unclear:* f] best of the young teachers who were already teaching, and gave them an amount of theoretical teaching which did not prove of [*unclear:* m] practical value. He had lately met in Wellington a lady who had passed [*unclear:* through] Auckland Training College, who told [*unclear:* him] after being there a year, and going back [*unclear:* to] school she had been at before, the headmaster told her she was very much worse than [*unclear:* be] leaving. It was all nonsense to say [*unclear:* that] college took the children of poor [*unclear:* parents] did them a great benefit: it simply [*unclear:* toc] number of young ladies and others [*unclear:* who] passed the E examination, and gave [*unclear:* them] their training, at a cost to the State [*unclear:* of] year each, in addition to the actual cost the instruction imparted. As he [*unclear:* had] they were nearly all ladies who passed [*unclear:* thr] the college, and if they received any advantage from attending the college the State got very little benefit from it, for they usually married in a year or two after leaving the college, and left the service. The colleges should certainly be abolished, and, as an argument for this, he might mention that it had been found that those sent from the Auckland College to take charge of schools had worse results than those who had simply been educated in the country schools. Although he believed in raising the school-age, he could not support it at present, because he had pledged himself to 'support retrenchment in every other direction before this; but as to the other proposals of the Government he should support them.

Mr. Moss said the real question before the Committee was, whether they should, under the pretext of altering the school-age, make some reduction in the amount voted for the education of the people. Though the Minister of Education had made a clear and interesting statement, going fully into the subject, it was manifest

the honourable gentleman would have been more pleased if, instead of asking for authority to make a possibly small saving of a few thousand pounds in the education vote, he could have devoted himself to showing how the System could be improved—that would have been much more congenial to the honourable I gentleman. It was unfortunate that at the end of the session they should be hurriedly discussing the education system, not with the view of improving it and putting it on a more solid foundation, but merely with the view of finding a pretext whereby to cut £15,000 off the vote—that was all that would be saved during the remainder of this year. It would be much better to say at once that this sum must be cut off than to waste time in seeking for a pretext under which to do it. He should not vote for the reduction, and he considered the question too large to touch in this way. (There were those who had hoped that our education system would one day embrace free tuition not only in the primary schools but in the secondary schools. That was the object many had kept before them in the past, and it was with that object that the secondary-education reserves had been made. They wanted free education for all classes—there should be no talk of rich and poor in this House—first in the common schools, and afterwards in the secondary schools and the universities. Now that idea was going to be abandoned, not because the system of education was too expensive, not because it had proved to be inefficient, but because they had wasted the resources of the colony in other directions, and therefore they were called on to curtail on this pretext the work in which the colony was engaged.

Mr. Fisher.—Last session you said £100,000 or £150,000 could be saved on education.

Mr. Moss said, to the General Treasury,; but not so long as the House takes on itself the education of the whole colony. If they would continue that responsibility, they must find the money to do it properly, and if they found the money they should take control of the whole affair, and abolish the Boards. The present hybrid system was wholly wrong; but the present was not the time to go into that question. As to raising the school-age, some children could very well attend school at five—it depended on the constitution and temperament of the child. In the United States the commencing school-age was in some States four—from four to twenty, starting with the kindergarten and ending at the university—free secondary schools and free universities. There the system was truly national, and that was what we should aim at. It was our first duty to educate the people, and it was shameful to say that we could not afford to educate our people—tho first duty of a free State—when we could afford to borrow money for all kinds of luxuries. The training-schools had been said to be useless. If so, it was because we made an improper use of them. The use of these institutions was to train teachers to habits of patience, and to methods of teaching, rather than to impart knowledge. Training-schools were a necessity if we were to have good teaching. As to stopping at the Sixth Standard, he disagreed with that, for if we were to have a truly national system we must look forward to the secondary schools and universities being a continuation of the district schools. With much that the honourable member for Linwood had said he agreed—it was an excellent speech; but, when the honourable gentleman spoke of teachers appointed by the Government being free and independent of the School Committees, he made a mistake. A teacher who did not work with the School Committee would be so worried that he could not retain his position. The School Committees wore an essential part of the system. They were the only real element of local government in the whole system. The Boards he had not the same regard for; and if there was to be a central system they were altogether out of place. If consideration of the question were left over until next session, the Minister would have time to go into it fully, and be able to come down with some proposals of a larger character, making, he hoped, the system a really local system, and relieving the General Government of much of the responsibility which now rested upon them; making the School Committees a great fact, and the Education Boards living powers, instead of mere surplusage as they were in present arrangements. The real object of this debate was to enable the General Government to spend less money; and how much did they expect to save this year? £10,000 or £15,000. Was it worth while to derange the whole system for the sake of that sum? Was it worth while to take action which would injure the one great institution upon which the whole future of the country depended? Surely it was better to let the matter stand over till next session, when the Minister would, no doubt, be prepared to come down and make it a matter of larger local responsibility and control.

Mr. Marchant said that the general feeling of the country, as expressed at the last election, was that the cost of education was heavier than it could afford, and that the country did not get value for its money; and he contended that the evidence taken by the Committee which had sat on the subject bore out the impression which people generally had formed. He thought that the thanks of the country were duo to the Minister of Education for the proposals he had brought down. He could not say that he agreed with every one of the proposals, but he did approve of the economical spirit in which the proposals were framed. He was thoroughly in accord with the proposal to raise the school-age, especially in view of the pledge of the Minister that no country school should be closed. It was nothing but the dread of the country schools being closed that prevented the people from demanding that the school-age should be raised to seven years. As to reducing the capitation allowance by 4s., he had a little doubt as to whether it would be wise to make the reduction all at once. He

should prefer to see it made in two instalments, believing that they could avoid embarrassing the Education Boards' finance in that way. He should be well pleased if the Minister of Education could see his way to modify his proposals in that matter. As to normal schools, he could not see why the teacher should be educated and trained at the expense of the State, any more than doctors, dentists, lawyers, or shoemakers. Therefore he was in accord with the proposal. But, as to the proposal to substitute strict average for working average, he must confess that he had some doubts as to its desirableness. He was afraid that in country districts where bad weather and bad roads formed a large factor in regulating the attendance it would have a very prejudicial effect upon the finances of the Board, especially where the Boards had but one borough within their boundaries, and many small schools—such a district as Taranaki, for instance. It would certainly lead to difficulty, and he should feel it to be his duty to vote against that proposal. With that exception he was thoroughly in accord with the proposals of the Minister. He did not think that there was the least fear that the cause of education would suffer by adopting them, and he maintained it was the real friends of education who were in favour of these reductions. He believed the time was not far distant when the Consolidated Fund would not be able to bear the whole of the charges that were cast upon it. Year by year they found the Government trying to relieve the Consolidated Fund. They saw the late Government relieving it of the charge of hospitals and charitable aid; and he found this year that the subsidies to local bodies were to be reduced, while other charges were also to be reduced, making a total reduction of £87,000—all at the expense of the road-making bodies. If the cost of education were not kept within moderate bounds, there would be soon an out-cry against the system all over the country, which would imperil its existence. [*unclear:* But] was not in regard to primary schools alone [*unclear:* ths] he would like to see a reduction effected, [*unclear:* b] also in regard to the higher schools. He maintained that these schools were nothing [*unclear:* b] class schools, and they ought not to be [*unclear:* key] up at the expense of the country. He [*unclear:* hope] the Minister would during the recess devote his attention to this matter of secondary schools, and sec whether he could not [*unclear:* devs] some plan for nationalising the reserves [*unclear:* th] were devoted to that purpose and putting [*unclear:* th] proceeds into a common fund; also for [*unclear:* alteri] the system in such a way that children living [*unclear:* i] the country should be placed on the same [*unclear:* foing] as children living in the towns—that [*unclear:* w] to say, that entrance to these schools shod be by scholarships.

Mr. R. H. J. Reeves agreed with [*unclear:* th] honourable member who had just sat [*unclear:* dov] more particularly in reference to what he [*unclear:* ho] said on the subject of secondary education He thought that, if they educated [*unclear:* children] to the Sixth Standard, that was all that [*unclear:* w] required to be done by the State. Children who showed an aptitude for the higher classic should receive extra tuition if their [*unclear:* parea] were able to afford it. He regretted that [*unclear:* th] honourable gentleman in charge of these estimates could not see his way to withdraw [*unclear:* th] vote under this head. It seemed to him a [*unclear:* far] to attempt to take off £60,000, when at [*unclear:* th] same time they heard of a sum being propose for defence amounting to £178,000, which [*unclear:* wa] wholly unnecessary. He should content [*unclear:* hir] self by simply stating that he should be [*unclear:* cr] polled—and he much regretted it—to [*unclear:* give] vote against the proposal.

Mr. Ross said this question had been [*unclear:* pre] well threshed out now, and he had been waring for the last six hours to hear the division bell. During the late election contest he [*unclear:* ha] occasion to address several meetings, at which there was an expression of opinion by the educators with regard to this subject. The which of the electors he met were in favour [*unclear:* of] reduction in the school-allowance, but [*unclear:* th] the schools should be kept as they [*unclear:* we] Many teachers with whom he had [*unclear:* come] contact were quite in favour of [*unclear:* reducing] capitation-allowance. He had read all [*unclear:* th] evidence taken on this subject by the Education Committee, and he had also read several publications on the subject. There was which had been published by the Education Institute of Otago, which was well worthy [*unclear:* th] attention of every member of the House; [*unclear:* bo] he would not detain the Committee by making any extracts from that work. He [*unclear:* suggested] Minister should agree to allow the matter [*unclear:* t] stand over till next session.

Mr. Fisher said that, late as was the [*unclear:* ho] and long as had been the discussion, he [*unclear:* felt] incumbent upon him to offer a few remark upon the speeches which had been [*unclear:* delivered] the course of the discussion. Many honourable members had been good enough to give [*unclear:* the] views upon what they believed to be the making of the Education Act and the [*unclear:* intentions] its framers. It had been his advantage to have had a good deal of communication with those who framed the Education Act, and with those who composed the Ministry that passed it. He was in a position to say, from what they told him, that the original intention was that the State should pay only upon the compulsory ages—namely, from seven to thirteen years. There was a further point he wished to mention, and that was this: that a great deal of credit was given to a gentleman in this colony who was very justly regarded as an educational enthusiast, but who was regarded as the champion of the common-school system of this colony. He thought this an appropriate occasion upon which

to mention that the author and champion of our present education system was Mr. Charles Christopher Bowen, the introducer of the Education Act, who had to encounter a good deal of opposition from Mr. Stout, who was a member of the House when the Bill was introduced in 1877. He (Mr. Fisher) claimed, himself, to rank as one of the strongest friends to the common-school system. The honourable member for Dunedin Central said it was premature to propose anything this session. It was open to any one to say that of any proposal. Some honourable members were as tenacious of their own opinions in regard to the particular mode to be adopted as were certain theologians in regard to their particular tenets. They would never recede one step in the attitude they took up. The honourable member for Dunedin Central said it was possible to reduce the cost of the education system by £100,000; but he was careful not to mention how this could be done. That honourable member also made some disparaging remarks in regard to Dr. Brown, who, in addition to being a medical man, was Chairman of the Education Board of Otago. He was bound to say that that gentleman was one of the keenest, ablest, and most powerful reasoners upon this question that he ever had the pleasure of listening to. One honourable member went so far as to say that Dr. Brown was a medical man, it was true, but that he was not an educational expert, and therefore was not a reliable authority. He was a University man, and was Chairman of the Otago Education Board, and, if these two qualifications did not entitle him to express an authoritative opinion upon this question, it was hard to say what would entitle any man to express an opinion. Now, the honourable member for Hawke's Bay had given them a great deal of valuable information in regard to this question, and had shown clearly how the system could be improved there. The only weakness in his whole argument was the statement that he hoped the Seventh Standard would not be done away with. He (Mr. Fisher) would undertake to say that not one man in a thousand in the colony knew anything of the existence of a Seventh Standard. He was the more surprised at the statement of the honourable member for Napier when he remembered that in the Hawke's Bay District, when the return for 1886 was made up, there were only twelve pupils who were in the Seventh Standard; while under the Otago Education Board there were some 221 pupils in the Seventh Standard. He undertook to say that, if the great mass of the people of the colony who had to pay for the maintenance of this system were aware of the fact, strong as they were for the maintenance of the Fifth and Sixth Standards, they would have a very strong objection to pay for the maintenance of the Seventh Standard; for the common impression of the mass of the people was that the State wont far enough when it educated children as far as the Sixth Standard. He wished only to touch upon one or two points, notably those raised by the honourable members for Caver-sham and Dunedin East—of course the remark had been made by other honourable members, but he referred to those honourable gentlemen especially because they were aware of the evidence that had been given before the Committee. Both these honourable gentlemen said that the matter ought to be allowed to stand over till the next session. Now, he asked whether it was fair to the country that a matter like this, in which it was possible to effect great saving, should be allowed to stand over until next session, when three-fourths of the colony had spontaneously said that in this department it was possible for very considerable retrenchment to be made. The Provincial Districts of Auckland, Hawke's Bay, and Otago had said it was possible to carry on the education system, without impairing its efficiency, at a considerable reduction. The Education Board of Otago, before the proposals of the Government had assumed any definite shape, sent to the Government to say that they were prepared to effect reductions to the extent of £8,500 or £9,000. Were they to send back to these three Boards and say that they did not want the Boards to effect these reductions? He thought that to do that would be to put the Parliament, the Government, and the Education Department in a very ridiculous position. He should not reply to the remarks of the honourable member for Kumara. He was not surprised at a ripe and rare old Tory, such as the honourable gentleman was, making the remarks he had made with regard to the Seventh Standard, and the Civil Service being closed against the people. He did not think the Civil Service was a great goal to strive for, and he would take care that none of his boys, at all events, entered the Civil Service. The objection that if the children were not in school they would necessarily be in the gutters was a very strong and unwarrantable reflection upon the parents of the colony. He would not follow the discussion, but would say that, although it had been long, it had been legitimate and profitable. By "profitable," he meant that honourable members who had spoken had spoken with the legitimate object of contributing so far as they could to the stock of information upon the subject.

Mr. Taiwhanga meant to speak on this question if he stayed a month to do it, as it was a great and important question. He had been concerned over the education question since 1876, when he gave a Bill to amend the Native School Act to Mr. Sheehan, who had probably put it under the table. He had even pleaded with the Governor himself about this question of education, which was the most important thing in the world, the foundation of all nations; but nothing had been done. The education of the Maoris was as nothing; but they should have the administration of their own land, and educate their own children. He did not blame the white people, but he blamed the Maoris themselves, for they had the matter in their own hands. They had the land, but if they let that slip they could do nothing. The Maoris did not get fair-play in this matter of education, and he would like to know what the result must be in fifty years. All the money that was being spent on Maori

education was simply wasted. For twenty years money had been expended under the Native Schools Act, but no good had been done; the Maoris had not been educated—not so much as he had been—and he had only learned what he could himself.

The Committee divided on the question, "That the vote be reduced by £5."

Majority for, 6.

Motion agreed to. Therefore school-age not to be raised to six years.

The Committee divided on the question "That the sum be further reduced by £5."

Majority against, 36.

Motion negatived. Therefore [*unclear:* capitation] lowance of 4s. per head to be abolished.

The Committee divided on the question "That the vote be further reduced by £4."

Majority against, 3.

Motion negatived. Therefore "strict average" to be substituted for working average."

The Committee divided on the question, "That the vote be further reduced by £3."

Majority against, 24.

Motion negatived. Therefore training colleges to be abolished.

Mr. Guinness moved a reduction of £2, as an indication that no more sums were to be placed on the estimates for higher education.

Mr. Bruce regarded this as the most important motion that had been made that evening. It meant, if carried, that the colony was not prepared to continue this higher education of which so much had been heard. He felt strongly on this question, and he had given (expression to that feeling on several occasions during last Parliament, and he was entirely in accord with the motion moved by the honourable member for Greymouth. The honourable member for Parnell, who, he was sorry to notice, was not in his place, had referred to the question of higher education in America. Probably he (Mr. Bruce) knew about as much of the United States as any honourable member in the House, and he knew that American opinion was strongly in favour of primary education, and not of higher education; and the most thoughtful men in America were in favour of abolishing higher education. The honourable member for Dunedin West said "No;" but he would point to a very much higher authority than even his honourable friend—Professor Smith, who thought it necessary to call the attention of the British Association to the American opinion of higher education. He believed the value of education was very much overrated. He believed if they gave children an opportunity of being educated up to the Sixth Standard they placed the key of knowledge in their hands, and any position in the colony was open to them. Some honourable members in Committee had given their own experiences. Let him cite his experience. He was nine years of age when his English education was completed. That was most of the education he had had; and, still, one of the most important constituencies of the colony had thought he was sufficiently educated to represent them in that Chamber. He thought that if they educated their children up to the Sixth Standard they had done all they ought to do.

Dr. Fitchett asked that the question of higher education should be tested on its merits, which could not be done then, for they must have full information, and a reasonable time to consider it.

Mr. Levestam was surprised at the Minister of Education, who wanted to reduce the expenditure on education, but wished to take it from the poorer classes. If the reduction were to begin with higher education, he would have supported him. He should vote against State support of higher education, as he had always done.

Mr. McGregor moved to reduce the vote by £500.

Mr. Allen thought the Committee should pause before striking out this vote. He had been consistent in wishing for the reduction of expenditure; but, if they wished this colony to succeed, they must maintain the higher education. He was perfectly sure that the primary education would be perfectly useless in fitting the people of this colony for competition with the people of other nations, unless they had also the higher education. The tendency of public opinion in other countries was to make the higher as well as the primary education free; and, if we could afford it, he would be glad to see it free in this country also.

Mr. Duncan considered the honourable member for Dunedin East had been inconsistent in the votes he had given, because he had voted to reduce the primary education.

Mr. Tanner maintained that the education in the secondary schools, which consisted of instruction in the dead languages, statics, and hydrostatics, was not necessary to a boy who had to earn his livelihood by manual labour.

Mr. Levestam also thought the honourable member for Dunedin East very inconsistent. If they made higher education free to all, he would agree with him; but, as it was at present; administered, the system was simply a means of helping the rich at the expense of the poor.

Mr. Allen said he had voted in the manner he had done with respect to two of the questions affecting primary education in order to preserve the system, being afraid that public opinion would turn against the system and destroy it if it were too costly. He would be glad to see all education free, so that every child who

had sufficient ability could obtain the higher education. It was by the education of the children of the poor—not pauper education, but a thorough education—that we should be enabled to maintain our position as a nation.

Major Steward said there would not be a single objection to this vote if the Minister proposed to devote it to scholarships obtainable by competition; and then the reproach, which now had a good deal of force, that money was voted to assist those who did not require it would be taken away.

Mr. Duncan thought that the honourable member for Dunedin East should endeavour to save higher education by reducing the expenditure upon it in the way he claimed to be defending the primary system from assault. The expenditure on secondary education was grossly extravagant, and would drag it down.

Mr. T. Mackenzie said there was the High School at Akaroa with ten children attending it, which cost £373 a year, or at the rate of £37 a head, although there was an excellent primary school in the neighbourhood. That was sufficient indication that they should put a stop to this system.

Mr. Marchant hoped that every Liberal member would vote for the reduction, not because there was any objection to higher education, but because of the way in which it was administered. These schools were simply class schools, and it was to that that the House and the country objected. If admission to them were by means of scholarships from the primary schools they would be welcome to everybody. If an opportunity were given of voting against the University system, he would vote in the same way as on this question, to show his disapproval of the administration.

Mr. Hislop could not allow any person to say that he would lower the range of public education, primary or otherwise. The vote on primary education was beside this question, because no person voted on that to take away the advantages of the system from any child. It would have been a sufficient objection to the reduction in the vote had it been proved that it would impair the system; but everybody knew very well that nothing had been raised so much as the cost of primary education above what it was years ago. With regard to secondary education, he could not agree with the honourable member for Rangitikei that the popular opinion was against it in America. Every thoughtful mind there was in favour of it, and the fact of such a number of schools being opened there showed that the people were alive to the advantages of education. Honourable gentlemen quoted Goldwin Smith; but it was not to him they should go, but to the [*unclear:* leaden] public opinion, who were advocating a [*unclear:* libe] movement in education. If they [*unclear:* read] books of Fisk and others of the same [*unclear:* clas] they would find that the chief way in Which the system had grown up was through [*unclear:* the] that higher education should be [*unclear:* spread] thoroughly among the people. As to [*unclear:* the] ministration of the high schools, he [*unclear:* could] suppose that, if honourable members [*unclear:* were] satisfied with the administration, they [*unclear:* mig] with reason change that system, but not taken away altogether. An honourable [*unclear:* gentle] gave as one reason for objecting to the schools that they were class schools. [*unclear:* Eev] they were, he would support them, because there could be nothing worse growing up [*unclear:* in] colony than an uneducated wealthy class.

Mr. Turnbull.—Let them pay for it

Mr. Hislop said they were the very [*unclear:* p] sons who would not pay for it; but it [*unclear:* was] absurdity to say that secondary-school education was class education. The fees paid [*unclear:* in] colony were about one-third of those [*unclear:* paid] Home; and honourable members [*unclear:* must] that by reducing the fees to a minimum the were opening the system to all classes, [*unclear:* bes] having a scholarship system which was large used. Let any one take the list of [*unclear:* those] obtained scholarships, and he would [*unclear:* find] three out of four of those who were [*unclear:* recei] secondary education were those who [*unclear:* could] receive it if they had to pay heavily for [*unclear:* it]. hoped the Committee would not strike [*unclear:* out] vote.

Mr. Leyestam was surprised at the [*unclear:* spee] just delivered. Did the honourable [*unclear:* gentle] call any one a Liberal who would tax the [*unclear:* ma] for the benefit of the few, [*unclear:* particularly] the many were poor and the few [*unclear:* rich]? honourable gentleman said the cost of [*unclear:* prim] education was higher than it was years [*unclear:* ago]; of course it would increase as the [*unclear:* number] children increased. As to the cost of seconded education being only one-third of that which was at Home, that was just what [*unclear:* they] plained of, inasmuch as those who sent ill children to those schools only paid [*unclear:* a] amount of the cost, and the poor people had pay the rest. Although the honourable member for Dunedin East said that the colony could not afford the cost of education, he [*unclear:* was] to vote for higher education and [*unclear:* against] education. And then he said his [*unclear:* district] not benefit by this vote as much as [*unclear:* others]! was surprised at the honourable gentleman.

Mr. R. Thompson thought that [*unclear:* this] the most sensible amendment [*unclear:* proposed] night, and was surprised at the Colonial Secondary saying that the wealthy people [*unclear:* of] colony would not pay for the education of the children. He thought better of them best felt satisfied, from the way in which high schools were conducted, that the primary education was injured by those schools. The [*unclear:* colo] was not in a position to carry on high school at present, and therefore he would vote [*unclear:* for] amendment.

Mr. Seddon said he found from the return that there were eighty-three children attending high schools

under ten years of age, and 1,191 between the age of ten and fifteen, making 1,274 children under the present school-age attending the secondary schools, which were costing the colony something like £30,000 a year.

Mr. Bruce did not want to be misunderstood on this question. The colony could not afford to educate children in the way many would wish, and he believed that higher education was given almost entirely to the children of the wealthy classes, and it was given in the towns. To what extent could children of the poor in the country take advantage of these high schools in the towns? He thought that not more than one child in seven ever came to the towns for this education, and they were not the children of poor parents. The consequence was that they were giving the children of the wealthy high education, and the poor were paying for it.

Mr. Duncan said on every platform of the colony it had been stated that the higher-education system had been mismanaged. The district he came from furnished a good sample of the mismanagement of the system. The expense of higher education in that district was a shame to them. There was no doubt whatever that the whole thing would be swept away were some alteration not made.

Dr. Fitchett recognised a great deal of force in the charges levelled against the high schools. They were in a great measure class Schools, and children attended them who ought not to be there, but who should be in the primary schools. Did the Committee recognise Shis: that if it took away this grant it would absolutely shut out higher education from poor children? Let the system be looked into and reformed, but let it not be killed.

The Committee divided on the question, "That the vote, £360,624, be reduced by £2."

Majority for, 28.

Motion agreed to, as indicating the wish of the Committee that the cost of higher education should be reduced.

Mr. Fitzherbert moved, That the vote for Native schools be reduced by £1, to indicate the desire of the House that the children of both races should be put on an equal footing with regard to education. At present the cost of education in the case of a European child was £4, while a Maori child cost £10.

Major Atkinson said if these Native schools were to be swept away the Maori children would be deprived of education.

Mr. T. Mackenzie thought that economy might be exercised in the Native schools. In his own district it had cost £132 to educate six children at the Native school, of whom four had passed. There was a school at Riverton where the education of a child had cost £100.

Mr. Kelly hoped the motion would be withdrawn, and that it would be left to the Government to effect whatever economy they could in this department.

Mr. Buchanan said there were three Native schools carried on very successfully in his district, and the children of both races received instruction at these establishments. He hoped the motion would be withdrawn, and that the discussion would be accepted by the Government as an indication that economy should be effected in this and other directions.

Mr. Fish thought it would be quite impossible to put Maori and European children on exactly the same level in the matter of education.

Mr. Moat would support the vote, because a great deal of good was being done by these schools. The honourable member for the Northern Maori District said the money was being thrown away; but possibly he might have been thinking of past times. At one time that honourable member was a teacher in a Native school at Kaikohe; and in 1879 the report of the Inspector of Schools on that school was as follows:—

"For all practical purposes this school has no existence. I found the teacher absent, and he had been absent for weeks. The school, during his absence, was supposed to be carried on by his wife; but school had not been held for some time. This teacher is in receipt of an allowance for boarders. At present they number only ten, half of whom are his own children. These ten, of whom one was a European boy, mustered, and I found that not one of them could read such words as 'dog,' 'cat,' &c.; nor could they do the simplest sum in addition. The building in which the school is supposed to be held is little better than a ruined shanty, originally belonging to the teacher, since sold. It is now occupied as a school house only on sufferance. There is a large Native population at Kaikohe, which is a flourishing settlement; and were a school built here, and a competent teacher appointed, the attendance would be numerous. The Natives here, as elsewhere, recognise the necessity of a school; and are willing to grant land for that purpose. In the event of a new school being built, and another teacher being appointed, I should judge the attendance would not be less than forty."

If the money was spent now as it was then, the honourable member might be justified in saying that' it; was' thrown away; but he (Mr. Moat) 'thought the system had been entirely changed, and knew was; producing good results.

Mr. R. Thompson thought these Native schools should be placed under the Education Boards, and then the abuses would soon be got rid of, the abuses now being due to the central management.

Mr. Bruce would protest in the strongest manner possible against reducing the vote. All the reasons given for educating the youth of the European population applied with even greater force to the Natives. If the Native

children were educated, in a few years they would be able to transact their own business, and not be in the future, as unfortunately they had been in the past, at the mercy of a few pakeha-Maoris, who had a monopoly of communication with them. However possible it might be theoretically to place both races on the same footing as to education, it was premature to do so now; but keeping on this vote would hasten the time. He looked forward to the day when all of both races would be placed on the same level; but in many districts now it was impossible to educate both races together, because there were no Europeans there, and therefore it was a matter of necessity to have purely Native schools. He hoped the vote would not be reduced by a penny.

Mr. Fitzherbert said his object was to give the Maoris a better education. The honourable member for the Eastern Maori District had told them that he had been working for it for years—that he wanted the Maoris to be placed on the same footing and to have as good an education as the Europeans, their present education being very bad. As it was now, the money was nearly all wasted. What he (Mr. Fitzherbert) wished was that the House should convey an intimation to the Government that the Maori children should get a better education at less cost, and that, as far as possible, the Maoris should be placed on the same footing in regard to education as the Europeans. Even in purely Native districts Maori schools could be worked on the same system as the schools for white children. He objected to the waste of money on the present system, and wished the House to show the Government that it desired the matter should be taken into Consideration during the recess, and prudently revised.

Major Atkinson said the honourable gentleman might have known from the promises of the Government that they would carefully deal with this department as with all others. At first the honourable gentleman told them he wanted to strike off the whole vote, but now he said he only wanted to [*unclear:* convey] intimation to the Government as to what [*unclear:* sho] be done hereafter.

Mr. Carroll hoped the proposal for education would not be carried. His [*unclear:* reason] wishing that was the same; as that of [*unclear:* the] poser for Wishing that' it should be carried That honourable gentleman said [*unclear:* the] should be put on the same footing as [*unclear:* Ed] peans. The only way to attain that [*unclear:* was] educating the Maoris. There were several[*unclear:* tricts] in the North Island in which [*unclear:* there] no European schools or-European, children and in such districts schools must be provided for the Native children. Of course the [*unclear:* hon] able gentleman was perfectly right in [*unclear:* spea] about the Hutt or Wellington, or any [*unclear:* pl] where the European population was in [*unclear:* exe] of the Native population. In all such [*unclear:* places] Native children would be much better education by going to the European schools, [*unclear:* which] did in many cases; and he knew [*unclear:* also] cases of European children going [*unclear:* to] schools, because there were localities [*unclear:* in] there were very few European children and large number of Natives, and there [*unclear:* that] the only means the European children [*unclear:* had] being educated. He did not think the [*unclear:* propo] reduction would bring about any [*unclear:* difference] all, but he would say that it was the [*unclear:* duty] the House to let the Maoris have as [*unclear:* m] education as they possibly could have, [*unclear:* consi] that the Natives had been very [*unclear:* unselfish] the past in the matter of providing for education. In nearly every district in the [*unclear:* N] Island there were large and valuable [*unclear:* reser] given years ago by the Maoris. How [*unclear:* they] been administered since was another question but the Maoris gave them solely for the propose of education, and now the House school act in the same spirit. He hoped the honorable gentleman would not press his [*unclear:* ament], but that the Government would [*unclear:* consi] the matter during the recess, as the [*unclear:* Preu] had promised.

Mr. Fitzherbert said that, at [*unclear:* the] quest of the representatives of the [*unclear:* Native] in whoso interests he had brought this [*unclear:* me] forward, he would withdraw the motion, [*unclear:* and] content with the assurance that the Government would consider it.

Amendment, by leave, withdrawn.

Mr. Fitzherbert would like to [*unclear:* draw] attention of the Committee to the industry schools. They cost the country a [*unclear:* great] of money, and were not conducted in [*unclear:* a] per manner. The sentiment was that you criminals should not be sent to gaol, because they would herd with older criminals and [*unclear:* le] things which would make them worse [*unclear:* inst] of better. But, judging by the [*unclear:* Kohimar] institution, the schools were not [*unclear:* working] The children there were entirely [*unclear:* neglect] received little education and no [*unclear:* technical] cation whatever, and no control was [*unclear:* exerci] over them. The elder boys went without [*unclear:* le] about the streets of Auckland, picked [*unclear:* up] kinds of wickedness, and then went [*unclear:* back] made the younger children as bad as [*unclear:* the] selves. The last report of the Inspector showed that twenty-seven boys had been absent without leave, and no doubt they were in the worst dens in Auckland that could be found. The other day, when in Court here, he heard the Resident Magistrate send a couple of little girls and a boy to the industrial school. The children had been brought up respectably, and it Struck him what a pity it was to send them to such a place. At these schools the children learned nothing, and when they came out they were worth nothing to society.

Mr. O'Callaghan.—No.

Mr. Fitzherbert said he was speaking specially with reference to Kohimarama. The children there did not make their own beds or wash out their own things. They were kept in perfect idleness. It would be much better to devote a wing of the Central Prison to the purposes of a reformatory, and teach the boys trades. He moved, That the vote be reduced by £1

Mr. O'Callaghan said the honourable member for the Hutt was altogether unacquainted with the position of affairs. When he stated that the industrial schools were a failure he stated what everybody who had studied the subject knew to be thoroughly incorrect. Being well acquainted with the Burnham School and the school in Otago, he could way that no better work could be done than was done there. The children were restrained from vice, and were taught to be useful members of society. The honourable member was wholly misrepresenting the industrial schools.

Mr. Fitzherbert said he had been talking of the Kohimarama School, where he was two years ago.

Mr. Buchanan said that any honourable members who were acquainted with the facts of the case as regards these schools would be aware that the statements of the honourable member were very wide of the mark.

Mr. Marchant said that he had been told that destitute children, even if they were toot criminals, were sent to these schools to mix with those who had been sent there for their crimes or vice. If this was so he hoped the Government would look into the matter, and apply a remedy to such an undesirable state of affairs.

Amendment negatived.

Mr. Seddon asked the Minister of Education whether, now that the general average had been reduced to strict average for the purpose of computing capitation, the Government would carry out their pledge that no country school should be closed in consequence of the change. He said that the Premier gave them an assurance that if the proposals were carried there should not be a country school closed.

Mr. Fisher said the position was perfectly clear. The representation was that in consequence of raising the school-age there was a risk of some of the country schools being Ulosed. The school-age had not been raised, and therefore the Government was relieved of all responsibility in connection with the as surance.

Mr. Graham much regretted the statement of the honourable gentleman. It was distinctly understood that if the proposals of the Government were carried *in globo* no country schools should be closed, and on the strength of that promise he had voted in a direction in which he would not otherwise-have voted.

Mr. Marchant thought there would not be much risk of any country school being closed.

Mr. Seddon left it to the Committee to say whether the Minister of Education was keeping faith with them. The Minister gave the Committee the assurance that, no matter what might occur, no country school should be closed.

Mr. Fisher said he had stated nothing of the sort. What he had said was, that if the proposal of the Government were assented to by the Committee they would undertake that no country school should be closed. That proposal had been rejected, and of course that arrangement had been upset.

Mr. Fitzherbert said, after the first division on the four questions the Minister of Education in the lobby gave him an assurance that the country schools would not suffer.

Mr. Fisher hoped the House would not hold him responsible for the honourable member's romances.

Mr. Buchanan said he was as much interested in the question of country schools as anybody, and he was quite satisfied that the Government would not see the country schools suffer. The whole point was as to the management of the Education Boards, for the matter would be in the hands of the Boards; and, as a member of an Education Board, he could say that the Boards were in the hands of the country School Committees, for if they chose to exert their power they had the voting-power as against the towns, and in that case could enforce an equal division of the funds at the disposal of the Boards. This being the case, the argument that had been brought forward seemed to entirely fall to the ground.

Mr. Duncan said that the honourable member for the Wairarapa had just missed the point. In a district like the West Coast they might call all the schools country schools. It was quite different where there were big towns, like Wellington and Christchurch. A district like the West Coast would be very seriously affected by only having strict average, whereas it would not make much difference to the other districts.

Mr. Fisher was very sorry to find that the honourable member had voted under a misapprehension; but he would say this to the honourable gentleman: that in future divisions, if he wanted to understand what effect his vote would have, he should go to the Government and ask them that question.

Mr. Anderson thought it was the duty of the Minister in charge to inform him. It was not his place to run after such information.

Mr. Seddon said he could take the oppor- tunity of reviewing the vote by moving an amendment now, but he did not think that was the proper course. He would rely upon the Ministers considering the situation, and the manner in which the votes had been given. The understanding, even though it might have been a misunderstanding, upon which the votes bad been given ought to be considered by the Ministers, and a promise ought to be given that country schools should not suffer.

Mr. Fisher said the Government had given; up the reduction which would have affected the country schools.

Dr. Fitchett was very much surprised to hear this. He understood a pledge had been given to the Committee, and that that pledge was not now to be carried out. Was that so? It seemed to him a most extraordinary thing. When the Minister of Education brought down four specific proposals, he understood the Minister to state that, whatever the result might be, he gave an assurance that the country schools should not suffer.

Mr. Fisher.—The principal one has been defeated.

Dr. Fitchett said the Minister of Education gave no indication that No. 1 proposal was to be the principal one, or that the country schools depended on No. 1. Each stood on its own bottom.

Mr. T. Mackenzie said the Minister of Education was perfectly free to carry out what he had indicated. He proposed that £26,000 should be saved by raising the school-age from five to six years. A number of honourable members, had voted against that proposal, and now they seemed to be most solicitous that the country schools should not suffer. How could they expect that they would not suffer when the proposal to save that amount had been negatived? He understood the promise that they should not suffer to apply to this proposal, and that the understanding was that no schools should be closed in consequence of the raising of the school-age.

Mr. R. Thompson understood that, when the Minister of Education gave the pledge that the schools should not suffer, that pledge had reference to the raising of the school-age; and before voting on the question he had taken the precaution of asking the Minister whether, if he voted to increase the school-age, the Minister would undertake that the country schools should not suffer; and a distinct pledge was given on that.

Mr. Fergus said that all the reduction the Committee had made amounted to £34,000, and the Otago Education Board in a communication had shown that they would, without closing a single school or reducing the salary of a teacher, be able to strike off one-fourth of that amount.

Mr. Levestam quite understood that in large centres that could be done, but the case was different in the smaller districts.

Mr. Kelly thought they might leave this question to the Minister of Education. He would not be anxious to sec the schools closed, and they might vote at once on the question.

Mr. O'Callaghan would agree to [*unclear:* that], the Minister would assure them that he would endeavour to prevent any school being [*unclear:* closed]

Major Atkinson thought they might [*unclear:* tah] it for granted that the School Boards [*unclear:* would] their duty, as they had always done [*unclear:* hither]. He took it that, if they did not do their duty the Government would have to come to they House and provide some remedy. He [*unclear:* believ] the Committee had given the Boards [*unclear:* ampl] means to carry on all the services in connection with education; and, as he had [*unclear:* said], believed that the Boards would do their duty Honourable members should recollect [*unclear:* that] Government were quite as much [*unclear:* interested] the education system as wore any member of the House. They had made provision which experience told them would be ample, [*unclear:* and] thought they might very well close the [*unclear:* del] on the clear understanding that the [*unclear:* Boar] would do their duty. If they did not, it would of course, be for the Government to step in.

Dr. Fitchett could not understand [*unclear:* th] attitude taken up by the Government; [*unclear:* and], one, he must protest against it. [*unclear:* During] debate he had raised this objection to [*unclear:* each] the proposals of the Government: that, so [*unclear:* las] as human nature was human nature, [*unclear:* so] would the Boards supply the town school with everything that was requisite, leaving the country schools unprovided for, because the latter could rely on the Government. He ventured to say that few members of the [*unclear:* Commit] understood, when voting on the second or [*unclear:* thi] amendment, that the country [*unclear:* schools] imperilled in any way. He, for his part, [*unclear:* fu] understood that the Government were [*unclear:* pledg] that country schools should be maintain To say now that it was to be left to the [*unclear:* Ed] cation Boards was little better than a [*unclear:* brea] of faith.

Major Atkinson said it was general agreed that the Boards could effectually [*unclear:* car] on their duties with the votes which had been passed, the only exception being the honorable member for Kumara, who thought [*unclear:* that] would be better to reduce the school-age [*unclear:* th] to make an alteration in the average, as [*unclear:* th] would affect his district most. There [*unclear:* was] misunderstanding about the matter at [*unclear:* all]; he would point out that, when these resolution were reported to the House, there [*unclear:* would] another opportunity of dealing with [*unclear:* them]. Government were of opinion that the [*unclear:* capita] given to the Boards was ample to [*unclear:* maintain] schools; but, if it should turn out that [*unclear:* it] not so, it would be necessary to [*unclear:* take] other measures. And honourable members should consider the difference [*unclear:* between] position now and that when the [*unclear:* resolution] first brought before the Committee. If the had reduced the school-age the country [*unclear:* scho] no doubt would have lost, and the

Government would have had to make up the [*unclear:* differe] But now the Education Boards had all [*unclear:* th] required to carry on their duties, and the [*unclear:* Ho] would take care that they managed their [*unclear:* arrai] properly.

Vote, £360,617, agreed to.

Front Cover

New Zealand. Proceedings of the New Zealand Secondary Schools Conference, Held at Nelson, *January 9th, 10th, 11th, 12th, 1888*.
R. LUCAS AND SON, PRINTERS, ETC. Nelson Bridge-street, Nelson. 1888

Secondary Schools.

Conference.

This Conference commenced its first session at the Girls' College, Nelson, on Monday, Jan. 9, at 10 a.m., when there were present:—The Headmaster of Auckland College and Grammar School, Mr C. F. Bourne. M.A.; the Principal of the Girls' High School, Wellington, Miss Hamilton; the Principal of the Nelson College for Girls, Miss Edger, M.A.; the Principal of the Bishop's School, Nelson, Mr J. H. Harkness; the Headmaster of Christchurch High School, Mr. Bevan-Brown, M.A.; the Headmaster of Akaroa High School, Mr. W. Walton, B.A.; the Hector of Timarn High School, Mr. A. L. Halkett-Dawson, M.A.; the Rector of Waitaki High School, Mr. J. Harkness, M.A.; the Rector of Dunedin High School, the Rev. Henry Belcher, M.A., L.L.D., and the Principal of the Otago High School for Girls, Mr. Alex. Wilson, M.A.

Mr. Halkett-Dawson was, on the motion of Mr. Bourne, seconded by Mr. Bevan-Brown, unanimously elected Chairman, and on taking the chair, spoke as follows:—

I return thanks for the honor you have conferred on me in electing me President of the first High Schools Conference. I trust this will be the beginning of a series of similar meetings whoso business it will be to look after the interests of higher education in this colony. I trust this meeting in its results will promote the interests we all have at heart. In New Zealand, with its scattered communities, there has been little or no association among teachers in our High Schools, we have been separated from each other by the natural barriers of chains of alpine mountains and silver streaks of sea. It may be that mutual jealousy has existed in some few cases—remnauts of the old provincial rivalries and antipathies; but the natural barriers have been surmounted by the railroad and steamboat, and mere provincial rivalry is merged in a common national struggle. The question is, not whether Auckland is to have the mastery over Otago, but whether in higher education we are to hold our own against the world. Hence the need for combination among the head masters is very great. Here and there, in this and that centre, certain steps in the right direction may be taken, but for lack of communication there has never been anything like progress all along the line. Since coming to Kelson I have heard old Æsop quoted very frequently. May I follow suit? May I say that hitherto we have been like the single sticks in the fable? This Conference will bind the separate sticks into a bundle. When some improvement has been effected in one centre now, it will, by means of this Association, be quickly passed round. Hitherto, opinions of the right sort have grown very slowly. Questions raised in Auckland may not be even so much as heard of in Canterbury or Otago. The necessity for association has long been felt. Ideas and circumstances were gradually maturing towards the realisation of this end whey the circular of the Education Department was sent down to us some six months ago. It was then felt that concerted action was necessary, and that at a Conference we could better discuss matters that interest us and are vital to the progress of higher education. This Conference then has grown out of the circumstances of the case. It is no mere combination for selfish ends, nor is it a Conference whose work will end with the results of owl deliberations on this occasion. So long as the present system of High School education exists, so long will it be necessary to meet to exchange ideas and form such opinions as will result eventually in the promotion of the cause of higher education. It is true that we are only a consultative body. We cannot carry into effect our views directly, us can a governing body, but we can do what is perhaps a safer and more beneficial thing for the public; we ear disseminate our views, we can put them into the crucible of public criticism, and, as in these days we have Government by opinion we shall ultimately get our views carried out if only they find general acceptance. In this we have a certain superiority over law-making body like the Senate of the University, an Education Board, or a Board of Governors. We may do something rashly we may pass resolutions that afterthought will prove to us are foolish, but no harm will come of such resolutions, as they will not be followed by immediate action. Some may say, let them talk they cannot follow up their talk by action. But herein lie our strongest point. We seek the general good; we shall

deliberated for the welfare of higher education; we shall formulate doctrine that will find general acceptance because they are for the general good; we shall create a body of public opinion respecting higher education in New Zealand which will gradually find its way [*unclear:* ist] the by-laws of every educational authority in the colony. This [*unclear:* dso] all we want, this is all we aspire to. I should like to say here [*unclear:* the] personally I think our system of local government in New Zealand is wonderfully good, all things considered. I believe that, as a [*unclear:* rub] speaking of that branch of local government which is [*unclear:* concer] with Education, our local bodies are extremely anxious to do [*unclear:* whe] is right and best for the community. If they err it is because of [*unclear:* lac] of knowledge, and I believe they will be most happy to profit by our deliberations. Here we are, a body of experts whom the colony has imported, and whose best services the colony is entitled to. How can we better do our adopted country service than in taking part in such conferences? How can we better do ourselves good than in meeting together to discuss difficulties, to suggest improvements, and to influence the department and the whole educational machinery of the colony? We are all working with a common aim, and I believe such meetings as these will result in great good to all. But, ladies and gentlemen, it is unnecessary to further vindicate our meeting this day. I may say in a word that the progress of association is the progress of civilization. In union there is strength, in disunion weakness, in the multitude of counsellors there is safety. Chief among the subjects that will engage our attention this time will be the relation of Secondary Schools to the University. This is a very wide subject, and we are determined to have a say in several matters which hitherto have been managed without much outside criticism, and without any suggestions from an important and competent body of men like ourselves. We are the feeders and the tributaries of the University, and as such we are most deeply interested in their regulations for entrance examinations. We want to tell the Senate what effect some of these regulations have on our work. We want to suggest certain improvements. We have every reason to know that the Senate will be ready to give full consideration to our wishes. We do not want to imitate Melbourne in having a preponderating influence of headmasters on the governing body of the University, but we must contrive to get ourselves effectively represented there. Then we shall discuss our own schools, their curricula, and the means of examination, and, lastly, we shall consider some few topics connected with the relation between the High Schools and the Primary Schools of the Colony. I shall not detain you longer by any further remarks, but simply express a hope that our deliberations will be conducive to the best interests of the sacred cause of education.

The Conference then proceeded to the election of a Secretary and Treasurer. On the motion of Mr. Wilson, seconded by Mr Harkness, it was resolved that Mr. William Walton, of Akaroa High School, be appointed to these offices.

The Conference then resolved itself into Committee to consider the Order of Procedure, agenda paper, See.

On resuming, the following resolutions were adopted:—

Moved by Mr. Wilson, seconded by Mr. J. Harkness (Waitaki), "That the Standing Orders of the Convocatiou of the University of New Zealand be adopted as the Standing Orders of this Conference."

Moved by the Rev. Dr. Belcher, seconded by Mr. Wilson, "That this Conference proceed to discuss the questions raised in the order suggested by the Committee."

The Conference then went into Committee to consider its constitution, and on resuming at 12.30 p.m., adjourned till 2.30 p.m.

Second Sitting.

The Conference resumed at 2.30 p.m.

Minutes of previous sitting were read and confirmed.

On the report of the Committee *re* the constitution of the Conference, it was resolved:

- "That the name should be the Secondary Schools Conference."
- "That no voting by proxy be allowed; that no one be allowed to vote except a Principal of a Secondary School, or his accredited representative, such representative to be a member of his staff."
- "That assistants in Secondary Schools be allowed to attend the Conference, and take part in the deliberations without voting."
- "That the subscription of such schools as join the Secondary Schools Conference be one guinea per annum."
- "That the Conference be not constituted unless seven voting members assemble, and that a quorum for any sitting be five."

1. Proposed by Mr. Bourne, and seconded by Mr. Bevan-Brown, "That it is desirable that the heads of Secondary Schools be represented in the Senate of the New Zealand University."—Carried

2. It was proposed by Mr. Harkness (Waitaki), and seconded by Mr. Wilson, "That in the Matriculation Examination for Arts and Medicine, the subject of mechanics should be more clearly defined."—Carried.

3. On the motion of Mr. Harkness (Waitaki), seconded by Mr. Bourne, it was resolved, "That in the University Entrance Examinations the subjects under the head of Mathematics should be more clearly defined."—Carried.

4. Proposed by Dr. Belcher, seconded by Mr. Bevan-Brown, "That the Conference respectfully calls attention to the ineqnitableness of the present system of marking by examiners for the Junior University Scholarships, as practically undue preponderance is given to Science and Modern Languages over Latin and Mathematics in the interpretation of the marking instructione."—Carried.

5. Proposed by Mr. Wilson, seconded by Mr. Bourne, "That it is desirable that no teacher engaged in teaching candidates should examine for scholarship or entrance examination."—Carried.

6. Proposed by Mr. Bevan-Brown, seconded by Mr. Harkness (Waitaki), "That it is desirable that each examination paper in the entrance examination of the University of New Zealand should be approved by, at least, two Examiners."—Carried.

The Conference adjourned at 5.30 p.m.

Third Sitting.

The Conference resumed at 7.30 p.m. After the minutes of the previous sitting had been read and confirmed, the following resolutions were affirmed:—

7. Mr. Bevan-Brown moved, and Dr. Belcher seconded, "That certificates be granted to all candidates who in the Junior University Scholarship Examination shall obtain 1500 marks (section 5, chap. 8, New Zealand University Calendar, 1887), and the subjects in which he has satisfied the Examiners be endorsed on the certificate with some sign appended if he has won distinction in any such subject."

8. Proposed by Dr. Belcher, seconded by Mr. Walton, "That this Conference respectfully requests that no changes affecting the work of Secondary Schools be made by the Senate without prior consultation with the Principals of Secondary Schools throughout the Colony ."—Carried.

9. Proposed by Miss Edger, seconded by Mr. Harkness (Waitaki), "That this Conference is of opinion that the University Entrance Examination should be fixed to begin on a certain day, instead of varying, as at present, over the first fortnight of December."—Carried.

10. Proposed by Miss Edger, seconded by Mr. Bevan-Brown, "That this Conference is of opinion that the fee charged to matriculated students under the University statute, "Terms and Lectures," is excessive, and would therefore respectfully request the Senate to reduce it to two guineas for the examination, provided only three subjects are taken, and half a guinea additional for each extra subject."

The Conference adjourned at 9.30 p.m.

Fourth Sitting.

The Conference resumed at 10 a.m. on Tuesday.

The minutes were read and confirmed.

Mr. Daniel Brent, M.A. and Mr. G. M. Thomson, F.L.S., of Otago High Schools, and Mr. E. Pridham, M.A., of New Plymouth High School, took their seats and were welcomed by the President, Mr. Halkett-Dawson.

11. Mr. Bourne proposed, and Mr Harkness (Waitaki) seconded, "That students of University Colleges should not be eligible for Junior University Scholarships."

Motion put and carried.

12. Dr. Belcher moved, and Mr. Bourne seconded, "That in the opinion of this Conference it is highly desirable that the number of Junior University Scholarships should be considerably increased."

13. Mr. Thomson proposed, and Miss Hamilton seconded, "That the following list of Secondary Schools be recognised by this Conference:—

Auckland College and Grammar School
Auckland Girls' High School
Thames High School
New Plymouth High School
Wanganui Endowed School
Wellington College
Wellington Girls' High School

Napier Boys' High School
Napier Girls' High School
Nelson College
Nelson Girls' College
Christ's College Grammar School
Christchurch Boys' High School
Christchurch Girls' High School
Rangiora High School
Akaroa High School
Ashburton High School
Timaru High School
Waitaki High School
Otago Boys' High School
Otago Girls' High School
Southland High School
Bishop's School, Nelson."

The list was approved.

The Conference adjourned at 12.30 p.m.

Fifth Sitting.

The Conference resumed at 2 p.m.

Minutes of previous sitting were read and confirmed.

14 Mr. Bourne moved, and Dr. Belcher seconded, "That in the opinion of tills Conference it is desirable that some arrangement should be made by which the examinations of the New Zealand University may replace as far as possible the existing examinations leading up to the professions."—Carried.

15. Mr. Bourne proposed, and Mr. Harkness seconded,

- "That in the opinion of this Conference it is desirable that regulations should be laid down by the central authority as to the disposal of the sums of money placed in the hands of "Boards of Education for the purpose of maintaining scholarships."
- "That these regulations should embody conditions such as to ensure that the scholarships shall serve to carry on pupils from the primary schools until they are able to compete for the Junior University scholarships."
- "That the essential points are: (1) That the scholarships should be divided into two classes, Senior and Junior; (2) That the examination for Senior scholarships should include the subjects usually taught in Secondary Schools; (3) That the period covered by a Junior and a Senior scholarship together should be not less than five years."

16. Mr. Wilson proposed, and Mr. Harkness (Waitaki) seconded, "That it is desirable that every holder of an Education Board Scholarship should be required to attend some properly constituted Secondary School during the whole tenure of the Scholarship, as recommended by the Royal Commission on Secondary Education of 1879."—Carried.

17. A long debate ensued as to the examination of Secondary Schools, and eventually Mr. Wilson moved, and Mr. Bevan-Brown seconded, "That this Conference is not at present prepared to suggest any practicable scheme for the regular examination of Secondary Schools, and is of opinion that the entrance examination of the New Zealand University should be used as far as possible as a test examination of the highest forms."—Carried.

The Conference adjourned at 4 p.m.

Sixth Sitting.

The Conference resumed at 10 a.m. on Wednesday.

Minutes of previous sitting were read and confirmed.

Various subjects connected with the relations between Primary and Secondary Schools were discussed at considerable length, and several propositions were made, the consideration of which was deferred till the next meeting of the Conference.

The Conference adjourned at 12.30 p.m.

Seventh Sitting.

The Conference resumed at 2 p.m.

Minutes of previous sitting were read and confirmed.

18. Mr. Bevan-Brown proposed, and Mr. Walton seconded, "That it is desirable that more liberal provision be made to give secondary education to the more promising pupils of Elementary and Primary schools, such as, for example, giving free or assisted education to all pupils who, under the age of 12, have passed a Fifth Standard examination with credit, or who, under the age of 13, have passed a Sixth Standard examination with credit, or an equivalent Entrance Examination."—Carried.

19. Mr. Bevan-Brown proposed, and Miss Edger seconded, "That free education for four years at Secondary Schools should be given to some of the candidates at the scholarship examination held by the District Boards of Education, who, failing to win scholarships, obtain at least half the total of possible marks."—Carried

20. Mr. Brent moved, and Mr. Bourne seconded, "That the Senate of the New Zealand University be respectfully requested to give every encouragement to High Schools by cheapening and localising the Matriculation and Junior Scholarship Examinations so that they may be used to test the work of the ordinary Fifth and Sixth Forms."—Carried.

21. Mr. Brent proposed, and Mr. Harkness (Waitaki) seconded "That the Secretary of Education be respectfully requested to furnish this Conference with details respecting the academical careers of all holders of Education Boards' Scholarships since 1879,'—Carried.

22. Mr. Thomson proposed, and Mr. Walton seconded, "That this Conference is of opinion that the management of all Secondary Schools should be by Boards of Governors, and not, as is at present the case in some instances, by the Education Board of the district."—Carried.

23. Mr. Brent, proposed, and Mr. Thomson seconded, "That Messrs Dawson, Walton, Bourne, and Brent, and Miss Edger be the Revising and Printing Committee."—Carried.

24. Mr. Thomson proposed, and Mr. Bourne seconded, "That the next annual Conference be held at Christchurcli."—Carried.

25. Mr. Pridham proposed, and Mr Bevan-Brown seconded "That Mr. Bourne. M.A., Principal of Auckland College and Grammar School, be elected President."—Carried.

26. Mr. Bevan-Brown proposed, and Mr. Harkness (Waitaki) seeconded, "That Mr Walton, B.A., the Headmaster of Akaroa High School, be re-elected as Secretary and Treasurer."—Carried.

The Conference adjourned at 4 p.m.

Eighth Sitting.

The Conference met on Thursday at 10 a.m.

The minutes of previous sitting were read and confirmed.

The business transacted was purely formal.

After the usual votes of thanks had been passed the Conference adjourned.

Motions Deferred.

The following motions were, after discussion, deferred for consideration at the next meeting of Conference:—

Dr. Belcher moved, "That in the opinion of this Conference it is desirable that Moderators for examinations be appointed by the Senate, to endeavor to secure reasonable uniformity from year to year in the examinations in Arts carried on in New Zealand."

Mr. Bevau-Brown moved, "That the certificates to be issued to candidates for the Junior Scholarships who obtain not less than 1500 marks should be accepted for—(1) D Certificate, (2) Senior Civil Service, (3) Law Preliminary (Solicitors), (4) Medical Preliminary; if the certificates be endorsed with the subjects pre, scribed for the examination,"

Mr. Bevan-Brown moved, "That candidates for Junior Scholar, ships must offer five subjects, but that the marks shall be counted for those four subjects only in which they do best, provided that in the subject not counted at least 20 per cent of possible marks be obtained."

Mr. Brent moved, "That in the examinations for Education Board Scholarships it is desirable to have one set of papers through, out the colony so as to secure the following ends:—

- Satisfactory results in the way of comparing the different districts with one another.

- Economical examination secured by printing one set of papers only."

Mr. Walton proposed, "That this Conference at its next meeting proceed to draw up a scheme defining the powers of Boards and Principals of Secondary Schools."

Miss Hamilton moved, "That it is desirable, with a view to encourage pupils of Secondary Schools to take part in the work of Primary Schools, that inducement should be offered to pupil teachers to spend enough time at a Secondary School to enable them to matriculate before beginning to teach."

Agenda Deferred.

1. Examinerships to be open to Secondary teachers.
2. Age and standard of entrance to High Schools.
3. Preparatory classes in High Schools.
4. Fees at High Schools.

decorative feature

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Front Cover

Ritualism and the Rights of the People. Being a Lecture Delivered at Roslyn on 5th July, 1888.
With Additions & Alterations, by James Ashcroft
Price Sixpence
JAMES HORSBURGH, PUBLISHER Dunedin 73, George Street. MDCCCLXXXVIII

Preface.

In the course of a recent Parochial controversy on the subject of Ritualism, I was led to examine the available evidence on both sides in regard to many of the points involved. I consulted many authorities, and at length thought it right to give my fellow-parishioners the benefit of my researches.

The Lecture having been very kindly received, and many having expressed a desire for its publication, I now sand it forth to the public, with only a few alterations and additions. I do so in the hope that it may be found interesting to my fellow-Church men, and instructive, especially to the young, who are in danger of being led by degree into practices, the full meaning and ultimate tendency of which they but little understand.
The Author.

Ritualism,—and the—Rights of the People.

Ritual, in its widest sense, includes many things about which there is no controversy. The acts of standing or kneeling, of responding, or singing, are, strictly speaking, parts of ritual. There are, indeed, those who consider that surpliced choirs and intoning the prayers are practices to be condemned as Ritualistic in the sense of being excesses of ritual; but these are no longer practices which are in any sense distinctly characteristic of the Ritualistic party in the Church: they have been adopted by men of all shades of opinion, and stand on a different ground altogether from those which have a doctrinal significance, and the kind of objections that can be raised to them are of much the same nature as those which can be raised against the use of instrumental music in church. Among ourselves, we have so long been accustomed to the latter that it is no longer a matter of controversy with us. There is much to be said for a stately and dignified worship which does not in any degree involve High Church or Ritualistic doctrine. Even John Milton, himself a Puritan, and the author of a work entitled "Reasons of Church Government against Prelacy," thus decribes in his poem, "Il Penseroso," such a dignified service, with all the surroundings of church architecture and church music:—

But let my clue feet never fail
To walk the studious cloister's pale,
And love the high embowed roof,
With antique pillars, massy proof,
And storied windows, richly (light,
Casting a dim, religious light.
There let the pealing organ blow

To the full-voiced choir below,
In service high and anthems clear
As may, with sweetness through mine ear,
Dissolve me into ecstasies,
And bring all heaven before mine eyes.

Whatever differences, therefore, there may be on these points, they do not touch my present argument.

The fathers of the movement which led to the full development of Ritualism were mainly Pusey, Newman, Keble, and Williams, and the first note was struck in the Oxford "Tracts for the Times" more than fifty years ago, though I am informed that Pusey and Keble never adopted the external practices of many of their followers. Judged by their opponents, this was the verdict of the time. Rev. W. Goode says:—"I must add that their works have such constant and manifest traces of their being imposed upon and misled by Romish writers, that we cannot but fear that they suffered themselves to be prejudiced in favour of that system of doctrine to which the circumstance's of the times had given them a formidable bias, before they had studied the subject in a way which alone could have entitled them to assume the office of reformers and correctors of the Church." They dwelt much on the authority and divine character of the Church and its Sacraments, giving a sacrificial character to the Holy Communion, and by consequence a priestly character to the Christian Ministry: and this is the verdict of the great Dr. Arnold, of Rugby, on their teachings. "It is clear to me that Newman and his party are idolators: they put Christ's Church, and Christ's Sacraments, and Christ's Ministers in the place of Christ Himself. . . . I have been looking through the Tracts, which are to me a memorable proof of idelatry. Some of the idols are better than others; some being, indeed, as very a Truncus ficulnus as the most degraded superstition ever worshipped; but as to Christianity, there is more of it in any one of Mrs. Sherwood's or Mrs. Cameron's, or, indeed, in any of the Tract Societies, than in all the two Oxford octavos." "The universal cry was," says Canon Perry. "that the whole party was dishonest to the Church of England, that they were Romanists at heart, and were rapidly going forward to a general union with Rome."

Newman did go over to Rome, and was followed not long after by Archdeacon Wilberforce and Archdeacon Manning. They were followed by numbers, and the effect of these doctrines on some of the ablest and brightest men of their day is a warning and a lesson not soon to be forgotten, even though of late, secessions have not been so numerous. The reason for this, no doubt, is that a section of the Church of England has been so far Romanised that numbers who accept all but a few of the doctrines of the Romish Church find themselves at home in her without putting on the additional fetters which an entire submission to Rome would impose; and others, and I am glad to believe a large number, while Ritualists in practice, have adopted an Anglican rather than a Romish standard of doctrine. But I have a witness as to the true tendency of these doctrines and practices, whose words are weighty, as they are those of a bishop of the Romish Church, who knows whereof he speaks.

The following observations were made recently at the opening of Truro Cathedral by Dr. Vaughan (Roman Catholic Bishop of Salford):—" The Protestant Church of England has lent herself unwittingly, but truly and efficiently, to the service of the Catholic Church. There has been going on a disintegration and separation of the good from the false, and the human from the divine. This showed itself in a remarkable manner in the rise and: development of what was called the Tractarian movement, during which over 1000 most learned, most conscientious, and must self-denying ministers and other members of the Protestant Church, after availing themselves of the liberty of that heresy, which was part of their system, to examine all things and test all things for themselves, joined the Catholic Church, satisfied that that Church must be catholic as to time, doctrine, and place. Then there arose what was commonly called the Ritualistic movement. A few years ago the Anglican bishops, with one or two exceptions, were shocked by the departure of the Ritualists, and the Legislature was again and again invoked to put down the Romanising tendencies. Still, the practices have gone on; churches in which Ritualism is adopted are arising all over the land under the jurisdiction of Anglican bishops, until Catholics can scarcely distinguish between such places and the churches belonging to their own communion. Even the great Cathedral of St. Paul, in London, is being turned to resemble more a Catholic church than anything else; a magnificent altar and reredos have been erected, which could not have been more effectually designed by an architect in Rome, so perfect are the outlines and decorations. It is now only necessary to provide the relics of the saints and secure the blessing of the Catholic Church in order to celebrate High Mass."

And now another from within our own Church. I have quoted a good deal from the Students' Church History, by Canon Perry, of Lincoln, by no means a hostile witness; and I quote once more:—"But while the best hope for the future may well be cherished, when the surprising development of all schemes of Christian love and care in the Church of England is contemplated, it is not to be concealed that two great dangers menace

that Church—of opposite character, indeed, but both of most serious import. The first is the undoubted fact that certain of her clergy teach doctrines and encourage practices which are entirely alien from the doctrines and practice of her best divines, and have no real support in her formularies, but are either evolved from the imagination from supposed primitive practice, or are directly imitated from Rome. This tendency towards Romanising happily is not widely spread, but it is sufficiently prevalent to generate considerable suspicion in the minds of the laity, to alienate many from the Church, and to stimulate the action of that persecuting spirit which seeks to repress eccentric conduct or teaching in the clergy by the stern action of the law, at a terrible cost of bitterness and uncharitableness."

I wish I could agree with him that the danger is not widespread, but an admission from such a quarter that there is a danger is sufficient for my present purpose.

Now, here the question of doctrine comes in, and what are the doctrines of the Ritualistic school with which, as honest members of the Church of England, we may take issue? They are mainly threefold, and may be embraced under these heads:—

- The relation between the Church and the Scriptures.
- The doctrine of the Real Presence and of Sacrifice in the Holy Communion.
- The powers of the Priesthood.

Now, it cannot be expected that I can deal with these great questions in the spirit of a theologian. I cannot for a moment lay claim to the learning, or the intellectual grasp, needful for dealing with all the subtle distinctions involved in these doctrines. I shall lay before you clearly the opinions of others well qualified to speak, and I shall endeavour to deal with the several points involved in a humble and reverent spirit, and, at the utmost, in the space of time at my disposal, I can give you but a mere outline of the arguments.

1. The Church and the Scriptures.—The view that the Church of Christ is guided by the Holy Spirit, and is the depository of the truth, that in fact the Church existed before the Scriptures, and codified the inspired writings, fixing what is called the Canon of Scripture, is no doubt correct; but the controversy arises when we are told that tradition is to guide us in our interpretation of Scripture, and that what all men always and everywhere have received is the test of Catholic doctrine. Here I pause in doubt. Will any doctrine stand that test? Are the early fathers alway clear and safe guides?—has the Church never erred?—have we not perpetual need to go back to the fountain head, the well of Scripture undefiled? The doctrine of development is a dangerous doctrine, all the more because it has in it some element of truth. I may use as an illustration of development, by means of successive traditions carried down and enlarged from age to age, the following. Suppose a portrait carefully takes by a competent artist from the original, and suppose, further, that this portrait were copied by another who had never seen the original, and this again by a third and a fourth, and so on, would not each portrait differ slight from the one of which it was a copy, and each copy successively from the others? and after many copies would not the last differ very widely indeed from the original? So, I think, have we had gradual departures from the Scriptures, until the most monstrous doctrines have been developed and promulgated as the true faith. Once tradition is placed between us and the Bible, the Romish Church gains an immense advantage, and the Reformation, which was in the main a return to Holy Scripture as the one rule and guide of our faith, is discredited. What say our articles.

Article XIX says—"As the Church of Jerusalem, Alexandria, and Antioch has erred: so also the Church of Rome hath erred not only in their living and manner of ceremonies, but also in matter of faith."

Again Article XX says—"The Church hath power to decree rites and ceremonies, and authority in controversies of Faith. And yet it is not lawful for the Church to ordain anything that is contrary to God's Word written, nor may it so expound one place of Scripture that it be repugnant to another. Wherefore; although the Church be a witness and a keeper of Holy Writ, yet as it ought not to decree anything against the same, so besides the same ought it not to enforce anything to be believed for necessity of salvation."

And Article XXI.—"General Councils may not be gathered together without the commandment and will of Princes. And when they be gathered together (forasmuch as they be an assemblage of men whereof all are not governed with the Spirit and Word of God), they may err and sometimes have erred, even in things pertaining unto God. Therefore things ordained by them as necessary to salvation have neither strength nor authority unless it may be declared that they be taken out of Holy Scripture."

Here we have the relation between the Church, and the Scripture clearly laid down, and now, by the way of contrast, I quote a small Catechism found by me in the Sunday School and at once withdrawn. It is edited by the Rev. W. H. B. Pro by, and in the preface I find the following:—"The Church, *not* the Bible, is the pillar and ground of the truth." The marginal reading of the word given as "ground" is the word "stay," which I prefer. What a remarkable statement founded on one passage in Timothy! Pillar and stay of the truth. But what is the truth? Surely the Bible, or rather the inspired writings contained in it? And how can the two be placed in opposition?

Note.—Dr. Wordsworth, late Bishop of Lincoln, in his learned and valuable work, "Theophilus

Anglicanus," which is written in eatechetical form, says:—

Q. Bat if what you have said be so, might it not be objected that our faith rests on the authority, not of the Bible, but of the Church?

A. No. The Church and the Bible are both from God: the one it God's Kingdom, the other is His Word. As soon as we are conscious of anything, we find the Church with Holy Scripture in he hands and appointed by God to deliver it to us and to instruct us in its meaning. The Church speaks to us ministerially, the Bible authoritatively.—[This, it must be remembered, is the view of an Anglican High Churchman, and I have throughout taken my witnesses, for the sake of fairness, mainly from that school of thought.]

What sort of teaching is this for our young people? No wonder the author speaks in the same preface of "purging out the evangelical element in the Church." Hear Canon Mason on this point, whose work, the Faith of the Gospel, was lent me by our clergyman, who claims him as a great personal friend, would that he would listen to his voice—

"Thus 'unscriptural' becomes synonymous with 'novel.' and therefore with 'false,' or at least with 'un-necessary.' 'Those fierce words.' as Jeremy Taylor calls them, of S. Basil well express the feeling of the Fathers on this point. It is a manifest fall from the faith, and a manifest incurrence of the charge of arrogancy, either to make light of anything that is in Scripture, or to introduce in addition any tiling that is not."

But if the voice of the Church is to be our guide, of what Church? the Church of Borne? the Greek Church? the Anglican Church? All these are claimed by the Ritualists to be branches of the Church Catholic, but how they have differed! Can any one at this moment say what is the united voice even of the Anglican Church in matted involved in this question of Ritualism. The only guide we have is our Prayer Book. The Church in England is in fetters to the State, and I hope and believe that ere I many years these fetters will be struck off. In New Zealand we have no such fetters, and here our bishops have pronounced (in the Carlyon case) and have pronounced against the main practices and doctrines of the Ritualists. But practically the voice of the Church means to the uninstructed, that is to the large majority of the people, the voice of the individual priest, and I do not hositate to say that doctrines and practices have been introduced and enforced by individual priests which no General Assembly of the Anglican Church would endorse or confirm. And if the idea of the Catholic Church is to be narrowed down to the theory of Apostolical succession,

NOTE.—I do not mean to suggest any doubt of the fact of Apostolical succession, but only of some of the extreme inferences drawn from that doctrine. Our Church has never formally pronounced on the orders of other Christian bodies; the Ritualists do.

what about the vast body of Non-Conformists? Have they none of the Spirit of Christ? Are they ontside the pale, and left to the uncovenanted mercies of God? That is, I believe the theory of those who accept the doctrines of the Ritualistic school, and such a conclusion alone would make me doubt whether there is not something wrong in the theory, for I cannot but think that there are at least as many spiritualty minded men outside the pale of the Catholic Church, as defined by the High Church party, as are within it. Christ himself owns them if we do not. If Ritualism becomes the rule of our Church, these Christians will never be brought within that Church, and the fight which they possess will never shine within the Church of England, but the breach will become wider. I do deplore the divisions of Christendom, and I do desire to see the approach of all good men to one communion, but the basis of that communion can never be tradition, it can only be the truth ascertained in the Holy Scriptures and the minimising of essentials in matters of faith, since in many points there must be differences.

Ritualism has all the characteristics of a sect. It seizes hold of particular points, partly in the Scriptures and partly not, and magnifies them out of all proportion to the great body of Christian truth. Instead of "Come unto Me" it is "Come unto the Priest," instead of "Believe and live" it is "Take the Blessed Sacrament and live." Instead of "Being justified by faith we have peace with God." it is "We are within the pale of the Holy Catholic Church and are safe."

I now come to the second point, which is—

2. The doctrine of the real presence and of sacrifice in the Holy Communion. And here I tread with awe and reverence. Whatever view we take of that holy rite, we cannot deny that it is a very sacred and solemn one, instituted by our blessed Lord Himself, and reminding us most touchingly of His one great sacrifice for our sins and for the sin of the world. Sad indeed is it that this observance, which should bring us into closer communion with Christ and with one another, should be the ground of strife and controversy, of bitterness and dissension. But I have often been struck with a remark of that great breather, Bishop Jeremy Taylor, who, in the midst of an impassioned argument, calmly pauses and says, "*Let us hear the truth; the truth can do us no hurt."* I shall give you what I believe to be the truth, and mainly from the lips of others. And I take first the "judicious" Hooker, who has been described as one of the greatest lights of the English Church, who wrote in the reign of Queen, Elizabeth, in the midst of the great controversy with Rome, and whoso great work on Ecclesiastical Polity is placed in the hands of all candidates for Holy Orders and a copy of which was presented to me by our Bishop.

He writes, be it remembered, also from the point of view of a moderate and thoughtful High Churchman and he was a man of profound learning. What does Hooker say? These are his words:—

"The real presence of Christ's most blessed body and blood is not, therefore, to be sought for in the sacrament, but in the worthy receiver of the sacrament.

"And with this the very order of our Saviour's words agreeth, first 'take and eat,' then 'this is my body which is broken for you;' first drink ye all of this,' then followeth 'this is my blood of the New Testament which is shod for many for the remission of sins." I see not which way it should be gathered by the words of Christ when and where the bread is His body and the cup His blood, but only in the very heart and soul of him the receiveth them. As for the sacraments, they really exhibit, but for aught we can gather out of that which is written of them, they are not really, nor do really contain in themselves, that grace which with them or by them it pleases God to bestow."

And in a passage, which I specially commend to those who can appreciate accuracy of definition, he thus defines the three doctrines with regard to the Real Presence, and frames his celebrated Eirenicon, "Whereas, therefore there are but three expositions made of 'this is my body,' the first ' this is in itself before participation *really and truly the natural substance of my body by reason of the existence which my omnipotent body hath with the sanctified element of bread.'* which is the Lutherans' interpretation [consubstantiation] the second, 'this is itself and before participation *the very true and natural substance of My baby by force of that Dsity which with the words of consecration abolisheth the substance of bread and substituteth in the plea thereof My body,'* which is the Popish constructs [transubstantiation] the last, '*this hallowed food, through concurrence of the Divine power, is, in verity and truth, unto faithful receivers, instrumentally a cause of that exceptional participation whereby, as I make myself wholly theirs, so I give them in hand an actual possession of all such saving grace as My sacrificed body can yield, and as their souls do presently need, and this is to them and in them My body*. Of these three rehearsed interpretations the last hath in it nothing but what the rest do all affirm and acknowledge to be most true, nothing but that which the Words of Christ are on all sides confessed to enforce nothing but what the Church of God hath always thought necessary, nothing but that which alone is sufficient for any Christian man to believe concerning the use and force of this sacrament; finally, nothing but that wherewith the writings of all antiquity are consonant and all Christian confessions agreeth."

NOTE.—Hooker further very pertinently says If on all sides it is confessed that the Grace of Baptism is poured into the soul of man, that by water we receive it, although it is neither seated in the water nor the water changed into it what should induce men to think that the Grace of the Eucharist must needs be in the Rucharist before it can be in any that receive it."

But what say the Ritualists?

The Rev. Vernon Hutton, in a pamphlet called "Reasons for being a High Churchman" (which some admirers published by advertisement in the Otago Daily Times'), says Our Lord's words, "this is my body, this if my blood," are to be taken *literally*—a doctrine which, by the way, was directly condemned in the Carlyon judgment by all our Bishops. But why literally? When Our Lord says, "I am the door," "I am the true vine," is He to be taken literally? Or when He says, "If thy right hand offend thee cut it off, or if thy right eye offend thee pluck it out," is He to be taken literally? But if taken literally in one part of this passage, surely He must be taken literally in the other part. When these words were spoken, Our Lord's body was not then broken, His blood was not then shed; and yet he says, "which *is* broken for you, which *is* shed for you." If the is in this case be taken literally, we make Our Lord say what was not then true. How by any possibility, while He was sitting with them, could the Apostles have understood the words literally? And yet He spoke to *them* primarily, and only to us through them.

But I quote another Ritualistic authority. "The Congregation in Church," a manual published at Home and recently introduced into this parish, which gives directions for rites, ceremonies, &c., connected with "Catholic worship" ("Roman" Catholic, it might have said). Speaking of the Communion Service after the consecration of the elements, it says:—"As you leave your seat to go up, remember that the Blessed Sacraments is now Present. Make, therefore, a genuflexion or bending of the knee till it touches the ground."

Here there is a distinct intimation of a "Presence" in the Sacrament itself, to which external homage is to be paid. But Mr. Bennett, who figured so largely before the Ecclesiastical Courts and the Privy Council in Shep hard v. Bennett is still bolder:—Mr. Bennett: "Who myself adore, and teach the people to adore, the consecrated elements, believing Christ to be in them—believing that under their veil is the sacred body and blood of my Lord and Saviour Jesus Christ."

Sir R. Phillimore, remarking on this passage, said:—"It seems to me that the first of these sentences dose contravene the mind of the Church as expressed in the declaration about kneeling, which is at the close of the order of Administration of the Lord's Supper, and though as will be seen, these words are not without some counts-nance from considerable authority, they are in my judgment to be reprehended." And to quote from another part of the same judgment—"Mr. Bennett speaks of the visible presence of Our Lord on the Altar of our

Churches' Sir R. Phillimore: "I have read these words with much surprise and sorrow. I have no hesitation in pronouncing that the expression is in its plain meaning, at variance with the language of the service of the Holy Communion of the 28th Article, and of the Catechism."

I will only further quote, to show the lengths to which the Ritualists go, from a leaflet for the use of teachers,

NOTE.—Published by the Church Extension Society.

which I found only the other day in our Sunday School:—

The Holy Eucharist,

- Q. What commandment did He then give the Apostles?
- A. He told them to "Do this" in remembrance of Him.
- Q. What took place when they spoke the same words?
- A. The bread and wine *became* Christ's true Body and Blood.
- Q. Did Our Lord give this authority to anyone else?
- A. Yes; to all Bishops and Priests who came after the Apostles.
- Q. When do the bread and wine *become* Christ's Body and Blood?
- A. When the words of consecration are said by the Priest at the altar.
- Q. What are the words of consecration?
- A. The same words which Christ used: "This is My Body," "This is My Blood."

Should not our young people be protected from teachings like this? Is there any distinction between "becoming" and "being changed into"? I have referred this assertion to several clergymen, and they all agree that this is Transubstantiation.

Now, in contrast to all this, take the words of our Article XXVIII. and the Rubric on Kneeling. Article XXVIII says:—"Transubstantiation, or the change of the substance of bread and wine in the Supper of the Lord, cannot be proved by Holy Writ; but it is repugnant to the plain words of Scripture, overthroweth the nature of a Sacrament, and hath given occasion to many superstitions. The Body of Christ is given, taken, and eaten in the Supper after an heavenly and spiritual manner. And the means whereby the Body of Christ is received and eaten in the Supper is Faith."

And the following words from the Rubric on Kneeling in the Communion Service are very important:—"It is hereby declared, That thereby no adoration is intended, or ought to be done, either unto the Sacramental Bread and Wine there bodily received, or unto any Corporal Presence of Christ's natural Flesh and Blood. For the Sacramental Bread and Wine remain still in their very natural substances, and therefore may not be adored (for that were Idolatry, to be abhorred of all faithful Christians); and the natural Body and Blood of our Saviour Christ are in Heaven, and not here; it being against the truth of Christ's natural Body to be at one time in more places than one."

But the whole evidence as to the true doctrine of the Church of England was reviewed in a vast number of quotations by Sir R. Phillimore in a judgment very favourable in the main to the Ritualists in Shephard v. Bennett. And what does he say?—

Sir R. Phillimore: "I say that the objective, actual, and real presence, or the *spiritual* real presence, a presence external to the act of the communicant, appears to me to be the doctrine which the formularies of the Church, duly considered and construed so as to be harmonious, intended to maintain. But I do not lay down this position as of law, nor do I say what is called the receptionist doctrine is inadmissible."

This judgment was reviewed and revised by the Privy Council, and this was their verdict:—"Any other presence than this, any presence which is not a presence to the soul of the faithful receiver, the Church does not by her articles and formularies affirm or require her members to accept." But they added, with a reference to Sir R. Phillimore's judgment, that the view of a real actual and objective presence after a heavenly and spiritual manner was not excluded.

Thus at most any real presence must be of a purely heavenly and spiritual, and therefore not of a corporal and actual character, in the elements themselves, and this remains the law of the Church in England at the present moment.

I will say in passing that Watorland, a great Eucharistic authority in our Church, has clearly shown from the Fathers and otherwise that the words of Our Lord in John vi., so often quoted and relied on by the Ritualists, have no proper Eucharistic signification at all.

Quoting Archbishop Cranmer and Peter Martyr, Waterland says:—"From what has been observed of these two eminent Reformers, we may judge how John vi was understood at that time; not of doctrines, nor of sacramental feeding, but of spiritual feeding at large, feeding upon the death and passion of Christ Our Lord.

This, I think, has been the prevailing construction of our own divines all along; and though it has been much obscured of late (for half a century, perhaps, or more) by one or other hypothesis, yet has it never been lost, neither, I suppose, ever will be."

NOTE.—Among many quotations from the Fathers by Water-land in support of his view, I nee I only give the following from St, Athanasius, who lived in the 4th century:—"He occasionally gives us his thoughts on John vi., 61, 62, 63, in these words: 'Here He has made mention of both as meeting in himself, both flesh and spirit, and He has distinguished the spirit from the flesh tint they, believing not only the visible part of Him bat the invisible also, might learn that His discourse was not carnal but spiritual. For how many men must the body have sufficed for food if it were to have fed the world? But for that very reason He intimated beforehand the Son of Man's Ascension into Heaven, to draw them off from corporeal imaginations and to teach them that the flesh He was speaking of was to be heavenly meat from above and spiritual food which he would give them. "For," says he. "the words which I have spoken they are spirit and life." As much as to say. "That which outwardly appears and is to be given for the salvation of the world is this flesh which I have about me; but this, with the blood thereof, shall be by Me spiritually given for food, spiritually dispensed to every one for a preservation unto all men, to secure to them a resurrection to life eternal." It will be seen that there is no sacramental teaching here.

But practically the doctrine of the extreme Ritualists is transubstantiation—a doctrine first formulated in the year 900, and formally adopted by Rome 300 years later

The modern Roman doctrine was not put forward till the middle of the ninth century. Paschasius Radbert, a monk, put forward a treatise, which attained a reputation. In this treatise the rhetorical phrases of the Fathers were turned into hard material definitions, and the doctrine of transubstantiation broadly expressed. This was at once disputed, and the best and completest answer was by Ratramnus. The controversy went on for 200 years, but at I length in 1216, the doctrine was formally defined in the Lateran Council, and put forth as part of the authorative teaching of the Soman Church that Christ's body and blood are really contained under the species of bread and wine, the bread being transubstantiated into His body, and the wine into His blood. The Council of Trent in 1551 confirmed in somewhat stronger language that there is a conversion of the whole substance of the bread and wine into the substance of Christ's body and blood.—*Turning Points of General Church History*, by Rev. E. L. Cutts, B.A.

— which does not mean, as many suppose, to the intelligent Romanist, a carnal and actual change of the elements it true and natural flesh and blood. I cannot do better or this point than quote a sermon of Dean Goulburn, whose "Thoughts on Personal Religion" is one of the most beautiful expositions of true Christianity I have ever read and he, too, is by no means a Low Churchman. He says:—"Putting aside all the subleties which the wit of theologians have woven like so many cobwebs round this dogma, and the hard terms, such as 'substance' and 'accidents,' in which they have attempted to explain and vindicate it, I take the idea which the tenet conveys to a plain, simple-minded Romanist to be exactly this: that usually, and even under the circumstances of ordinary worship, our Blessed Lord is really in heaven, observing us no doubt, and listening to our prayers, but still at a vast distance from us, but that on the utterance of the priest of the words of Consecration, He is drawn down into the church, and is concealed under the consecrated elements; so that the state of things is really just the same as when He visited the Apostles from time to time after the Resurrection and ate and drank with them, and showed them the wounds in His hands and side. . . . But how emphatically corrected and reproved by Scripture is the sentiment which I have described. Nothing can be clearer on the surface of the narrative than that the spiritual state of the Apostles after Pentecost was far higher, far more blessed, yea, one of far more intimate communion with the Lord than it had been previously . . . But, alas! the natural and corrupt heart of man is not really satisfied with that spiritual presence of Christ which has superseded His bodily and visible presence. We like walking by sight much better than walking by faith and liking this, naturally we imagine to ourselves a local presence of Christ upon earth in one particular spot and under a particular form of matter, even when such as imagination involves the greatest absurdities." Contrast this with the "Congregation in Church," which says, "Re- member the Blessed Sacrament is now Present, make a genuflexion," &c.

NOTE.—Farrar says ("Life of Christ"):—"The "transubstantiation' and ' sacramental' controversies, which have raged for centuries round the Feast of Communion and Christian love, are as heart-saddening as they are strange and needless. They would never have arisen if it had been sufficiently observed that it was a characteristic of Christ's teaching to adopt the language of picture and of emotion. But to turn metaphor into fact, poetry into prose, rhetoric into logic, parable into systematic theology, is at once fatal and absurd. It was to warn us against such error that Jesus said so emphatically—' It is the spirit that quickeueth; the flesh profitcth nothing: the words that I speak unto you, they are spirit and: they are lite.'" (John vi. 63.)

I can only briefly allude to the idea that the Holy Communion is "a sacrifice offered by a priest on an altar," to use the words of the "Congregation in Church" before quoted. Hutton says: "We think ourselves quite

justified in believing that the Holy Communion is the sacrifice of the New Law . . . and if it is a sacrifice, those who offer it must be priests." I could bring numerous authorities to show that this is contrary to the teaching of our Church. Hooker and Waterland are the best authorities on the point, and a reference to our Prayer-book shows that there is no altar in our churches but a table—the Lord's Table. The only sense in which the term "Sacrifice" is permissible, is in that of a Sacrifice of Commemoration offered by the whole people, or by the priest in the name of the whole people, just as they offer sacrifices of praise and thanksgiving. This is what the judgment of the Privy Council says on the subject:—"Our Church does not teach that the communion table is an altar of sacrifice. She has deliberately ceased to do so .—*Vide* K. Edw. VI., 1st Prayer-book." And a stone altar erected in a metropolitan church was ordered to be removed.

I have also the late Bishop of Manchester on this point:—"Bishop of Manchester's address to Diocesan Synod: 'He must emphatically proclaim his own conviction that the symbolism of Eucharistic vestments and the symbolism of the Eastward position, as they were now told they must understand them, were symbolisms of a doctrine that was not the doctrine of the Church of England, and which could not be proved from Holy Scripture: he meant the doctrine that ministers in the Holy Sacrament were discharging the functions of a proper priesthood, and that what they offered to God was a proper and propitiatory sacrifice.'"

As to all the surroundings of ceremony which illustrate these doctrines, Incense, Elevation of the Cup, Eucharistic Vestments, the Biretta, &c., though in some cases there has been conflict, the Privy Council has finally decided against their legality. It is, therefore, clear that the highest authority in the realm, which the Ritualists set at naught, contrary, as I think, to their ordination vow, which binds them to the doctrines and sacraments "as received by this Church and Realm," has condemned as foreign to our formularies most of the ceremonies which they are persistently foisting on us.

NOTE.—The decisions of greatest importance are those is Martin v. MacKonochie, Liddell v. Westerton, Shephard v. Benutt, Elphinstone v. Purchas, and Clifton v. Ridsdaie. It is to be regretted that litigation has evoked much bitterness of feeling at Home, and the result as a whole has been harmful; but while it is desirable that these subjects should be dealt with by the Church herself without appealing to Civil Courts, I cannot but think that great weight must be attached to the interpretation given to our formularies by the highest legal authorities of our day. With respect to the Biretta, Beresford Hope, while defending the Ritualists, with whom he sympathises strongly, says of this "ornament":—"This is a Romish Cap which gives a peculiarly alien character to the service very disturbing to my own mind, and I cannot but think that there is some irreverence in the covering of the head of the minster while performing Divine service."

There has been a long controversy about the ornaments Rubric in our prayer-book, which seems at first sight to admit certain vestments used in the second year of Edward the VI, The point turns on subsequent actios suppressing Eucharistic vestments in the reign of Elizabeth, and on the meaning of the word "retained." The judgment of Phillimore was in favour of the Ritualistic view, but this was reversed by the Privy Council after careful renew, on the ground mainly that what had been Disused for 60 years in the Church, when our present Prayer-book was printed in 1622, could not be then spoken of as "retained;" and this argument is strengthened by the further disuse for 250 years since. The wording of the Rubric is unfortunate, but the disingenousness of the Ritualists who want to put a literal interpretation upon it when it suits them is shown by the fact that though processional crosses are undoubtedly excluded by it, they introduce them, though not in use in the second year of Edw. VI. The controversy is comparatively unimportant here, but I think our bishops ought to decide what is and what is not permissible.

It is undeniable that a distinct doctrinal significance is given to the practices I have referred to, and that in adopting the Manual Acts of the Romish Rubric, turning the Lord's Table into an altar of sacrifice, and teaching that the elements are changed into the very Body and Blood of our Lord, they have endeavoured to undo what was done at the Reformation, and to conform almost exactly to the Romish practices then protested against. I admit that the English Church is far older than the Reformation, and that the word "Protestant" can only have a local and temporary meaning

NOTE.—Dr. Wordsworth, in "Theophilus Anglicanus," before quoted, says on this question:—

Q. You speak of the Church of England as existing before popery, and as holding the ancient faith; but is she not called a Protestant Church, and is it then consistent to say that she is older than Popery when Protestantism is a renunciation of Popery? and how then can she be united by doctrine with the Catholic Church?

A. The Church of England as a church is as old as Christianity. Her Protestantism is indeed comparatively recent, and this for a good reason, because the Romish errors and corruptions against which she protests are recent; but the fact is that as the Universal Church for the maintenance of her Catholicity was protesting at the first four General Councils, as she protested at Nicœa against the heresy of Arius, and at Constantinople against Macedonius; as she protend at Ephesus against Nestorius, and at Chalceden against Eutyches, so the Church of England became Protestant at the Reformation in order that she might be more truly and purely

catholic; and as far as Papal errors are concerned, if Rome will become truly Catholic, then but not till then, the Church of England will cease to be Protestant.
; but I do hold that what was then done was in the main rightly done: the supremacy of Holy Scripture was asserted, and much that was contrary thereto was given up, though some things were retained by way of compromise that might wisely have been given up.

3. And now I come to the doctrine of the Priesthood, which is so closely bound up with all the teaching and ceremonial of the Ritualistic party. Now "priest is but presbyter short writ." The Ritualist writers say it does not matter what name is used if the thing signified is to be found in Scripture; but I shall endeavour to show that the name is of considerable importance. The idea of sacrifice is almost always associated with the term Priest. The Greek word so interpreted in the New Testament is "hiereus," from whence comes hierarchy. I got a friend who is a Greek scholar to go carefully over the passages in the Epistles where this term is used, and I find it is invariably applied to a priest under the old dispensation. "Our great High Priest," a "priest for ever after the order of Melchisedec," "and every priest standeth daily ministering," &c.—Heb. 10-11; but never once is an officer of the Christian Church called "hiereus"—episcopos, diakanos presbuteros, but not "hiereus." Now can it be conceived that if those officers who administered the Holy Communion in Apostolic times were regarded as offering a sacrifice, the proper term for a sacrificing priest would not have been applied to them.

But although the term *hiereus* is never used to indicate a Christian minister, the whole body of the people are so described, they are kings and priests (hiereis)—Rev. 1-6; and St. Peter speaks of them as a royal priesthood, *hieratuma*—I Pet. 2.9.

To my mind this is a powerful argument against all sacerdotal pretensions. Our Minister corresponds to Presbyter—*i.e* Elder. "Seeing then," says Hooker, "that sacrifice is now no part of the Christian Ministry, how should the name of priesthood be thereunto rightly applied and he replies only by analogy, "in regard of that which the Gospel hath proportionable to ancient sacrifices—viz., the Communion of the blessed Body and Blood of Christ—although it hath properly now no sacrifice." I think, however, it is not unimportant that in this case the name has been changed, because under it is brought in a great deal that in Scripture is plainly excluded from the idea of the Christian Ministry, and the danger from priestcraft is not either imaginary or small. Not content with the two sacraments which according to them derive their efficacy from the act of a priest, they bring in the other five more, which our Articles plainly reject.

"Marriage," says the "Congregation in Church," is one of the seven sacraments, and has been so from the Apostolic times," and the other four are Holy Orders, Confirmation, Penance, and Extreme Unction. Astounding that the men who fight so for a literal interpretation of the ornaments Rubric should so boldly contradict Article XXV and the Catechism. But all this is to give further power and importance to the priest. The Confessional is brought in with all its dangers. The tremendous power of priestly absolution is exercised and insisted on—a passage in the Visitation of the Sick giving, unfortunately, a slight colour to these pretensions, the form "I absolve thee" being there used, though in the ordinary service of the Church the form is "He pardoneth and absolveth." And here I think it very necessary to give some important words of Dean Goulburn's upon this point of absolution from a very valuable work of his on the Holy Communion.

"Goulburn on the Communion (p. 200):—'As to the form "I absolve thee" in the Rules for the Visitation of the Sick (a late introduction, by the way, dating from the twelfth or thirteenth century, whereas all the primitive absolutions run in the modest style of prayers), it cannot possibly impart more than a strong declaration, "I declare thee absolved," and thus falls under the former head—*i.e.*, residing in the Ministry of the Church.'"

NOTE.—If it be inquired when the use of the indicative form of absolution first began to be used in the Church—that is, the form "I absolve thee," instead of the deprecatory form "Christ absolve thee "—Morinus has fully proved that there was no use of it till the twelfth or thirteenth century,—not long before the time of Thomas Aquinas, who was one of the first that wrote in defence of it; and our learned Bishop Usher has clearly proved the novelty of it from Aquinas himself.—Goulburn. [Apply S. Basil's test *re* "Novel."]

He further points out that if our Prayer-book has anything in it contrary to Scripture, it is not to be received (see Articles); and says: "Christ Himself, though of course He might have done so, never said i absolve thee,' but 'thy sins be forgiven thee' "

I will now give what Canon Mason, a High Churchman, but of the Anglican typo, says of the Christian Ministry; and I may state that I submitted it to another High Church clergyman in Dunedin, who admitted its accuracy. It will be seen that it at once disposes of the pretensions of the Romanising Ritualists, and it is altogether a frank and candid statement of the case, which I did not expect from such a quarter.

He says:—"Here comes in the doctrine of the Christian Ministry. We must plainly recognise at the outset that it is the whole body of the Church which is Apostolic, and not only a particular order within it. No proof is forthcoming that the commission given by Christ on the eve of His resurrection was addressed to the eleven to the exclusion of them that were with them (Luke xxiv., 33), or that the Holy Ghost on the day of Pentecost fell only on the twelve, to be by them dispensed to the rest. The entire society received the mission, the entire

society received at once the inspiration by which it was qualified to perform it. . . . Within the Apostolic Church *all are priests*. There is no sacerdotal caste performing religious offices for a secular laity. The contrast between clergy and laity is that between a higher and lower degree of the priesthood. . . . If wilfully severed from the faithful laity, the clergy would have no right to act in the name of Christ. Their priestly ministries are those of the whole body, performed through them as its natural organs."

Though he uses the term priesthood, he manifestly Attaches to it a very different meaning from that applied to it by the Sacerdotalists, and puts the whole ministry on an intelligible basis, "Ourselves your servants for Christ's sake." Not lords over God's heritage, nor as doorkeepers holding the keys of the Kingdom of Heaven.

And it is a remarkable fact that the Church has recognised the validity of lay baptism in circumstances of emergency, and if one sacrament is valid without a priest, why not another? Of course there must be order in the Church. God forbid that everyone should be assuming the right to minister in Holy things without being called, and qualified, and set apart for the work. But order is one thing and Divine authority is another. The minister is the mouthpiece of the Church, but has no separate and individual power or authority. Even the objectionable passage in the Visitation to the Sick is qualified by the context.

"Our Lord Jesus Christ who hath left power to His Church to absolve all sinners who truly repent and believe in Him of His great mercy forgive thee thine offences. And by His authority committed to me "I absolve thee from all thy sins," &c. But

Man, proud man, dressed in a little brief authority,
Plays such fantastic tricks before high Heaven
As make the angels weep.

That one man should dare to stand between his fellow man and his God, that he should even enter the family and tell a wife that she must obey her priest in spiritual things and not her husband, and should tell a son that he is to obey his priest and not his father—and such things have been done—seems to me the arrogant assumption of 4 terribly misguided mind. And the worst of it is that so much is done in secret.

Perhaps thou wert a priest, if so my struggles
Are vain, for priestcraft never owns its juggles.

The men who lend themselves to such a system I pity, the system itself I utterly abhor.

And now, having, I fear, exhausted your patience, I come finally to the Rights of the People. I have shown that the faithful people are an integral part of the Apostolic Church, and that the priest has no mission without them. What then are their rights.

1. They have clearly a right to be heard. When they feel their minister is wrong they must plainly tell him so Not with bitterness and harshness, but in all Christian charity. We have even high Apostolic example for religious controversy, for when St. Peter dissembled in a question of Ritualism of that day, viz. of Judaic observances, St. Paul says, "I withstood him to the face because he was to be blamed."

2. They have a right to appeal to the Prayer-book which is a charter of their liberties as members of the Church of England. And although it needs revision, it is even in its present state a valuable safeguard against Romanising teaching.

3. They have a right to appeal to Holy Scripture, even against the Prayer-book. Not, indeed, to any private interpretation, but to its meaning as ascertained after all the lights of learned and devout expositors in all ages have been brought to bear upon it, not by way of authority, but by way of evidence, which it is the duty of every true student of Scripture to weigh. Those guided are safest, therefore, who have studied the Scriptures most closely.

4. They have a right still to protest against the re-introduction of practices which were given up at the Reformation 300 years ago for strong and valid reason.

5. They have a right to appeal to their Bishop, and if need be, to the whole bench of Bishops within the Ecclesiastical province.

6. And finally, they have a right to use every possible means of making the truth known and confuting dangerous error.

It is with these views I stand here to-night, and am prepared to use all my humble powers in lighting for the truth. I have no personal quarrel with any man. I admit that men with whom I have serious differences are conscientious, if misguided. I admit that the Ritualistic party have laboured hard, according to their lights, for the souls of men, and that no sincere work for God is without some good results; even though the wood, hay,

and stubble will not stand the final tests, some precious stones may remain, built on the one foundation. Many of these men are noble and saintly men, but their work will at last be tried in the fire, and I think in some important points will be found wanting. Frequent services, frequent communions may have some good results. God is very merciful and gracious to all who approach Him, but it may be that in many cases mere externalism, without the root of the matter, is all the result of much apparent spiritual activity. God, and not man, is the Judge. But error will never do the work of truth. Even under the Jewish dispensation inward purity was set before outward observances. What saith Isaiah: "Bring no more vain Ablations, incense is an abomination to me; the new moons and Sabbaths, the calling of assemblies, I cannot away with, it is iniquity; even the solemn meeting. Your new moons and your appointed feasts my soul hateth; they are a trouble unto me; I am weary to bear them. And when ye spread forth your hands I will hide mine eyes from you; yea, even when ye make many prayers I will not hear."

And why? Because inward purity was wanting. All these things may be without a true and living faith, and without inward purity of heart. Matthew Arnold, though often wrong, is right when he says the true method of Jesus is "inwardness." You may have it with, but you may also have it without, all these tilings; but the final test is that of a faith which lives and works.

He (Matthew Arnold) speaks of our Lord's words, "This Cup is the now covenant in My blood which is shod for you," as clearly alluding to those words of the prophet Jeremiah: "I will make a new covenant with the house of Israel. . . . I will put My law in their inward parts, and write it in their hearts." And says, "No more doctors, no more scribes, no more priests; the crowning act in the secret of Jesus seals at the same time His method, His method of pure inwardness, individual responsibility, personal religion." (Literature and Dogma.)

I give one more quotation before I close, this time from Charles Kingsley, from a sermon preached at Bide-ford in 1854, early in the history of the Ritualistic movement, which has since attained such large proportions at Home, but is happily as yet in its infancy here. I could hardly have a more apt authority on the rights of the people:—

"There are practices against which congregations have a right to protest, not only as Christians, but as free Englishmen. Congregations have a right to protest against any minister who introduces obsolete ceremonies which empty his church, and drive away his people. Those ceremonies may be quite harmless in themselves, as I really believe many of them are: many of them may be beautiful and, if properly understood, useful, as I think they are; but a thing may be good in itself, and yet become bad by being used at a wrong time and in a way which produces harm. And it is shocking, to say the least, to see churches emptied and parishes thrown into war for the sake of such matters. The lightest word which can be used for such conduct is pedantry; but I fear at times lest the Lord in Heaven should be using a far more awful word, and when He sees weak brethren driven from the fold of the Church by the self-will and obstinacy of the very men who profess to desire to bring all into the Church, as the only place where salvation is to be found—I fear, I say, when I see such deeds, lest the Lord should repeat against them His own awful words: 'If any man scandalise one of these little ones who believeth on Me, it were better for him that a millstone were hanged round his neck, and he were drowned in the depths of the sea.' "What sadder mistake? Those who have sworn to seek out Christ's lambs scattered up and down this wicked world, shall they be the very ones to frighten those lambs out of the fold, instead of alluring-them into it? Shall the shepherd play the part, not even of the hireling who floes and leaves the sheep to themselves, but of the very wolf that scatters the flock? God forbid? The Church, like the Sabbath, was made for man my friends, not man for the Church: and the Son of Man, as he is Lord of the Sabbath, is Lord of the Church, and will have mercy in its dealings, rather than sacrifice. The minister, my friend, was made for the people, and not the people for the minister. What else does the very word 'minister' mean? Not a lord who has dominion, but a servant, a servant to all, who must give up again and again his private notions of what he thinks best in itself, for the sake of what will be best for his flock."

To sum up, my argument is that the Ritualists are faithful to the formularies of our Church—(1) in placing the Church before the Scriptures, and introducing doctrines and practices which are not derived directly from the Scriptures, but from tradition, and often from late tradition, thus bridging over the main difference between the Anglican and the Romish Church. (2) In giving such an interpretation to our Lord's words in the institution of the Holy Communion as practically amounts to Trans instantiation, with its necessary concomitant of superstitious reverence to the consecrated elements themselves, turning a sacrifice of commemoration offered by the whole people into a "sacrifice offered by a priest upon an altar"—*i.e.*, a proper or propitiatory sacrifice; and (3) in giving to the Christian ministry the character of a Divinely appointed priesthood with a separate and individual power; of Absolution, and thus practically making the people depend upon the priest in all spiritual things, and by means of the Confessional establishing once again a tyranny over men's consciences.

And now my task is all but accomplished. I hare endeavoured to show you what Ritualism is, where it leads, and how far it differs from the standards of on Church, and to point out your duty in regard to it. I am not conscious of having said anything but the truth, but I entreat you to enquire, to search, and to judge for

your-selves. Read your Prayer-books, and, above all, read your Bibles. It is not a matter of small moment, but one involving great issues, and remembering how great a work was done for us at the Deformation in freeing us from a yoke of superstition and priestcraft, remembering that this great movement was the parent of our civil and religious liberties. I may venture to use the words addressed by St. Paul to the Gralatians, "Stand fast, therefore, in the liberty wherewith Christ hath made us free, and be not again entangled with the yoke of bondage."

Do not let sentiment prevail over your judgment, and regard for persons prevent you from opposing false teaching. The introduction of error is often insidious and stealthy; good men have often boon themselves misled, and have misled others. It is painful to differ from those you have learned to esteem, but let us have truth before all things. I would like you to leave this hall with these words of St. Paul ringing in your ears, "What so ever things are true . . . . think on those things."

While this Lecture has been passing through the press, I have received a letter from a gentlemen in New South Wales, unknown to me, who expresses strong sympathy for my anti-ritualistic views, of which it seems he has heard. The Evangelical party in New South Wales are, he informs me, fighting the same battle with some success. I am glad to receive sympathy from any quarter, and though not an Evangelical, I certainly do not desire to see Evangelicals "purged out" of the Church, my correspondent sends me a good deal of literature bearing on the subject, and among the rest a pamphlet by Lord Ebury, President of the Society for the Revision of the Prayer-Book, and a revised copy of the Prayer-Book on Evangelical lines. In Lord Ebury's pamphlet is a photograph of the Bishop of Lincoln and his acolytes after celebrating the Holy Communion "pontifically," and the effect is startling. I refer to this correspondence mainly to show the wide interest which is felt in the matter in these Colonies. It may not be out of place to republish the following letter which my correspondent sends me, without offering any opinion on its contents:—

REVISION OF THE BOOK OF COMMMON PRAYER.—*To the Editor of the Herald:* Sir,—At the recent Sydney synod of the Church of England one half of the members present publicly recorded their votes in favour of a Revision of the Book of Common Prayer. It has, therefore, become evident that a revision is very much nearer than many persons have hitherto supposed. It consequently becomes a matter of primary importance that we should know in what sense the word "revision" is being used; and, with your permission, I will endeavour to show. By examining the names of those who voted for a revision, I find that they were all leading representatives of the Evangelical section of the Church of England. It therefore follows that what they mean by the word "revision" must be, substantially, as under—1, a reverential revision of the Book of Common Prayer on a thoroughly Protestant and anti-Ritualistic basis; 2, a removal from the Prayer Book of the word "Priest," and of everything that the word "Priest" implies, or is assumed to imply; and 8, the removal from the Prayer-Book of everything that implies, or that can be assumed to imply, that the minister obtains by the rite of ordination the power to forgive sins; or, in fact, any spiritual power whatever differing in kind or degree from what may be possessed by the humblest member of his congregation. If this is the true scope and intention of the word "revision" in the present controversy, as I fully believe it is, then it does seem to me that the leaders of the movement ought to say so distinctly and publicly; the respective parishes would then be enabled to make the necessary arrangements for sending to the future Synod synodmen property representative of the views of the respective parishes, either for or against such a mode of revision.—I am, &c., HUGH LATIMER.

decorative feature

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Front Cover

The Wealth and Annual Production of New Zealand.

By Main Waring Brown, M.A.,
Professor of Political Economy in the University of Otago.

decorative feature JAMES HORSBURGH, PUBLISHER Dunedin 73, George Street. MDCCCLXXXVIII

This Paper was originally read before the Otago Institute, and was afterwards criticised at a special meeting. All the points that were raised at this meeting, and by various critics both in the press and privately, have been carefully considered, and some alterations have been made, especially in the table of Pastoral Produce. The total results, Low ever, are practically unaltered.

Comparisons are instituted wherever possible, since it is only by comparison that we can judge of our position. The bulk of these comparison are made with Victoria, both because it is one of our nearest and most prosperous neighbours, and because Mr. Hayter's admirable statistics afford exceptional facilities for the process.

I have to express my thanks for assistance rendered me by the Registrar-General, Mr. Sperrey, and Mr. Hickson.

The Wealth and Annual Production of New Zealand.

Methods of Ascertaining the Wealth of the Colony.

The wealth of countries may be divided into the two classes of public and private. The amount of public wealth can usually be discovered by simply examining official returns; but with private wealth the case is more difficult, and various tests have been applied by statisticans with the object of arriving at an approximation to it. Perhaps the most satisfactory of these tests is to take the amount of property left at death, and to divide it by the number of persons who die, the result being the average-e wealth per head; since, as Mr. Hayter says, "it may be supposed that the average amount left by each person dying is equivalent to the average amount possessed by each person living." But in this colony we have the exceptional advantage that we can check our result by the returns made to the Property Tax department. There is, however, one great drawback to the usefulness of these returns—viz., that they are made by taxpayers under the strongest sense that they form the basis of taxation, and that consequently it is most improvident not to put down every item at its lowest value, or not to leave it out altogether if there is any excuse for doing so. I lay some stress upon this because there is an idea abroad that properties are often returned at too high a value. If this is done in particular cases it is certainly not of sufficiently frequent occurrence to bring the total value up to anything like its real amount. The probate returns no doubt give a fairer view of the case, though they understate the real wealth, because no account is taken of sums under £100. It may be as well to mention that estates left entirely to the widow are not included; but this does not affect the result, since the property is counted on the death d the widow. I therefore take the probate returns a the basis of my calculation of the national wealth, and regard the property tax return as chiefly valuable because it gives us an idea of the items.

Wealth according to the Property Tax Returns.

The return from which I have taken the figures is the first table was made by the Property Tax department last year, and it is to be found in the appendix to the journals of the House of Representatived marked B—6. The bulk of the items explain them selves without any comment, but those which compose the "Private Debts" are arrived at in a necessarily very imperfect fashion. In the first place, the amount of foreign capital lent on mortgage is only the estimate of the department, though the wide knowledge of the financial condition of the colony possessed by Mr. Sperrey and his assistants makes it well worth quoting. In the second place I have arrived at the debts owed to foreign creditors by deducting the amount of debts returned as "owed to persons making statements" from the total indebtedness. Now, is many cases it is known that in their statement people omit all, or a great part, of what is owed to them, so the debts to foreign creditors are made to appear much larger than they really are. Thus we may assume that the amount set down in the table as owed to persons in the colony is too small, while that set down as owed to persons outside the colony is too large. The total indebtedness is probably fairly correct, though it may be unduly swelled by some large mortgages which have been registered in local offices, and therefore counted twice over.

Having thus noticed the weakest points in the return, we can proceed to inquire the amount of wealth it makes out that we possess. The amount of debts owed to creditors within the colony does not diminish the total wealth; one set of persons is poocer by the liability, another set is richer by the asset, but the community as a whole is neither richer nor poorer. With respect to outside debt the case is different, and the whole amount must be deducted from our wealth, which will then stand thus:—

The private wealth divided by the number of persons in the Colony (578,842 in March 1886) gives us £188 as the average wealth of each person.

In closing this part of my inquiry I must repeat that there can be no doubt that the amount thus arrived at is considerably below the real amount.

Wealth of the Colony.

According to Property Tax Returns based on the Assessment of 1885.

Of these debts £3,131,000 was held in the Colony in 1887 by the Post Office Savings Bank, Government Insurance, &c.

Wealth According to the Probate Return's.

The probate returns for New Zealand have not hitherto been published, and I am indebted to Mr Hickson and his assistants for having made me the very laborious calculation of which they are the result. It will be observed that they are averaged for a period of live years, the reason being that the falling in of a very large estate may cause the average of any one year to be misleading. The Victoria; calculation is copied from Mr Hayter's "Year Book." Those for New South Wales and the United Kingdom I worked out from returns contained respectively in Mr Coghlan's official work "The Wealth and Progress of New South Wales," and in the "Statistical Abstract of the United Kingdom."

ESTIMATE OF WEALTH FROM, PROBATE RETURNS.

It will he noticed that the probate returns give us £214 a head, a larger amount of wealth than the property tax returns do. This is only what might be expected from what we have seen of the errors likely to arise from the former method of estimating our wealth; and I feel convinced that the probate returns themselves give us a result that is lower than the reality. For purposes of comparison, however, the probate returns are excellent, and the comparison shows us that this young country is not so very much poorer than the richest of old countries—the United Kingdom. The capital with which we are working is, then, ample—instead of being very poor, we are really very rich. It is true that we are far from as rich as Victoria or New South Wales; but one very hopeful point crops up in the comparison:—Twelve years ago Victoria was not so rich per head as we are now, though her population was considerably greater and her resources probably better developed; her great advance has been made in the last 12 years. The figures in this case are one of the most striking instances of progress that I have ever seen in print, but the progress of Victoria seems to have been actually exceeded by that of New South Wales, where, if the returns are correct, the average wealth per head must have risen from £184 in the quinquennium 1877-81 to £323 in that of 1882-86. If we are likely to follow in the steps of these sister colonies our prospects are certainly very good. Whether we are likely to do so depends upon our production, which we will not examine.

AGRICULTURAL PRODUCE.

Our annual production is a far more important matter than our accumulated wealth. Far more important because there can be no doubt that if our production is satisfactory, then, no matter how poor we may be, must grow in wealth, unless we are altogether thrift, less; while if our production is not satisfactory, we must grow poor, however great our accumulated wealth. In the three principal branches of production—vix, agriculture and pasture, mining, and manufactures, we have statistics which give us a very fair idea of oar position, and, fortunately, there are even better materials for ascertaining the position of Victoria. The table illustrating the production of our agriculture is prepared on Mr Hayter's system, in order to give us as exact an idea as possible of how we compare with Victoria. The amounts of produce in both colonies are probably fairly accurate, but difficulties arise in respect of prices. The Victorian statist has prepared his list of prices from a number of returns showing the value of produce on the farm in every district of the colony. The prices are simply the average amounts that the farmers obtain; no account is taken of the value added by transport, &c. Now in this colony we have return of average prices for each provincial district, but these returns in many cases give too high a value for my purpose, as they show what the consumer gives, which is often a good deal more than the producer receives My prices then are mere estimates, they are arrived at from a comparison of the official returns already mentioned, with the average declared values of exports and with the market reports; and the results have been criticised by experts who very kindly rendered their assistance. Since the paper has been published the table of agricultural produce has not been attacked and as it needs no explanation I will merely say that the price of wheat, though it would be high for the present moment, is below the export average of 1886; and that the value of smaller crops, as to which the data were very insufficient, has been put at a figure which I believe to be considerably below the truth.

Agricultural, Produce.—1880-7.

COMPARATIVE TABLE ON MR HAYTER'S SYSTEM.

Name of Crop. New Zealand. Victoria. Gross Product. Estim'd Price. Estimated Value. Gross Product. Price. Estimated Value. £ s. d. £ £ s. d. £ Wheat .. .. .. 6,297,638 bush 0 3 6 1,102,086 12,100,036 bush 0 3 9

2,268,757 Oats .. .. .. 11,973,295 " 0 1 6 897,997 4,256,079 " 0 2 9 585,211 Barley .. .. .. 558,606 " 0 2 6 69,825 827,852 " 0 3 3 134,526 Potatoes .. .. .. 134,965 tons 2 0 0 269,930 170,661 tons 4 0 0 682,644 Other root crops (turnipsin N.Z.) 318,653 acres 1 0 0 318,653 37,945 " 3 0 0 113,835 Hay .. .. .. 79,103 tons 3 0 0 237,809 483,049 " 3 13 0 1,763,129 Green forage (oats in N.Z.) .. 98,029 acres 1 10 0 147,043 281,186 acres 2 10 0 710,465 Other crops .. .. 22,002 " 4 0 0 88,008 5,841 " 5 0 0 29,205 Garden and orchard produce .. 22,885 " 12 0 0 274,620 27,593 " 20 0 0 551,860 Other cereals, grapes, &c. .. Not distinguished 421,103 3,405,000 7,260,735

PASTORAL PRODUCE.

The estimate of pastoral produce originally made in this paper was on Mr Hayter's system, but as the results were occasionally objected to, and the process was invariably misunderstood, I substitute calculations which I believe will be more easily comprehended. The total result is much the same as before, but it would have been considerably larger if I had not lowered my estimate of dairy produce to make it agree with some very doubtful returns sent in by farmers of their produce of butter and cheese.

Dairy Produce.

Average consumption, estimated for the United States by Mr Atkinson (Distribution of Products, p.350), ½ pint of milk, 1½oz. to 2oz. of butter, and a scrap of cheese, at a fraction under 5 cents (2½d) per day per adult.

At dairy farmers' prices for 1886-7 this amounts to 2d a day (milk, 3½d a quart; butter, 9d per lb; cheese, 5½d per lb). Reckoning our population as equal to 500,000 adults—2 children under 10 equal to one adult—we arrive at a consumption of £1,520,590 which, adding exports of dairy produce, £151,194, amounts to a total of £1,671,781.

Mr Atkinson's estimate seems to allow too little milk for children, seeing the amount of milk and milk puddings that they consume; but, on the other hand, the official returns of our dairy produce do not give the amount of butter he assumes. These returns are certainly worth very little, being compiled from the statements of settlers many of whom have really no idea of how much they are producing; but as I prefer to follow the statistics in all cases, I shall accept them, and allow 1d a head a day for milk. This makes a large amount for milk, but the work of distributing is very expensive, and much of it is done by the farmers. The total is only £5 a cow, against £8 10s in Victoria The estimate will then be—

Produce of Stock.

The number of fat cattle slaughtered annually may be arrived at by taking the Victorian average head, since we have no returns from slaughter-yards and by the number of hides treated at tanneries. The Victorian average, allowing for private killing, is about one beast to every four persons, which would give us 144,000. The tannery returns show 135,000. Seeing that some of the hides included in tannery returns will be from animals that died, I will assume only 120,000 cattle to be killed. The value of fat cattle, according to official returns, averaged from £5 to £11; so, in order to allow for cows and calves killed, I will take the lowest figure—£5. The annual increase in value of the animals that are not slaughtered, excluding cows, may be reckoned from the average age, which cannot be put at over years, even allowing that very few calves are slaughtered. The annual increase in value will then be more than one-fifth of £5. The total produce will thus be—

The uncertainty of the data obliges me to put this amount at a figure lower than I feel convinced it ought to stand at. 120,000 fat cattle is less than one fifth of the total, excluding breeding cows altogether—we have no accidental deaths to allow for, because we are going on returns of cattle actually alive—and it is more probable that we should have, allowing for calves, over a fourth coming into the butcher's hands every year. It is plain that if one fourth came each year, they would average four years old, and, at £5 each, would be worth £770,000, instead of the £600,000 that stands in the estimate

Produce of Sheep.

The annual consumption of sheep for food, judging from the data already referred to in the case of cattle, will be from two to three sheep for each person. The average price, according to the returns, ranged from 4s 6d for fat lambs and 5s for fat sheep up to 12s. The average value of sheep frozen was 12s, from which we must deduct the cost of freezing, and to which we must add the value of the fleece. The one will fully counterbalance the other; but the average seems to me so high that I will not adopt it, but will put frozen sheep by themselves and allow only 6s, or one-half of that, for the general run of sheep killed. The value of a fat sheep being taken at this figure, and the average life of sheep excluding ewes being not over four years, the annual increase in value, exclusive of wool, will be put sufficiently low at 1s. It will be much more than that for lambs, but in the case of

old sheep it will be nothing at all, or in extreme cases a minus quantity. About one-sixth of the ewes will be killed, and their value for boiling down may be put at 2s.

The produce of sheep will then stand thus—

As in the case of cattle, this result is certainly lower than it ought to be. It only accounts altogether for 2,800,000 sheep, which is but a sixth of the number in existence.

NET PRODUCE.

Having drawn up his estimates of the value of agricultural and of pastoral produce, Mr Hayter adds £e two totals together and gives the result as the value of the produce of rural industry; but, though I am unwilling to differ from so high an authority—and one whom I have often suspected of being wrong, and in every case but this found to be right, I consider that before adding the totals we ought to deduct the value of the produce that is consumed by animals. The farmer does not make both the value of the hay and the value of the bullock that is fed upon it; he only makes the value of the bullock. This is so plain that Mr Hayter takes no account of the value of grass, because it is included in the value of stock. On the Other hand, probably the bulk of the oats and a considerable proportion of the hay are sold off the farm, and consumed in towns or exported. The problem now is, how much of this produce are we to consider as being consumed on the farm, and therefore counted in pastoral produce? We have no data for deciding this, and we are further hampered by the comparison with Victoria, where the production of hay is such a large and disproportionate item. The best I can do is to suggest that we should consider one-quarter of the oats and one-half of the hay to be consumed on the farm, together with all the green forage (though a good deal of that must be sold), and the whole of the "other root crops," which will be consumed by sheep and cattle. On this basis I will estimate the net produce of rural industry, and if the process be objected to we can fall back upon the original table of gross produce for the purpose of comparing New Zealand with Victoria. The result of the comparison is to show a net produce of over millions in New Zealand, and over 14¼ millions in Victoria. To arrive at an idea of what this means to the farming interest, we must divide it by the number of persons engaged in the production. The numbers for New Zealand are taken from the census; the numbers for Victoria are from Mr Hayter's estimate Year Book, 1886-7, page 57. The result of the calculation shows a produce per head of £149 in New Zealand against £104 for Victoria. If we adopt Mr Hayter's system, and take the gross product of both industries, we get the result of £161 in New Zealand and £118 in Victoria. Whichever calculation we take, the produce of New Zealand in proportion to the number of workers is far greater than that of Victoria. Low as our prices are, our produce is so vastly greater that its money value exceeds that of Victoria by the large amount thus shown. Under these circumstances, and in spite of the great efforts that have been made to stimulate manufacturing industries in Victoria, it may appear peculiar that there is a larger proportion of agriculturists in that colony than here. The class "Engaged in Pastoral Pursuits and Agriculture" contained in New Zealand 11.3 per cent of the population, and in Victoria 13.8 per cent. But this disproportion is really only apparent itself. It is caused by a peculiarity which has constantly to be taken into account in this comparison—viz., our large families: if we deduct the "domestic" class from the total populations, and so get something more nearly approaching to, though still exceeding, the number of persons whose produce we can take into account, we find about 32 per cent engaged in rural industries in New Zealand against about 30 per cent in Victoria.

If the further question be raised of how is it that prices are higher in Victoria, I suppose the general answer would be, because there is a larger town population to consume the products of agriculture, The fact is, however, that it is not a question of town population; the whole population are consumers of agricultural produce, and instead of being more numerous in proportion to producers than in this colony they are less so, as is shown by the proportion of 11.3 per cent of agriculturists in New Zealand against 13.8 in Victoria. The cause of higher prices is therefore not the superiority in number of the consumers. The real cause plainly is, that in Victoria more labour is required to produce a given amount of agricultural produce. The higher prices are simply the result of the lower rate of production.

The last point in this connection is that if the farmers and stock raisers suffer from the low prices, the rest of the colony must gain. The farmer, in the long run, cannot gain much from the superior productiveness of his land. Higher prices for freeholds or rents for tenancies, and lower prices for produce are the invariable result, but though the farmer may not be greatly the gainer, the community is, and the country which gets the largest return to a given amount of labour is the country which, other things being equal, must be the most prosperous in the long run.

Before leaving this branch of the subject we must notice that the previous calculations do not include the whole produce of agriculture. There are some smaller items which have been omitted, because no account is taken of them by Mr Hayter. I give the results of my calculations about them, and shall add the result to the value of produce when I come to calculate the total produce of the colony. They are:

In addition to this there is all the produce of gardens under one acre in extent, as to which we have no data, though the value must be considerable.

NET PRODUCE OF RURAL INDUSTRIES.

Mining.

The most important facts in respect of this industry are the stationary condition of the production of gold and the very rapid growth of the production of coal With respect to the former, it remains to be sea whether the investments of foreign capital in quartz reefs will result in again raising the exports of gold; but so far as coal is concerned, the increase in the years between the last census and the one preceding it may be really called extraordinary, the amounts raised being 277,918 tons in 1880 and 481,858 in 1885.

As there was no mining of any importance in Victoria except gold mining, I have compared the average earnings of all miners in New Zealand with those U gold miners in Victoria. The result is distinctly fa favour of Victoria, but it is impossible to be sure of the number of men really engaged in the industry in either colony. The numbers given for Victoria are the estimates of the Victorian Department of Mines, while our census returns probably include a number of men who are only working a part of their time at mining. The reason for this opinion is that in the mines of which we have particular returns—that is practically, all the mines worthy of the name that are in operation—the average product is £252 per head far gold mining, and £211 per head for all mines and quarries; and if we exclude both the hands and the products thus accounted for, we get an average of only £48 a head for the remaining miners. Thus in this case the comparison is unsatisfactory, but the value of total products is probably not far wrong, depending, as it does, on the export returns in the case of gold, and special returns from managers of mines and quarries for the other items. Kauri gum digging cannot be in eluded among mining industries without spoiling the average, because the return per head appears to be much larger than is really the case. The only diggers who are enumerated in the census are Europeans, but it is known the large quantities of gum are the produce of Maoris, which accounts for the fact that the produce per head appears to be abnormally high.

Manufactories.

In both New Zealand and Victoria very elaborate returns of manufactures are obtained, and if we can trust the figures we may get a very accurate idea of our Relative positions. The commonest objection to the comparison is that we include numbers of small establishments which would be excluded in Victoria. All the information that I could obtain from the Registrar-General's department went to show that this is not the case; that the class of establishments is the fame as in Victoria. The comparison, however, made out such a good case for the manufactures of the colony that I could hardly believe it to be correct; so I tested the returns in various ways, examining the nature of the industries, the number of hands in particular works, and the horse power employed. The result was that I concluded the comparison is a perfectly fair one, and the best illustration of this is the amount of power employed in comparison with the number of the establishments. We employ 19,315 horse-power in our 2268 establishments, while Victoria employes 20,160 horse-power in 2813; so that relatively our power is the greater. The comparison, however, is not quite fair until we exclude mines, which are put on a separate table by the Victorian statist; if we do this we reduce the horse power to 15,615 and the establishments to 1961, which gives an average of just under eight horse power to each establishment, against just over seven horse-power in Victoria; even this is not quite conclusive, because some of our power is manual, &c., whereas only engine power is reckoned in Victoria, so I will compare the number of establishments using engines. In Victoria there were in 1886 1409, and in New Zealand 815 using steam, 281 using water, 66 using gas, and 44 using other motive powers If we compare the number of hands per establishment we find 11 hands in New Zealand against 17 in Victoria which, allowing for the very large works in Victoria seems to show that the comparison is fair. With our widely separated centres of industry we have naturally smaller works and more of them. If mere shops where some industry is carried on had been included, our average number of workers to each establishment would be far smaller than this. Another reason for believing that our returns represent real industries aided by machinery, is the high average produce per head, and yet another is that thinking over particular branches of production, such as dyesinking, I find they are considered too small to be taken into account although we know that they exist in numbers which must make the total produce worth consideration.

For these reasons, the comparison seems to me to be fair, and accordingly I show the results in the subjoined table. If you compare it with the statistics you will find that I put down our total production at a smaller amount than is given in them; the reasons is that I have excluded mines because they are not included in the Victorian tables. The value of raw material is generally given in the returns of bolt, colonies; but our returns

appear to be less perfect and in the case of "animal matters" and sawmilling I have had to estimate the value, which I did by taking the same proportion as obtains in similar industries in Victoria and adding over £70,000 to the total to represent the probable excess in the value of our raw material in animal matters. In any case the value of raw materials given can only be regarded as roughly approximate. The value of the net produce in New Zealand is very high, but on account of the uncertainty about the value of raw material I cannot regard it as anything like exact. It will be seen, however, from a later table that it agrees fairly well with average production in other industries. The value of gross produce is certainly too low, for several factories sent in no returns of their production (nor of their raw materials), and there is reason to believe that the returns that were sent in seriously understated tat value of produce in some cases. The number of hands appears to be correct.

PRODUCE OF THE THREE INDUSTRIES.

The next table shows the total produce of the three Industries we have examined, and the average produce. Which amounts to £146 in New Zealand and £111 in Victoria. But this £146 is not the whole result of these industries; to get that we have to include various smaller items that could not be brought into the comparison with Victoria. When these are added we get a total of over 15¾ millions, and dividing this by the number of workers, to which we must add 1297 kauri gum diggers (there are really more, if we could count Maoris, but not enough to affect the present average), we get £156 per head. On making the comparison with Victoria we see that, taking an average of the leading industries, there appears to be no room for doubt that we are much the more productive. This being the case, however disordered trade may have become, we cannot resist the condition that our prospects are not merely good, but brilliant.

Estimated Produce of Remaining Wealth Producers.

We have now examined what I may call the primary industries, those on which all others depend, and for which we have statistics to guide us; but we have by no means analysed all the production—we have still to account for that of the "industrial" producers, who are not working in factories, and for that of ordinary labourers. The only way to form any idea of the value of their produce is to adopt the system by which Baxter Levi, and Giffen have endeavoured to estimated national income—that is to take the numbers and estimate annual wages and profits. This system even less exact than the one we have hitherto pursued so, though I shall attempt it, I will not use it in comparative purposes, nor shall I lay any stress upon the results. The produce of the building trade is estimated by taking average wages from the official returns, and deducting something over two months for time out of work, allowing interest and profit at 10 percent, on £1,000,000, and assigning £150 each to employers, many of whom are no doubt in & very small way of business. This is checked by companies with the number and size of houses built, and such as allowance as I could make for the probable value of repairs. The result would be too high if we only consider the condition of the building trade in Dunedin at the present time; but remembering that we are dealing with the whole colony and the year 1886, I venture to submit it for criticism. The produce of the remainder of the industrial class is based on average wages, allowing £120 a head, and £100,000 for interest and profits. I have estimate the value of the produce of the class of general labourers at £100 a head, and have deducted half of them, because it is impossible to say how much of their labour may have gone to bring up the results of the industries for which the produce has already been estimated. The total, 20½ millions, gives us as idea of the wealth annually produced—the wealth that is to say, out of which we pay the interest our outside debts and support our non-productive members.

INCOME OF THE COLONY

The total income of the colony is, of course, considerably larger than this 204 millions, though it is really only the same wealth passed from hand to hand by the instrumentality of money. I have tried to arrive at an estimate of it by going through all the classes of persons in the census and allotting incomes to them, and have tested this by comparison with the average results obtained in the leading industries, and by whatever other tests I could obtain from the works of the leading statisticians; the result is, though I have some hesitation in giving it, that I think the total amount cannot be less than £30,000,000, while it may be considerably more. If we accept this estimate, we get an average income per head of over £51, which may be compared with Mr Giffen's estimate for the United Kingdom in 1883 of a total of £1,270,000,000, or about £35 a head.

Note.

Since much misapprehension exists respecting the manufacturing industries of New Zealand as compared with those of Victoria, I append some tables to illustrate their position. The "Comparison of Manufactures and

Imports goes to show that we are proportionately, whatever the reason may be, less dependent on foreign countries than Victoria is, The table of "Manufactures and Corresponding Imports" gives some idea of the variety of our productions and of their possible extension, supposing outside competition to be absent. The industries given are all those of which we have special statistics, except iron and brass, which I cannot compare owing to difficulty in deciding what is to be considered raw material, &c. Iron and brass manufactories produce to the value of £351,739, but the imports are considerably greater. Printing does not figure in the imports, because im- ported books cannot be said to come into competition with local printing to any appreciable extent. The: value of earthenware imported is not included.

[The figures respecting New Zealand are for 1885, those respecting Victoria for 1886; the produce of manufactures being estimated on Mr Hayter's basis—"Year Book," p. 481.]

In the next table manufacturing hands are compared first with the total population, and secondly with population, less "Domestic Class." The very material difference in the result is caused by the larger proportion of children in New Zealand. The table shows that according to the return of manufactories (excluding mines) we have a larger proportion of *workers* engaged in this branch of production than Victoria has. The returns for New Zealand are those of the census year 1886. Those for Victoria are the last obtainable—viz, for 1887. The population of Victoria is that of December 18, 1886.

The next table shows that, whether or not our manufactures are of the same high class as those of of Victoria, they have certainly been progressing faster, for it can hardly be supposed that our officials have been continually making fictitious additions to the number of hands.

In this table the population of Victoria is estimated for the middle of the year. The proportion of hands per cent of population is actually under 4.5, if we take the mean population, but closer to it than to 4.4

The next table shows the proportion of the various industrial classes to the effective workers (population less domestic class). The comparison is made for the year 1881. The industrial class includes workers in manufactories and all artisans, but not common labourers. The numbers of this class had increased slightly more than in proportion to population in New Zealand at the census of 1886.

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Front Cover

A Synoptical Account of the Making of the Harbour at New Plymouth.

By F. A. Carrington,
Topographical Engineering surveyor.

For Pribate Circulation only.
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TO THE HONORABLE THE MINISTER FOR PUBLIC WORKS, &C., &C., &C., AND THE MEMBERS OF THE NEW PLYMOUTH HARBOUR BOARD.

GENTLEMEN,—

Referring: to the reports contained in the *Taranaki Herald* of the 18th January, 1888, and the *Daily News* on the following-day, in reference to a deputation which waited upon the Mayor, requesting His Worship to call a public meeting re New Plymouth Harbour matters, and likewise referring to the reports and statements which have from time to time been made on this said harbour matter, I deem it right, being a member of the New Plymouth Harbour Board, to give a synoptical account of the origin of this harbour work, the action I have taken from the very first, the cause of the deplorable and costly sand difficulty, and how far it can be effectually cured and prevented from lessening the depth of water in the harbour, or barring the approach thereto.

Preluding, I may observe that in the year 1840, and after having had nearly fifteen years constant experience on the Ordnance Trigonometrical Survey in England and Wales, and considerable practice in Topographical Engineering Survey Works, Deline- ation of Country and Modelling of Ground, &c., I was applied to by the then New Plymouth, New Zealand, Company, and induced by them to accept the appointment of Chief Surveyor to a settlement they were about to establish in New Zealand, the site of which was to be determined by myself, after conferring with Colonel Wakefield in Wellington. The terms offered me were very liberal, and the prospects brilliant, I therefore (acting under the advice of the then Master General of the

Ordnance, who was one of the Directors of the Plymouth New Zealand Company) resolved to resign my Ordnance appointment and forego all claim to pension, and accepted the Chief Surveyorship of the said Company. I arrived in New Zealand in 1840, and after conferring with Colonel Wakefield, I found that I was deterred from selecting the site for the New Plymouth settlement until the whole of the Wellington settlement had been chosen. When this was done I was informed that I was at liberty to determine the site for the Plymouth Company's settlement, wherever I thought proper between the 38 and 43 degrees of latitude. In this undertaking I was courteously aided by Colonel Wakefield placing at my disposal the barque "Brougham," by which means I visited the range of country I was entitled to select from, and I finally determined to fix the site of New Plymouth where it now stands.

Early in the year 1841, forty-seven years ago, I made a survey of the Sugar Loaf Islands and coast adjoining, which I sent to the Managing Director of the Plymouth New Zealand Company, for the purposed showing what could be done in the way of makings first class harbour, safe and accessible at all times and seasons. I afterwards made a more minute surveys of these islands and the coast, which I took with me to England in 1844, together with samples of the rock and stone from the various islands and coast nearto, which I submitted to the inspection of Sir John Rennie the eminent engineer, and Sir Roderick Murchison, the great geologist. Sir John was so much pleased with that which I showed and imparted to him, that shortly before my return to New Zealand he entered into an arrangement with me to construct the entire harbor works on terms which, if they had been carried out, would have proved most advantageous, not only to New Plymouth, but to the whole colony. From circumstances which I could not control, this arrangement was frustrated.

From that which I am now about to state, in reference to the making of the New Plymouth Harbour, it is, perhaps, right that I should further show how and where I was professionally occupied from the time I left New Zealand, in September, 1843, until my return to the Colony in July, 1857—fourteen years—in order that it may be known that my life has been devoted to my profession as a Topographical Engineering Surveyor, and, as such, that I am fully and specially qualified to decide upon the most judicious sites and lines of engineering works, as is also borne out by the medal awarded me and many gratifying testimonials I hold from some of our most eminent engineers and other distinguished persons. I therefore beg leave to say that, during the fourteen years I was away from New Zealand, I was professionally employed in England, Scotland, France, Belgium, and America, making many and various kinds of surveys, delineating and modelling ground, showing proposed engineering works in miniature of railroads, waterworks, and harbours, for the purpose of elucidating to Committees of the Houses of Parliament and Courts of law disputed engineering questions which arose between rival engineers and other contending parties which, otherwise, could not be made clear to members of committees and other personages by plans, lections, and cross sections. Some of these models and Topographical sketches was requested to send to Buckingham Palace for the inspection of His Royal Highness the Prince Consort, who, himself in Buckingham Palace, personally complimented me upon them. I have also been visited in my studio, in London, by the Premier, the Commander-in-Chief, and many distinguished personages, who, one and all, expressed themselves in a most gratifying way to me. The *Times*, and other leading journals, have noticed my works in a very complimentary way.

I returned to New Zealand in 1857, and on the 29th October, 1858, nearly thirty years ago, I wrote to His Excellency Governor Gove Browne, and under the same cover was enclosed a letter from myself to the Right Honorable the Earl Shaftesbury, to whom I was personally known, with desire that it should be submitted to the Secretary of State for the Colonies, and the New Zealand Government, which was graciously complied with. On referring to this said enclosed letter I find that, together with other important matters then touched upon, I made reference to our harbour question. The following is an extract from the letter:—"Does not philanthropy remind us of the noble works which, have been executed at Portland, Holyhead, and other parts of the kingdom, chiefly by means of convict labour; and does not charity tell us that these works were performed by men who toiled against hope, who, when they had made expiation for their offences, went forth from their prisons with heavy heart, knowing that they were the marked men of a superabundant population, with little chance of future employment, who, though they had resolved to lead a new life, found themselves foiled in every effort by the stigma they bore? These are the men to whom I would call the special consideration of all good men, and all who are in heart the humble followers of Him who was the friend of sinners. Instead of the indiscriminate convict system which was pursued in Van Dieman's Land and New South Wales, I would suggest the employment of those who, by their probationary conduct at Home, have shown themselves deserving, and are desirous of amending their lives. In no part of the world that I have seen could this kind of labour be more judiciously and humanely employed than in this colony. The difficulties and expense attending the making leading roads and bridges in this country are greater than I have met with in other parts of the world where I have been. It is fallacious to think that any ordinary taxes levied upon the settlers will be sufficient "to lay out and construct the requisite roads and bridges required to civilize, commerce, and govern this country; and, unless something such as I have suggested, be devised and carried out, generations will pass away before New

Zealand becomes a civilized country, or we become acquainted with the vast mines of wealth which now lie hidden within our reach."

From time to time, as opportunity offered, I never failed to urge the advantage to be gained by constructing a harbour of refuge by means of convict labour, which, had it been done, would have obviated the necessity of a tax being levied upon the settlers, who, in that case would have derived immense benefit from the large expenditure necessitated in erecting and carrying out so great and beneficial a work. My efforts, so far as I know, were unheeded by all, save one man, and that man was Mr. Chilman, the then Collector of the Customs here, who did all in his power, up to the time of his death, to aid so good and righteous a cause; and when officially called upon to give his opinion on the financial prospects of the undertaking to Messrs. Doyne and Balfour, Marine Engineers, he stated that the direct pecuniary loss to the community from the want of a proper harbour here, was as estimated by him fifteen thousand pounds during the year 1864.

Nothing, however, of importance was effected towards the making of our harbour until 1873. In October of that year I received a letter from the then Premier of the Colony, Sir Julius Vogel, telling me that—" In present circumstances Taranaki is unable to take advantage of the immigration scheme to the extent designed." This was at a time when people were coming to New Zealand by thousands; it was therefore clear to me, I being the Superintendent of Taranaki, that I should write to Sir Julius, and state—" Nothing less than a harbour at the Sugar Loaves would enable us to have a fair share of the advantages administered to the other provinces," and I followed this letter up with an interview with the Premier, in Wellington, when I showed the way and the means by which our harbour could be constructed without the cost being felt; in fact, I made it manifest, that it would put money into the Colonial Treasury. I said that we were now acquiring, and were about to acquire, large tracts of land, and if it were sold without the prospect of a harbour it would realise little more than half its value; if, on the other hand, an endowment in land were given for the purpose of making a harbour at the Sugar Loaves, two thirds of the land would, in my opinion, realize more than would the whole without the prospect of such harbour. The truth of my opinion can now be verified by referring to documentary evidence, which will show the price at which the land in Taranaki was sold before the harbour endowment was given, and the price at which it has since been sold. I truly believe, if fairly gone into, it will be found that the colony has gained considerably in money by giving the endowment to enable the making of the New Plymouth Harbour.

To return to my narrative, my interview with the Premier was very satisfactory, and when, in the House of Representatives, in August, 1874, I moved the second reading of the New Plymouth Harbour Board Bill, which was strongly supported by Major, now the Honorable Sir Harry, Atkinson, and Mr. Kelly, the Premier stated that—"The Government had no objection to allow the Bill to pass." The Bill provided that one-fourth of the land fund of Taranaki might be appropriated for the purpose of making a harbour, when ratified by a Bill to be passed by the Provincial Council of Taranaki, which was done.

Some twenty months after this, at an interview between the Honorable Mr. Bowen, the then Minister for Justice, and the members of the New Plymouth Harbour Board, which took place on the 26th April, 1876, and after well considered discussion, resolutions were passed and agreed to by both parties, that prison labour should be employed in making the harbour at New Plymouth. The general terms of the agreement were that the Harbour Board should make over to the Government its 25 per cent. of the land fund, and all its endowments, the Government on their part agreeing to carry out the work, irrespective of the money coming in from the land sales, so that in no case should there be any delay for the want of funds in carrying out the works. On the same day, 26th April, 1876, the New Plymouth Harbour Board met and ratified the above named agreement. Land for a prison site was purchased by the Government at Moturoa, close to the New Plymouth harbour site; plans and estimates for the proposed prison were made, and tenders called for; but while this work was in hand certain persons in this town and country around, were greatly perplexed and alarmed at the prospect of a prison being erected here, through the silly and misleading statements made, and by letters which were published in our papers predicting the most fearful consequences if the convict prison work, as determined, was carried out; in fact every means in the power of those who were the agitators in this matter, was, I believe, used with little compunction, to the now trying and pecuniary cost of the people of this district for years to come. Instead of having a noble harbour of refuge constructed, and without a rate, as was always my aim, we must now be content with what we have got, and for this lamentable mistake we have to pay a tax—a harbour rate.

Had the Harbour Board's agreement, of making over its endowments to the Government, been carried out, we should not have had occasion to go to the London market for our loan of two hundred thousand pounds, and consequently should never have had a harbour rate. Moreover, the Government would have ultimately carried out the work to its entirety; most unquestionably to the extent authorised by Parliament, viz., three hundred and fifty thousand pounds. Thus the additional expenditure of £150,000 would enable us to continue the building of the concrete breakwater until we reach a depth of 38 feet at low water, thereby making New Plymouth harbour a harbour of refuge to all ordinary vessels.

The New Plymouth prison agitation was not lost sight of by the opponents of the work in the House of

Representatives, and on the 23rd of August, 1876, Mr. Whitaker moved in his place in Parliament—"That, in the opinion of this House, the tenders should not be accepted for the central gaol at New Plymouth till this House has had an opportunity of re-considering the question of the site of a Central Penal Establishment." This motion, after full discussion, as may be seen by reference to *Hansard*, Vol. 21, page 549, was carried by a majority of thirteen in a House of 63 members present.

Thus, through the want of discernment, discrimination, and foresight, narrowmindedness and uncharitable feeling, shown by certain individuals in this place, towards poor unfortunate convicts, we are deprived of a port from which, otherwise, we would have been able to trade *direct* with any sea port in the world.

In 1878 Sir John Coode was here, and confirmed the harbour plan and works as proposed by Messrs, Carruthers and Blackett, the Government Engineers. The *modus operandi* for carrying out the work at this time was to have a rubble breakwater, and to bring the stone from Paritutu on an inclined plane, to be deposited in the water in the very place where the concrete breakwater is now built. This Paritutu rubble work idea was, towards the end of the year 1879, abandoned, it being alleged that stone could not be obtained there in blocks sufficiently heavy to resist the action of the sea. Sir John Coode was therefore consulted on the matter, in Loudon, and he agreed to the proposed alteration being made from rubble to concrete.

On the 1st March, 1880, 1 addressed a letter to the New Plymouth Harbour Board making suggestions consequent on the alteration from rubble to concrete, which, had they been attended to, *would have prevented the sand difficulty arising*, and would have saved, in my opinion, which I derived from careful personal observations, a very large amount of money which has been spent on sand dredging. My suggestions were offered with desire to lessen the action of the sea upon the structure, by causing the heavy western waves to strike the work obliquely, to prevent the possibility of sand drift, and to have obtained an area of .some seven or eight acres more harbour water than we now have. (This seven or eight acres of water is now in part lost, being filled win sand and *debris* from the road works and quarries, to the depth of 1 or 2 feet to some 15 feet—which sand will follow the breakwater and bar the entrance *if not properly attended to*.)

My letter of the 1st March, 1880, was read at a meeting of the Board on the following day, when I laid upon the table a plan which I had made in order that I might elucidate all that I had suggested; my letter, plan, and suggestions were listened to at that meeting, and a vote of thanks given me for the same, but no action has been taken on all that I then and have since offered.

On referring to my diary of 9th April, 1880, I find that on that day the Honorable Mr. Oliver, Minister of Public Works, Mr. Blackett, Government Chief Engineer, Colonel Trimble, Mr. King, Chairman of the Harbour Board, and seven other gentlemen, accompanied me to the proposed harbour site, and when on the ground, with Sir John Coode's plan in my hand, which was referred to by all, I pointed out the importance of attending to that which was stated in my letter of the 1st March, 1880, *and the consequences if not attended to*. I regret to say that my predictions are now verified.

Before the Honorable Mr. Oliver and Mr. Blackett left New Plymouth, in April, 1880, *and before the building of the breakwater was commenced*, I gave them copies of the *Taranaki Herald* of the 5th March, 1880, which contained a copy of my letter of the 1st March of that year, and I urged their consideration to my suggestions, as contained in my said letter, and likewise to the suggestions which I made to them when on the ground at the harbour site.

It being determined to make the change from rubble to concrete, which was agreed to by Sir John Coode, and to abandon the idea of the inclined plane and the getting of the stone for the making of the breakwater from Paritutu, which, so far as I know, was *not* agreed to, considered, or even made known to Sir John, a difficulty arose, and that difficulty I will now point out.

Paritutu rock being ignored, other and nearer quarries were to be operated upon, involving a deep and heavy cutting before they could be reached by road; so soon as I knew this to be the case I saw Mr. King, the Chairman of the Harbour Board, on the matter, and together with him and the then Engineer of the Works, Mr. Rees, and on the ground, on the 16th of October, 1880, I asked what was going to be done with the twenty-seven thousand yards of sand and dirt which would be excavated in making the road to the quarries? The Engineer gave me to understand that it would be thrown over the hank, meeting the high water! I was positively astounded, and remonstrated, and told both Mr. King and the Engineer that if that was done it would ultimately be all carried into the harbour. I pointed out that the full force of the western gales and our heaviest seas came direct into this little horseshoe bay, and would beat upon it and drive the whole mass of excavated waste sand and dirt through the narrow pass, 6¾ chains wide, between the Mikotahi Island and the salient point of the mainland, now block yard wall, against the breakwater, and would, I feared, follow the work out as it progressed to the great detriment and cost of the harbour work; the Engineer replied, saying it would spread itself all over the bay, and would not lessen the water more than an inch or two. I did all I could to prevent this costly folly from being done, and as I could prevail nothing, I immediately, on my return home, recorded in my diary the following words, as said to me on that occasion by Mr. King, and backed by the Engineer, as

truthfully as I possibly could, viz.,—"Mr. King and Mr. Rees both expressed themselves strongly that there would be no good in again directing Mr, Blackett's attention to this matter, he had evidently made up his mind, being backed by Mr. Carruthers and Sir John Coode." This objectionable work has been done, and, together with the *debris* from the quarries, *is the entire cause of our sand trouble and costly dredging, as can be clearly shown on visiting the ground*.

I now again say that the sand difficulty in our harbour is caused by the way the work has been carried out in abandoning the inclined plane and Paritutu rock, which was approved by Sir John Coode, and by making a road to other quarries which, I cannot bring my mind to believe, was ever sanctioned by Sir John. Indeed, I feel convinced that if it had been proposed to him, he would have condemned it in the strongest terms. It has been a most painful tiling for me to witness, and has been a mental torment to me for years, seeing that I could not prevent such deplorable doings. I am however, happy to say that our sand drift trouble can be greatly remedied at moderate cost, and I am willing to show how, in my opinion, it can be done, but if neglected the harbour will be barred, and the harbour water considerably shoaled, and in course of years will only be fit for vessels of less draft than at present trade here.

before closing this letter I shall mention a few more facts out of the many I can adduce, showing the unheeded efforts I have made to obviate the difficulty we have now to contend with.

Being grieved to find that no notice was taken of all that I had said and written about our harbour, I determined to go to Wellington at my own expense, and sec if I could move the Government to attend to my representations, *before the wrong doings at our harbour were commenced*. I now, therefore, give extracts from mu diary of the 5th and 10th November, 1880, viz.,—"This day saw the Honorable the Minister for Public Works, Mr. Oliver, on the matter of the harbour works at New Plymouth. I asked him if he had considered the letter which I addressed to the New Plymouth Harbour Board on the 1st of March last, a copy of which I handed to him when he was in New Plymouth on the 9th April, 1880, and published in the *Taranaki Herald* on 5th March, 1880. Mr. Oliver said that he had consulted both Major Atkinson and Mr. Blackett on the matter contained in my said letter to the New Plymouth Harbour Board. He told me that Mr. Blackett's objection appeared to him to be the working in deep water at once. So far as lie could judge, it appeared to him that my suggestions, as offered in said letter, was what ought to be done, but the Chief Engineer must deride. I also had a like conversation with Major Atkinson, also a like result." Mr. Oliver and Major Atkinson both advised me to remain in Wellington and see .Mr. Blackett on this harbour question. I waited in Wellington until the 10th November, 1880, on that day I saw him in his office, and related the interviews which had taken place between Mr. Oliver, Major Atkinson, and myself, and strongly stated "My regret that the gap between Mikotahi Island and the mainland had not been joined. I pointed out the importance of so doing, and expressed a wish that he should sec it for himself, at once if possible. I urge all I can and tell all I can as strongly as possible." Mr. Blackett in reply told me—That he expected to be in New Plymouth very shortly, in about three weeks from the present time, He urged the commencing of the root of the breakwater at once. I left him with the assurance that he would be at New Plymouth in about three weeks." Mr. Blackett, I was informed, came to New Plymouth sometime after my interview with him, but he did not send for me, and I did not hear of his being in New Plymouth until after his departure. No notice or action was taken respecting my harbour suggestions, and I now truly declare that had my suggestions been attended to we would not have had any sand difficulty, or the now deplorable depreciation of our harbour, and consequently of our town property and country around.

Again, on the 29th May, 1882, I was so much distressed at seeing the 27,000 yards of sand and dirt, which had been excavated in making the road to the quarries, and the immense mass of *debris* from the quarries, all gradually working towards the harbour, that I called upon Mr. King, the Chairman, and told him what was taking place, and I urged the joining of Mikotahi Island to the mainland without further loss of time. The following day, 8th May, 1882, Mr. King and myself went to the harbour, and while on the ground we had a survey made and levels taken of the work required to effectually bar the sand and *dibris* thrown from the road works and quarries from injuring the harbour, the cost, as then calculated, was £1,750. It has not been done, hence our trouble, and it will now be more costly to do.

Seeing that little regard was given by the authorities to all that I endeavoured to do for the good of our harbour, I, in October, 1882, wrote as follows to the Board:—"Beferring to my letters of the 1st March, 1880, and the 16th June, 1882, and to all that I have from time to time written and stated in reference to the making of our harbour, and the indifference which has been shown to my writings and statements, induces me to make known to the Board that I feel myself called upon to retire from a position where my services are not valued. I therefore beg leave to tender my resignation as Treasurer of the New Plymouth Harbour Board. My resignation as a member of the Board I will forward to the Government." To the above letter was appended the following note:—" Connect Mikotahi with the most salient portion of block-yard by means of two sea walls, say from 45 to 50 feet apart, fill in the space between with the stone workings from the quarries, plant your new crane at the proper level on Mikotahi at a well con-gidered distance inside the point, run out your work in line for

Waiwakaiho point, and you will quickly have a land-locked harbour; proceed as you are now doing, and you will I fear, fail in obtaining a harbour with the means you have in hand.—FRED. A. CARRINGTON, Topographical and Engineering Surveyor, New Plymouth, 24th October, 1882."

In deference to opinions expressed to me I have continued on the Harbour Board to the present time, but baring done all the good I can hope to do for the cause I have so much at heart, I think that I should now retire from all controversy in connection with this, to me, most grievous, harbour question; but, in doing so, I consider that fair and honorable inquiry should be made into the whole matter, when I will show that if the original plan of the works, as projected by Messrs. Carruthers and Blackett, and approved by Sir John Coode, had been carried out, we would have been troubled with very little sand indeed; and that by changing the structure (the breakwater) from rubble to concrete was a wise step, had the work been projected as it should have been after this change from nibble to concrete was made. This remark in no way refers to the building of the breakwater as manipulated under the guidance of Mr. Rhind, our Resident Engineer. His work has been severely and thoroughly tested by piercing gales and heavy seas, and has proved itself a staunch and solid structure, but, unhappily it is built in the wrong place. The wharf, also, as framed by Mr. Philp, the contractor, under Mr. Rhind's supervision, is, so far as I have observed, very satisfactory.

I now close this letter by saying that I am still willing to go upon the ground and point out to competent engineers, what., in my opinion, can and should be done at comparatively small cost, to prevent the entrance of the harbour from being barred, the depth of water from being lessened, and to render this contracted, shoaled, and marred harbour, a boon to the whole community.

I have the honor to be,

Gentlemen,

Your most Obedient Servant,

Fred. A. Carrington,
Topographical Engineering Surveyor.
NEW PLYMOUTH, NEW ZEALAND, MARCH, 1888.

Printed at the HERALD Office, Devon-street, New Plymouth.

Front Cover

landscape sketch dated 1838, W. C.

Fifty Years Ago in New Zealand. A Commemoration: A Jubilee Paper: A Retrospect: A Plain and True Story.

READ BEFORE THE HAWKE'S BAY PHILOSOPHICAL INSTITUTE, OCTOBER 17TH, 1887.

By William Colenso, F.R.S., F.L.S., etc., Honorary Member of the Institute.

(Published under the auspices of the Board of Governors N.Z.I., and with the approval of the Council H.B.P.I.)

"Build me straight, O worthy Master!
Staunch and strong, a goodly vessel,
That shall laugh at all disaster.
And with wave and whirlwind wrestle."
LONGFELLOW: "*The Building of the Ship."*

"Quæque ipsi vidi, et quorum fui."—VIRG.

—"We cannot express any truth without involving ourselves in some degree of error or occasionally conveying an impression to others wholly erroneous."
—PROF. JOWETT.

Printed by R. C. Harding Napier Hastings-Street. 1888

Extract from, a Circular issued by the Council of the Hawke's Bay Philosophical Institute, 18th June, 1888.

The twentieth volume of the *Transactions of the New Zealand Institute*, which is now being issued, does not contain the extremely valuable and interesting "Jubilee Paper" read before this Society by Mr. Colenso in October, 1887; and on enquiry the Council find that owing to retrenchment and general lack of funds, this

Paper has been "deferred," together with many others.

Seeing that the Paper contains a long and excellent account of the Introduction of the Printing Press into New Zealand, and of the printing of the New Testament in the Maori tongue in 1837 (fifty years ago), together with many collateral and little-known facts and items of colonial and public interest, the Council took steps to procure the return of the Paper from the Governors of the New Zealand Institute, with a view to its publication.

The Board replied as follows:—"The Board very much regret being unable to publish the paper in question, and have therefore directed me to return it as requested. . . . The Board expresses great satisfaction at the prospect of the publication of the Jubilee Paper in another form.

—*(Signed)*
R. B. GORE, *Secretary*."

Fifty Years Ago in New Zealand.

A Jubilee Paper.

§ 1. PRELIMINARY.

THIS present year of grace—1887, has been, is, and will be long-known as, the marked "Jubilee" year; probably more so than any Jubilee that has ever preceded it since time began! This arises, mainly, from the fact of its ubiquity, or universal dissemination and observance, more or less throughout the whole globe. We here in New Zealand, the most distant of all the Colonies of the British Empire, situated at the very antipodes,—we have done our best in joining with thankfulness and acclaim in the carrying-out of the Jubilee of Her Majesty our most I gracious Queen Victoria.

And in doing so the question has more than once arisen in my mind, whether we (or more strictly speaking, I) have not also a Jubilee to observe, to commemorate? Indeed, all of us who have passed the fiftieth Birthday have such a private Jubilee; which is stronger still when those who can do so (as in the case of Her Majesty), can look back over the long vista of fifty years of active life; and this is still further strengthened, when, in so looking back, we can specify some peculiar useful public work undertaken and completed for the benefit of the people fifty years ago;—especially when such was begun and carried on and finished under singular trials and hardships and difficulties.

As I have reasons for believing, that I am the only one I present who has dwelt more than fifty years in this country, I trust I shall be permitted to say at the commencement, (and, in so doing, to meet and cut short all anticipation and conjecture,)—that I do not intend to speak specially of that—my arrival in this land,—in this paper. The Jubilee, or fifty years commemoration of that time, expired nearly three years ago, and was then duly though privately observed by me; as well as a few others since,—special goals or landmarks of some important epochs in my life now nearly drawing to its close; a select few of the more important of them I may briefly mention: viz.—

- In the year 1835, the printing of the *first* book in New Zealand.
- In the same year, the printing of the first *English* book.
- In the same year (Dec. 25), meeting with the celebrated *Darwin* in the Bay of Islands, and spending a happy long day with him.
- In 1836, the commencement of the printing the New Testament in *Maori*.

Having so far cleared the way, I may now state that my present Jubilee paper is intended to commemorate more particularly the completion of the printing of the New Testament in the Maori tongue at Paihia in the Bay of Islands in the year 1837—fifty years ago! an event that caused a great sensation at the time, both in New Zealand and at Home, (although now, in part, forgotten,) and one that was productive of incalculable good to the Maori race: together with the introduction of the Printing. Press into this country; and also, the gradual formation of its present written Maori language;—with many peculiar and little-known circumstances pertaining to those prehistoric times, and incidental thereto.

And as I have had necessarily a prominent part (active or passive) in almost every successional item or subject that I have to bring before you, I trust, in my endeavouring to fairly and faithfully narrate the same, I shall not be deemed egotistical.

§ 2. INTRODUCTORY.

In the year 1833, the Church Missionary Society, having determined to send out a Printing Press and types and all necessary *matériel* to their mission in New Zealand, were seeking a Missionary Printer to be in charge. In the end of that year, I, then residing in London, was introduced to the Secretaries of that Society at their Mission house, and engaged to go out to New Zealand with the Press as a Missionary.

For various reasons matters were not soon ready; and it was June, 1834, before we left London for Sydney, New South Wales, *en route* for New Zealand. During the long interval, (after my return from the Country in the Spring,) I was frequently at the large printing establishment of Messrs. Watts and Son, near Temple Bar, about the necessary requirements, (their types, &c., being all cast at their own foundry within the same building,) but all directions, orders, &c., respecting the same, were given by the Under-Secretaries of the Mission-House to that firm without any reference to me. Well do I remember the answers that were returned to my repeated applications for an Imposing-stone, and for page-cord, (not to mention other pings,)—"What! 'Coals to Newcastle'!! In that country where the New Zealand Flax grows everywhere wild, and the Natives are all adepts at making such beautiful lines and cords! and where the handsome Greenstone abounds!!!"—I briefly mention this here, as its sure results followed.—After a long passage of seventeen weeks our ship arrived at Sydney.

Here I make a short digression. What a difference! between the Sydney of that period and of to-day!! Then there was no steamer on her waters, and but few ships! then there were only three clergymen of the Church-of-England residing in all Australia;—two of them (the Reverends Messrs Cowper and Hill) in Sydney, and the Rev. S. Marsden at Paramatta. In order to get through their fixed Sunday (or weekly) duties, those Sydney Ministers were obliged to commence them on Saturday afternoons. During my stay in Sydney I assisted them as well as I could.

As no vessel could be found willing to leave for New Zealand, owing to their fear of the Maoris, we were obliged to remain eight or nine weeks at Sydney. At last, after much entreaty, a small schooner of 67 tons was got ready, and we sailed on the 10th December for the Bay of Islands. After a long and eventful voyage of twenty days, (suffering much from want of water, as well as from a complication of *peculiar* miseries!) we landed at Paihia Mission Station in the Bay of Islands, at 9 p.m. on the 30th December; and in the following few days got the Press, type, &c., safely on shore.

§ 3. THE PRESS IN NEW ZEALAND.

1835. Jan. 3. On this day we got the Press and heavy boxes of type securely landed; the lighter packages, including Bookbinders' standing-and cutting-presses, and tools, having previously been taken on shore. It was a very difficult matter to land the printing-press safely, from the bulk and weight of the iron "*staple*" (it being a large Stanhope Press), and the vessel out at anchor in the harbour, with no wharf nor good landing, place, merely the natural sandy beach open to the ocean; the passenger-boats of the Mission Station being far too light, and the Maori canoes too small and crank; at last we managed it, by lashing two canoes together and so making a deck or platform on them, and working early in the morning before the sea-breeze began. The boxes of type would have been opened on board, but as the little vessel, owing to her novelty, was continually crowded by Maoris, (all of whom were very wild and rough, and some of them not very friendly,) it was thought the parcels of type might be seized for making musket-balls, then in very great demand. It was a matter of very great rejoicing to us when all our precious stores were safely on shore and without loss.

Speaking practically, however, our rejoicing was of short duration; for on unpacking the goods and stores I found many necessary articles to be absolutely wanting! For the information of Printers I will just set down a few of them; though I almost fear my relation will scarcely be believed. There was no wooden furniture of any kind, nor quoins, (cast-metal furniture, so common now, not being then in use,) no galleys, no cases, me leads of any size, no brass rule, no composing-sticks, (save a private one of my own that I had bought two years before in London, a most fortunate circumstance!) no inking-table, no potash, no lye-brushes, no mallet and shooter, no roller-irons and stock, though there was a massy cast-iron roller mould, and (as I have already intimated) no imposing-stone nor page-cord; and, worst of all, actually *no printing paper!!* Moreover, in those days, as things then were, none of these missing articles could be obtained from England in a less time than eighteen months! while they might possibly be got from Sydney in six or eight months.—

Such was the state of things at the setting-up of the Press in New Zealand! At first, and for some considerable time, we hazarded the hope that the deficient printing stores, especially the large bales of paper, might have been left in the Agent's warehouses at Sydney, where the Press and types and Binding tools had been long stored; but time revealed that such was not the case. Fortunately I found a handy Joiner in the Bay, who soon made me two or three pairs of type-cases for the printing office after a plan of my own. For as the

Maori language contained only 13 letters (half the number in the English alphabet), I contrived my cases so, as to have both Roman and Italic characters in the *one* pair of cases; not distributing the remaining 13 letters (consonants) used in the compositing of English, such not being wanted.

I may here observe, in a note, that such an arrangement proved to be a very good one while my compositing was confined to the Maori language only; but when I had any English copy to compose it was altogether the reverse! then I had to pick out the discarded English consonants as required from their lots put up in paper parcels. Fortunately this occurred but rarely; except at the time of the Treaty of Waitangi, (1840,) when I had necessarily much printing work to do for the Government of the Colony; and having no extra cases, was obliged to place the letters required in little lots on tables, and on the floor!—(See Note A, Appendix.)
My Joiner also made me a few galleys, and a small inking-table, and some furniture and quoins,—these last, however, were wretched things (partly owing to the want of proper and seasoned wood,) and gave me an enormous amount of labour, vexation and trouble!

§ 4. THE LOCATION OF THE PRESS.

The sudden arrival of the Printing-press in New Zealand, took the resident Missionaries at the Paihia Station by surprise. It is true they had asked for it from the Society, and the Society had promised to supply their wants, but no time was, or could have been fixed, and communication between them was very rare and irregular—about once a year. And during our long sojourn in Sydney we had no means of communicating with New Zealand. Paihia is a small flat on the sea-side, about half a mile long, having a sandy beach in front, a bold rocky headland at each end, and a steep hill at the back; in calm weather there is good landing from boats on the beach, but not so at other times. At this date there were three Missionaries with their wives and families living here,—the Rev. H. Williams, the Rev. W. Williams, and Mr. C. Baker; they resided in three separate and rather large houses, which with their houses for domestics, Carpenter's and Blacksmith's shops, and store-houses, and the Mission Chapel and Infants' School-house in the middle, composed the buildings of the Mission Station, making quite a little village. Fortunately it happened that a large and well-lighted room, being one semi-detached wing of the house occupied by Mr. Baker, was just now empty; this room had been hitherto used as a schoolroom for the sons of the Missionaries; but it was now the holiday season, and many of the lads had gone home to their parents, and that School for the future was to be carried on at the inland Mission Station—Te Waimate. Therefore the press was at once located in this empty room, for the time at least And though, subsequently, there was much debate, and even decisions arrived at, by the Committee of Missionaries respecting its speedy removal;—1st, to the spacious two-story stone building at the Kerikeri Mission Station, built for a general store for the Church Mission, of which all the facing stones were brought from Sydney
See Note B, Appendix.
; and, 2nd, to a new building to be forthwith, constructed for it at Te Waimate, (of which the framework was subsequently erected, and then blown down in a gale,) yet, nevertheless, it remained in this room, for a few years, and in this room the New Testament (with several other books) was composited and printed.

And here I should also mention the reasons which swayed the Committee of Missionaries respecting the future and fixed location of the Press, these were chiefly three:—1. to be near to the Editor of the New Testament, the Rev. W, Williams, who was soon to remove to the inland station at Te Waimate;—2. to be away from the constant interruption pertaining to a Statical at the Harbour;—3. to be safe from Maori inroad and pillage; (this last had reference to the types, as Maori Chiefs had passed significant remarks on inspecting them and handling the big quadrats and *Canon* size capital letters; and the Bay tribes were in a very unsettled state, talking of going to war among themselves; this state of things was the main cause for removing the Press to the large and strong stone building at the Kerikeri station).

§ 5. THE PRINTING OF THE FIRST BOOK.

As all parties both European (Missionaries) and Maori were very desirous of seeing something printed, it was arranged, (1) that the Missionaries at Paihia should supply some writing-pawl for that purpose from their small private stores: (2) that the *first* sheet from the Press should be a portion of the New H.B. HERALD LITHO. Paihia from the islet Motuorangi Testament and printed in book form: (3) that as it must necessarily be, under all the circumstances, some small book, it should be the Epistles to the Ephesians and the Philippians, which the Rev. W. Williams (afterwards, Archdeacon, and also Bishop of Waiapu, and one of the founders of this auxiliary branch of the New Zealand Institute,) had lately finished translating into Maori; so, on the 17th of February, 1835, I pulled proofs of the first book printed in New Zealand; the Printing-office being filled with spectators to witness the performance. And on the 21st of the month, twenty-five corrected copies were printed and stitched and cut round for the Missionaries; their wives kindly furnishing a few sheets of pink

blotting-paper from their desks wherewith to form coloured paper covers for these tracts; which, of course had first to be pasted on to stronger paper. This little book was in post 8vo., Long-Primer type, and consisted of 16 pages in double columns. For leads I was driven to the miserable substitute of pasting paper together, and drying and cutting it up! not being able to obtain any card or cardboard. My good Joiner (always willing to assist) tried his hand at making reglet, but was obliged to give it up. And not being able to manufacture a roller, from want of the proper materials, I was obliged to do my best with a small make-shift "ball" of my own contriving. I may add, that of this little first pamphlet, 2000 copies were ultimately printed, some folio post writing-paper having been found at the large Central Mission Store at the Kerikeri Station.

§ 6. Removal of the Editor and chief Translator to Te Waimate, a distant Mission Station: his Separation from the Press.

Not long after the printing of the first book, in the autumn of that same year, the Rev. W. Williams, his wife and family, removed from Paihia (where they had resided for several years) to Te Waimate Mission Station, inland. At that time there was no resident clergyman at that place, nor nearer than Paihia (a long day's journey); besides he was now stationed there by the Committee of Missionaries, to conduct the large boarding school of the sons of the Missionaries, which was to be carried on there for the future. I mention this circumstance, as it separated (in distance) the chief Translator and Editor of the New Testament from the Press, which proved to be a great disadvantage, and serious hindrance to the carrying on and early completion of the work. At first, however, it was determined to build a large printing-office at Te Waimate; and in time the framework of the same was erected there;

It was to be a two-story building, and not long after erection was blown down by a violent storm and never re-erected.

but as sawn timber; was not easily procurable (though in the midst of *kauri* forests), the work was delayed, and eventually it came to nothing.

§ 7. Of Te Waimate Station, and the Road thereto.

Here I should briefly mention the geographical position of those two places or Mission Stations. Paihia (as I have already shown) was on the immediate sea-shore; Te Waimate was about half-way across the island, between the Bay of Islands and the head of the Hokianga river; not very many miles distant (perhaps sixteen) in a direct line from Paihia; but in those days of no roads nor bridges, and scarcely even a Maori track between the two Stations, it was considered a good day's journey (on foot of course,) from the one Station to the other; a portion of the way being circuitous by the sea-shore made the distance to be more than twenty miles. There were also two uninviting places to be crossed; the one at Whauwhauroa, a broad muddy estuary lined by mangroves, unfordable save at low-water or nearly so and then only by stripping and slowly and cautiously finding one's way with a long pole, wading through deep tidal mud;

Sometimes, but rarely, a visitor or traveller would be taken thither in a boat from Paihia at high water to the landing place on the opposite shore.

and the other the big river Waiaruhe, equally impassable after rains which also, a little lower down from the ford in its course, forms the Waitangi waterfall. Indeed this, the nearer way, was so very bad, that Mr. Williams, his wife and family, and his goods, all went by the much longer and roundabout one,—across the Bay and up the long Kerikeri river in boats, and thence to Te Waimate by a track over the high open land,—which altogether might occupy three days.

§ 8. Of other matters Printed in 1835.

Having obtained a small supply of folio post writing paper from the Mission Store at Kerikeri (all there was!)—1000 copies of the Gospel of St. Luke, 67 pages, post 8vo., were printed and bound during this year. Also, some Proclamations and Circulars (or the British Resident, in both English and Maori, respecting the arrival and assumption of the Baron de Thierry and his party; and of the murderous night attempt on the life of the British Resident by a Maori, which, for some time, caused great sensation.

See Note C, Appendix.

Some hundreds of old Maori books, (of the small 4to. edition printed at Sydney in 1833,) much worn, very dirty and ragged! were also strongly bound.—

§ 9. Of an Inking-table and Imposing-stone.

I had found it a difficult matter to get on without an iron Inking-table, but the want of an Imposing-stone was a far more serious one. For the former, I had substituted a small wooden table (14 x 28in.), the top made out of a broad plank of a hardwood tree that grew on the cliffs nearby, (Pohutukawa = *Metrosideros tomentosa;*) for the latter I had no other alternative than to use the iron "table" of the Printing-press; this was anything but pleasant, but there was no help for it! On my early rowing up the Kerikeri river, I had noticed the many black basaltic boulder-stones of various sizes, fantastically scattered and piled and even ranged in natural rows in many places; and J thought that one of them might be made to serve and do good service if it could be cut. This was eventually done by Mr. Edmonds, (a Catechist of the Church Missionary Society, residing at the Kerikeri Station, who, at Home, in England, was a stonemason by trade,) although when a fitting size block was found at last, and conveyed to the Station, it took him a long time to cut it into two parts (after having been trimmed and squared) through the stone itself being so excessively hard, and his not having any proper appliances for the purpose. And when cut and their surfaces smoothed they were found to possess several scattered vesicular cells, which had to be filled up with cement. Still, they were a useful pair of stones, and when, at last! (in March, 1837,) I got them brought down in our little Mission Cutter (Te Karere) from the Kerikeri Station, and also got them mounted on frame with drawers, made at Kororareka (now Russell) by my joiner, I felt happy and thought I was rich! This is the first, perhaps the only, instance, of a pair of large Imposing-stones made out of a boulder of basalt, and therefore I relate it. I often heard the remark, that the cutting alone of those two stones cost the Church Missionary Society, on the lowest calculation, considerably more than *£20;* of course they were both from one block sawn asunder, and roughly squared and trimmed on their outsides, and very thick!—

§ 10. Printing the first English Book and Placard.

On May 19th, 1836, the first English book was printed at the New Zealand Mission Press; a small unpretentious book of eight pages, post 8vo., containing the first "Report of the New Zealand Temperance Society." Placards also in English, and the first ever printed in New Zealand, calling a Public Meeting to establish the said Society, were printed and circulated the month before.—

§ 11. The Commencement of Printing the New Testament.

("Opus manuum nostrarum dirige.")

We had heard of the arrival at Sydney of our long-looked for supplies of paper and printing materials from England; therefore, on the 23rd of March, 1836, (having recently received a few sheets of first "copy" from the Editor,

His kind note which came with them is so characteristic of him, that I am tempted to make an extract from it.—See Note D, Appendix.

) I commenced compositing the New Testament. It was long, however, before we received those necessary supplies from Sydney; so that I did not commence printing the Testament until the 23rd of June,—and then *alone*, without any assistant 1 (A MEMORABLE DAY AND TIME WITH ME!) It had been already decided by the Committee of Missionaries, that the New Testament should be of demy 8vo,. size, and in Small-Pica letter, and should consist of 5000 copies! (4000 had been at first fixed on, but at the very earnest request of the Wesleyan Missionaries, 1000 additional copies for then was added thereto.) Finding I was advancing very slowly, and the work long and heavy, I engaged three steady Christian Maoris, (adult and tattooed chiefs from Te Kawakawa,) Andrew, Joseph, and Hamo, to work as pressmen. But while, at first, willing to learn and to work (*in their way*), they caused me so much trouble and anxiety, and also loss, (besides their getting to dislike the work, as being wholly unsuitable to their habits, there was so much standing, and that too in one place,) that I was obliged to dismiss them and to do without them, and go on, as before, *alone!* The youthful Maoris of that day would not work at all, and could not be trusted. Indeed I had tried some sharp intelligent Maori youths (sons of neighbouring and friendly chiefs) during the past year to roll the forms, while engaged in printing the gospel of St. Luke, and some other smaller works; but they soon got tired and left me, just as they were severally becoming useful; this was in a great measure owing to their being obliged to stand so long in one spot at their work.

See Note E, Appendix.

As a bit of curiosity I may mention, that the wages I paid to those three men, as agreed upon between us,

was 3s. each per week, and their food,—this latter mainly consisting of potatoes and other edible roots of Maori cultivating. Three were engaged, as while two (in turn) worked at Press, the third did the simple cooking, getting water, shell-fish and firewood.—

"All service ranks the same with God—
With God, whose puppets, best and worst,
Are we: there is no last or first."—
Browning.

§ 12. Of the peculiar Hindrances to the Progress of the Work.

Here, I think, I should briefly mention the hindrances or obstacles in the way of carrying on this important work; for unless I do so, such would not be known, nor even guessed at. These were many, and may be classed under three main heads; viz. (1) on the side of the Editor: (2) on the side of the Press and Printer: (3) Sundry.

I. *Those on the side of the Editor, were:*—(1) His own heavy and constant daily public duties, besides those appertaining to his own growing family, arising from his being the only Clergyman at that Station, and indeed in the whole North inland District, extending from Mangakahia on the South to Kaitaia the most Northern Station: (2) from his being the Master and the only Teacher in the Mission Boarding-school for boys: (3) from his being the only resident Doctor and Surgeon in those parts: and (4) from his residing so far away from the Press, with which he could only have distant, precarious and irregular communication,—scarcely on the average of once a fortnight; and then only by special messenger, and not unfrequently at some risk.—

II. *Those on the side of the Printer and the Press*.—These were also manifold, heavy and unceasing. For, in addition to those of his own separate department of the Printing-office and Binding room, (in two houses far apart,)—all of which had to be performed by him alone; there were the common daily public duties of the Mission Station, of which he had to bear his share. The rule of the station was, that out of the three resident Missionaries, comprising the Rev. H. Williams and Messrs C. Baker and W. Colenso, one was always to remain at the Station; this was absolutely necessary on account of visitors, both Maori and settlers in the Bay, and also foreigners from ships at anchor; and my own particular duty in the Printing-office confining me at the Station during week-days, a larger share of the home or Station duties frequently devolved on me. Besides I alone had the charge of the Surgery, the attending to patients, and the making-up and issuing of Medicines; occasionally informing Rev. W. Williams of severe and peculiar cases for my guidance. My daily week-day duty commenced with early morning Maori prayers in the chapel, and adult male school in the open air in its grounds when fine, when showery in the chapel, and the keeping the roll and books of the School; that over, to return to my house and prepare and get my breakfast, and then to the Printing-office or Binding-room according to what work might be; in hand. Then there was the warehousing work, (viz. the receiving of paper and other printing stores, the packing and sending off of books &c., to the different Mission Stations,) also; the keeping of the accounts of the Printing-office, both for receipt) and expenditure of material and money, including periodical] returns both for the Committee of Missionaries in New Zealand and for the Parent Society; and not unfrequently the tiresome jobs of bartering with the Maoris, for potatoes and other edible-roots, maize, pigs, fish &c., &c., which necessarily took up a great deal of time, so much of it being *new* to me! and the Maoris utterly regardless of the value or the waste of time; and also twice a week attending to the delivery of rations, and many other necessary and common things in daily use: the "rations" included the cutting-up and weighing out of pigs (pork), weighing out of potatoes, flour, rice, &c., &c., for the Mission families and the inmates of the European Girls' Boarding-school (approaching 50 persons

Both of the two senior resident Missionaries had very large families, nearly one dozen of children in each.

), also for all the Maori domestics and workmen of the Station, in number about another 50. This work, however, for some time, was mainly undertaken by Mr. Baker when at home and well, before that he removed to Waikare Station. Of course there was also the cooking to be attended to,—another heavy item with me, as it included the making of bread; (no Bakers, nor Butchers either, then in the land!) this was mostly done by me on Saturday afternoons. The having to go to-and-fro so very often daily, from my dwelling-house to the Printing-office, situate far apart, was another item causing great loss of time,—to say the least of it. Then, at night, was the learning the language, &c., &c., mainly, if not only, to be obtained from oral intercourse with the Maoris.

Sundays, also, were my heavy days of work; on these there was no rest for me. Indeed my duties on Sundays were generally heavier than on weekdays; whether it was my turn to remain at the Station—to hold

Divine Services there, or to go out to the Maori villages to do so. *If at the Station*,—then there were invariably (weather permitting) four or five Church-of-England services; four at the Mission Station, viz. two in Maori, early morning and evening, and two in English at 11 a.m. and 3 p.m., which several of the more respectable English settlers residing on the opposite shore of the Bay, together with the British Resident (Mr James Busby) his lady and family usually attended weather permitting, and frequently captains or officers and a few men from ships; and, also, at 2 p.m., at Kororareka (now Russell) on the opposite shore of the harbour, to which place we always went in our boats, the only mode of communication; usually the Missionary who had taken the two morning services at the Station had to cross over to Kororareka and take the two afternoon Services there, (one in English and one in Maori,) besides visiting the sick Maoris, &c., and then late in the evening take the Station Maori Service on his return, (this last often performed in excessive weariness!) *If away from the Station*,—at Kawakawa, or at Waikare, (or at some of the other Maori villages on the shores of the Bay,) then in order to get there in time and with the tide, (always some hours pull or sail,) I often had to leave the Mission Station by sunrise, or earlier, and return at 8 or 9 p.m., hungry and completely worn out! and that partly through travelling some miles over hilly country on foot, after landing from my boat, to get to the Maoris at their several villages: sometimes, when wind or tide or both against us, I have not been able to get back to the Station till midnight, or early morning, after pulling perhaps six or seven hours!—I ought not to omit to mention the good praiseworthy conduct of my young Maori rowers, &c., *at such times* of trial; but in order to obtain it, or to keep it up, one must ever be in a good humour I at such seasons not always an easy matter.

III. *Sundry:*—To those already mentioned must also be added certain abrupt obstacles of another kind, often of a very serious nature, which could neither be foreseen or provided for as, for instance:—

- The state of the weather; for if wet, (heavy rain which sometimes lasted two or three days,) especially in winter,—the young Maori messenger could not well perform the journey on foot, whether to or from Te Waimate; besides we all knew, from sad experience, that the Maoris were careless and prone to sleep in their wet clothing, especially when tired and in a strange! place, which frequently ended in consumption. And just so it; was for a few days after heavy rain, as the big river Waiaruhe would then be flooded and impassable at the only landing-place, its current too, at such times being very strong: Europeans have been drowned there.

  See Note F, Appendix.
- The dislike Maoris always had to travel alone to any distance. This was a national feeling and not to be wondered at nor trifled with. At the same time they frequently paddled singly in their small canoes many miles up and down the rivers and estuaries of the Bay, when they could see around them for some distance and so be free from surprises. We generally had a pretty large number of Maoris dwelling with us at the Mission Station, but most of them (sometimes all) had come thither from other and distant tribes to be taught in our schools; and these grangers could not be sent on any such journeys, over the lands &c., of other tribes, who might have been their deadly enemies in the past, or have some grudge still unavenged; neither could they have been induced to go.
- The uncertain capriciousness of the Maoris (in those days), rarely ever to be depended on for coming at the time appointed; Use one engaged as a messenger being continually liable to be tailed away, or to turn aside, or to loiter, and be almost sure, after he had arrived at the place to which he was sent, and delivered his packet, to want to rest for a few days, or to visit some relative or clansman in the neighbourhood, where he would while away two or three days or more; indeed, to do so, would often be the real ground of his going as a messenger.
- The interruption occasioned by travelling or voyaging parties of Maoris coming peacefully or otherwise to the Station, and which for the time upset, or put a stop to, all regular occupation;

  See Note G, Appendix.

  not unfrequently causing the Missionaries and their Maori residents and domestics to be on the *qui vive!* Here, also, must be placed the interruptions caused by unexpected European visitors,—as by the Captains and officers of Ships of war; the last visit to the Station and New Zealand of the Rev. S. Marsden and his suite, &c., &c.

  See Note H.
- Also, in stormy weather, the hauling up of all our boats and canoes on to the high bank above the sea-beach as a place of safety; and, again, the saving of the few head of cattle belonging to the Station from being lost in the neighbouring swamps, into which they sometimes ventured in quest of food, and could not intricate themselves.
- And lastly, during the year 1837, great and serious and long-continued hindrances arose, owing to the Ngapuhi tribes in the Bay of Islands fighting among themselves; this was their last battle—or series of battles, for it continued several months, during which many on both sides were killed and wounded.

  See Note I.

Of course this sad unsettled hostile state of things proved to be a great hindrance to any communication by a single Maori messenger between the two Mission Stations.

§ 13. THE PRINTING OF THE NEW TESTAMENT—*continued*.

To return: My three Maori neophyte pressmen having left me, and of course taken back with them to their *pa* (village) and people a full and particular account of the many disagree ables inseparable from this new and wonderful art of printing there was no longer any hope of fresh Maoris in their place, (nor did I wish to have any more,) so on their leaving me in August, I was obliged to carry on my heavy work *alone*, and that very slowly; what served to make it worse, and to embitter it, were my many interruptions and extra burdens,—not a few of which might have been lessened if not avoided: (my feelings at that critical period I will not attempt to give).—Thus it continued till the middle of November, when I accidental fell in with two young pressmen on board of an America! whale ship, and as they were desirous of leaving their ship I engaged them; their names were Henry Mann and John Bevan; and as these men had worked as pressmen in America I record their names as my first trained helpers in the work of the printing the New Testament. Unfortunately, however, they only remained with me until near the end of January, 1837, (just nine weeks,) when they left. No doubt the isolation and quiet of the Mission Station, and the great difficulty of their getting any needful supplies, (save the common rations already mentioned,) had much to do with their leaving me; they were quiet industrious men. I may also mention, that their wages were, each 5/-per day, and they worked 5½ days a week. This latter their own choice, as they spent the Saturday after-new attending to their own private matters; also in going acres the harbour, when fine, in one of my boats, to the Storekeeper on the opposite side, about three miles distant, to purchase stores.

Here I should state, that the American whale ships (which at that period came frequently into the Bay of Islands to obtain supplies) were always manned with a very different class of men to those of our English ships. The crew of the American ships were not usually trained sailors, but young workmen of almost all trades; men who, tired of their occupation, or desirous of seeing the world, or of going on a voyage of adventure and sport, engaged on board of those ships; yet they generally worked well together there, and seemed happy:—I had seven opportunities of observing them in my visiting those ships, where I sometimes partook of their free and kind hospitality.

Once more, being left, I carried on *alone;* and this continued about a month; when, on 23rd February, I again met with two more American pressmen on board of one of the American whalers at anchor in the Bay, and they being willing I engaged them. Their names were James Powell and Charles Upham; the former remained with me scarcely five months, leaving in July; but the latter remained until the printing of the New Testament was completed, in December, 1837.—They were both very quiet industrious steady men; it was even A rare thing to hear them talk! Upham in particular was a very peculiar man, a thorough American, even to the chewing of tobacco! and a good quiet steady hard-working fellow; excessively quaint in his few remarks made at intervals. The wages I paid these two men were, at first, the same as to the two former pressmen, 5/-per day; but after a short time, at their own request, their pay was altered to 25 cents, or 1/-each per "token," (10 quires = ½-ream,) besides which, as they could not be always at press-work, they were paid 12 cents, or 6d per hour for other work connected with the Printing-office and Binding-room, and Warehouse,—as, in drying, and press-ling, and folding the sheets, &c.; but would never do anything in the way of distributing type, and even if a letter should be drawn out, or be broken in their working-off the forms, (which sometimes though rarely did happen,) they would not, or more properly could not well, replace it; and spoiled paper (if any) they had to pay for,—which, however, did not amount to much. Upham worked alone at Press for a period of six months, after his companion left, (always a disagreeable and slow process for *one* person,) and, of course, from that time he was paid 2/-per "token." He was a very good and trusty pressman, and kept the "colour" well up, and his rollers, &c., in nice working order. During the whole of the time they continued with me they never once got into altercation or trouble with the Maoris.—

§ 14. COMPLETION OF PRINTING THE NEW TESTAMENT.

The printing of the New Testament, consisting of 356 pages, being at last accomplished by the middle of December, 1837,—a cause of great rejoicing with me! (and also many others who were in eager expectation of receiving a copy;)—the next step was to get the books bound. By dint of steady persevering labour I was enabled to finish binding a few copies in calf on the 30th December, for distribution to the Missionaries on the approaching 1st January, 1838, as a New Year's Gift; which was heartily welcomed with many thanks and correspondingly valued by them. Now the demand for copies became great beyond expression, from all parts of New Zealand where the Missionaries were known, or to which Christianity had extended' finding it impossible

for only myself—unassisted—to get then bound fast enough, (and there were plenty of other useful and needful works awaiting publication,) the Committee of Missionaries met, and I was instructed to send a quantity to Sydney, in lots of 500 at a time, to be bound there; having first arranged with a Sydney firm as to price, &c. These were all bound in cloth, but were not so strongly and carefully bound as those which I also bound in linen cloth at Paihia. And as it was well-known, that the Maoris valued more highly an article they had paid for, than one given to them, it was also decided that the book should be sold, and the price fixed for it was 4/-,—a rather large sum in those days for the Maoris to raise, (as they received but a very low price for all their articles of barter, which, as a matter of course, was very rarely ever paid in coin,) at the same time many copies were given away. The 1000 copies in sheets were soon handed over, as promised, to the Wesleyan Missionaries residing at Hokianga, who sent them to England to be bound.

§ 15. Notice of some Pleasing Occurrences, showing the High Value set by the Maoris on the Book.

Many remarkable incidents happened at this time, showing the extreme value placed by the Christian and well-disposed Maori Chiefs on the Sacred Volume; all of them would prow highly interesting; one or two I will briefly mention. The powerful Chief of Kaitaia, (near Ahipara and the North Cape,) Panakareao, (afterwards Baptized and named Nopera = Noble,) wrote me a letter for a single copy; and in order that it should arrive the more dignified, he sent it all the way by a special messenger, (a long journey of several days through a wild and little-known dense untravelled forest,) and with it he sent me *£1* in *gold* for payment, strictly limiting his request to *one* copy only! It was the *first* sovereign I ever saw with a Maori, or in this Country, (indeed, silver coin also was very scarce, rarely seen or used,

See Note J, Appendix.

) and the letter and the gold were well-secured being wrapped-up in folds of cloth, and bound and worn turban-fashion night and day on his head. And as not many of the principal Maori Chiefs or their sons could then write, many of them travelled on foot and barefooted to Paihia, from very great distances, to obtain a copy; at the same time running no small risks in their doing so, owing to the unsettled unavenged old feuds which still existed. Several distinguished early foreign visitors also got single copies by asking,—as the Bishop of Australia, Admiral du Petit Thouars of the French Navy, Capts. P. P. King, and Harding of the British Navy, Commodore Wilkes of the American Exploring Expedition, &c., &c.—In fine, and in spite of the utmost care, the whole edition went away so fast, that a new edition of 5000 copies, in 12mo., was speedily printed in England by the British and Foreign Bible Society.

§ 16. Foreign Congratulations on the successful Performance of the "Work: this Edition of the New Testament the *FIRST* published in the Southern Hemisphere.

Among the number of kind congratulatory letters I received from many and distinct quarters abroad, on the finishing of the New Testament, I may be allowed to give an extract from a high official one written by the Clerical Secretary of the Church Missionary Society, the Rev. William Jowett,—a good man! his letter is truly *sui generis* and highly characteristic of the writer.—

"Church Missionary House, London, "Dear Mr. Colenso,

December 17th, 1838.

** * * * "I desire to turn your thoughts to the peculiarly useful (and therefore honourable) department which you do occupy. The sight of that New Testament in the Native language, which you have been privileged to carry through the Press, is such a sight as fills my heart with indescribable joy. Think now to what great ends it is capable of becoming instrumental. Preachers will preach from it: Families will conduct family-worship by it: Conversations innumerable will be held upon it: it will help private self-examination: it will help those who conduct examinations of the professing Native Christians: it will be for private meditation and prayer: it is the Standard of Wisdom of every kind: it comes in most seasonably with a flood of light to resist the invading darkness of" (the time): "it will, moreover, help the fixing of the language; and school-books, and many other books, will grow out of it. No doubt the Spirit of GOD will use this sword!*

"Then it may be well to consider, that we are only instrumental in this matter. We did not make the Book; Divine Inspiration gave it. You did not translate it; others did that But you were at hand with the art—hidden

for ages—by which this great and simple work, this unmiraculous miracle, was produced.

"There is on every side cause to be thankful and humble, The Lord make you and me to be so, and that habitually! I have often heard persons of the highest talent say, that they would gladly be hewers of wood and drawers of water in this cause. One had better not say too much for one's self,—but I could almost fancy that were I a Christian Nobleman, and had the choosing of a humble but most useful office in the Missionary field, it should be that of a Printer, to print the Holy Scripture and Religious Tracts. Now this office you have: Bless the Lord for it, and serve Him in it!

"I remain, Yours most truly,

"Mr. Colenso."
(signed) "WILLIAM JOWETT."

From the date of this letter may be well-inferred the length of time it took for a letter, &c., to go Home and to be answered, (as alluded to by me in § 3.) I had sent bound copies of the New Testament by first direct ship in April, 1838.—It was known that those whale-ships always sought for whales on their way Home, and so made long voyages. It will, also, be seen, that Mr. Jowett wrote thus fully and kindly to cheer and encourage me in my work; having known from my daily journal (which we were all bound to keep and forward regularly to the Society,) how I had been situated. I have given a longer extract from his letter than I had intended, to record his Christian hope and belief of the great and manifold benefits to be derived from the printing of the New Testament in the Maori language, (in which he was also joined by all the Members of the Church Missionary Society;) as well as to show his valuable opinion of the Press and its introduction into this Country; he too being an author of several works.

And here, perhaps, I may also mention, the little-known but astonishing fact, that this edition of the New Testament in the language of New Zealand was the *first* publication of the Sacred Volume entire in the Southern Hemisphere!

—" Sail on, O Ship of Life,—
In spite of false lights on the shore,
Sail on, nor fear to breast the sea!
Our hearts, our hopes are all with thee,
Our hearts, our hopes, our prayers, our tears,
Our faith triumphant o'er our fears,
Are all with thee,—are all with thee!"
—LONGFELLOW: "*The Building of the Ship*" (slightly altered).

§ 17. OUR HOLIDAY ON THE COMPLETION OF THE NEW TESTAMENT.

The Committee of Missionaries very kindly granted us two (the Editor and the Printer of the New Testament) a holiday,—or relief from heavy and constant daily duties which had long been pressing on us both; it being also the time of the Christmas vacation with his School. And with the New Year, (1838,) we were directed to visit the Natives at the East Cape and Coast on to Poverty Bay, (then an almost unknown district,)—so we left the Bay of Islands on our voyage thither, on the 1st January, and returned on the 13th February following.—Our journey of several weeks among those hitherto unknown parts and people was a very interesting one, highly romantic in not a few instances;

See Note K, Appendix.

one benefit to the Press resulting therefrom I may here briefly mention, viz.,—that out of the nine youths I brought away with me from the East Coast for instruction, two of them I succeeded in training to become fairly good and useful pressmen in the following year, 1839.

§ 18. A FEW REMARKS ON THE NEW ZEALAND LANGUAGE, AND THE CHARACTERS OR ALPHABET USED IN THIS EDITION OF THE NEW TESTAMENT.

When Professor Lee of Cambridge in 1820, supervised and methodically arranged the MSS. of the New Zealand language,—that "had for the most part been previously collected by Mr. Kendall, who had for several

years resided as a settler in New Zealand under the auspices of the Church Missionary Society: and who, on his return to England, took two Native Chiefs with him, Hongi and Waikato;"

See Preface, Lee's "Grammar and Vocabulary of the Language of New Zealand," page 1.

Professor Lee (or Mr Kendall) gave the five vowels (still retained and in common use) and twenty consonants; so making the New Zealand Alphabet to consist of 25 letters or characters,—much the same in fact as the old and common English one, with the sole exception of the letter *C;* and yet one essential sound or character was not provided for. In course of time, however, this long alphabet wag found to be not required; and no less than eleven consonants were discarded,

These discarded consonants were B, D, F, G, J, L, S, V, X, Y, Z.

and the alphabet correspondingly simplified.

On my leaving London in 1834, for my sphere of labour in New Zealand, I applied at the Church Missionary House for a copy of Lee's "Grammar and Vocabulary," published by them; and I was informed that I had better not study one on my way out as it was in many places incorrect: so I came away withal a copy. On arriving in New Zealand, I found the language had been lately settled by the resident Missionaries; (as, also, recently used by them in some portions of Holy Scripture, prayers, and hymns, that were printed at Sydney for the Mission in 1833;) and this orthography was further adopted in the printing of the New Testament, and other early books and papers.

Still, there were grave objections to the combination of the two English consonants *n* and *g*, to represent the nasal sound, or *ng*, (as given by Kendall and Lee,) such being complex and unwieldy, when a new and much more simple character (say half of the *n* and half of the *g*) would serve, and in writing be more quickly made; this objection, however, was overruled, on its being shown, that some of the New Zealand tribes, particularly the Ngatiawa, only used the *n*, dropping the *g* sound altogether!

I was not very long in the Country before I discerned, that one more character or letter, was absolutely necessary to make the New Zealand alphabet perfect; this was early made very apparent to me while conducting the adult Maori school, as I saw from the want of it the Maoris themselves often made both ludicrous and grave mistakes in their reading in class the Sydney printed books; where the consonant *w* was made to stand and do duty both for its own simple sound of *w*, and for the more complex one of *wh*.

In course of time I wrote a long letter on the subject to the Committee of Missionaries, showing the need of the wanting character being supplied, and also how it might better be formed, from several printed examples in large and small letters, as, *w#, wh f*, and *v*. To my letter an official reply came from the Secretary, informing me, that the Committee of Missionaries did not see the necessity of any alteration or addition to the Maori alphabet.

See Note L, Appendix.

And so the New Testament was printed according to the then established orthography.

Notwithstanding, my expressed opinion grew, and was supported by several, and among others by the Wesleyan Missionaries on the West Coast, who adopted the *wh* to represent the sound not already provided for. I had certainly preferred the more simple form of *v*, (so easily written,) which, together with *f*, had been also used by some of the Missionaries in the South Sea Islands to represent that common Polynesian sound. Subsequently, the Rev. W. Williams, and the Rev. R. Maunsell, agreed with me in this. .

In 1842, the Bishop of New Zealand, Dr. Selwyn, arrived in New Zealand, accompanied by his Chaplain, Rev. W. C. Cotton and others; and in the following year (1843), a Printer having arrived at Paihia from the Society in England to take charge of the Mission Press, I went to reside with them at St. John's College, Te Waimate. They had seen the letter I had previously written to the Committee of Missionaries, and agreed with it; and as the Bishop had a very small printing-press and type of his own, at which small notices, bills, leaflets, and single pages, were frequently printed in Maori, (though not by me,) Mr. Cotton adopted the *w* with an apostrophe (thus, *'w*,) to indicate the wanting character for that particular sound, and a type was struck at Home at Mr Cotton's expense, to represent it, and in course of time used there at the Bishop's press. For my part, however, I never cordially approved of it, as it was not so simple as the *v*, and not quickly written, the accent like apostrophe might be easily broken off, and it was opposed to all established Poynesian alphabets. In subsequent years that new character Was abandoned and the *wh* adopted, which has long ago become general and fixed, as we now have it.

In concluding this section of my paper on the orthography of the Maori language, I would give an extract or two from Cook, and also from Forster,—the talented German *savant* who accompanied him on his second voyage to the South Seas, and who did so much under great difficulties. The marvel with me has ever been that Cook and his party on the whole managed so well as they did, which must mainly be attributed to their having the Tahitian native Tupaea with them as *quasi* interpreter. Capt Cook says, in his genuine racy way:—

"It is the genius of the New Zealand language to put some article before a noun, as we do the or a; the articles used here were generally he or ko: it is also common here to add the word öeia after another word, as

an iteration, especially if it is an answer to a question; as we say, yes indeed; to be sure; really; certainly: this sometimes led our gentlemen into the formation of words of an enormous length, judging by the ear only, without being able to refer each sound to its signification. An example will make this perfectly understood:—In the Bay of Islands is a remarkable one, called by the natives Matuaro. One of oar gentlemen having asked a native the name of it, he answered with the particle, Komatuaro; the gentleman hearing the sound imperfectly, repeated his question, and the Indian repeating his answer, added öeia, which made the word Kotnatuaroöeia; and thus it happened that in the logbook I found Matuaro transformed into Cumettiwarroweia: and the same transformation by the same means, might happen to an English word." [Of which he gives examples.]—Voyages, vol. iii, p. 476 (original 4to. edition).

Unfortunately, however, similar errors still continue here among us! notwithstanding their settled, plain, written, and printed tongue.—

I have often been struck, some 40-45 years ago with the close phonetic rendering of many Maori names of Birds, Fishes, &c., by the two Forsters (father and son), and with the large amount of patient toil they must have experienced in taking them down; albeit their orthography, at first sight, abound in harsh double consonants, looks very barbarous, and is anything but tempting: also, with those of Lesson and other) Naturalists belonging to the French Discovery Expeditions of 50-60 years ago. Of course their orthography varies much from the far simpler one adopted in rendering the Maori tongue into writing; still it is such that I could have beneficially used in my early enquiries among the Maoris, which is more than can be said of many (so-called) Maori names more recently written and published too in this country! A few of those old Maori names of Birds I will give here from Forster, as a curiosity. It will be seen that he, in many instances, adds the indefinite article (*he*=a) to the name of the Bird, and uses *g* and *gh*, hard for *k:*—

§ 19. Of Pay and Rations, viz., Money and Food.

I have in this paper said a little about pay (to Maoris and American pressmen) and rations; perhaps I had better say a little more on these subjects; as, at the present day, they must appear somewhat antiquated, and my further information may serve to amuse if not interest you.

I. *Of Pay:* Money (coin) was not then in use in dealing with the Maoris, (nor indeed in dealing with whites, who were paid in Orders, which they parted with at the Stores.) With the Maoris, whether for wages or for articles brought for sale,—as pigs, fish, peaches, melons, pumpkins, potatoes, maize, *kumara* (sweet potatoes,) &c., it was invariably a matter of barter.—Sometimes, two, three, or four canoe-loads, belonging to different parties, landed and stacked on the beach, were purchased and settled for in an hour or less; at other times the purchase of a jingle pig brought for sale might occupy (if allowed) half a day. The Mission goods sent out for that purpose were always good useful durable articles, whether iron ware,—as axes, spades, iron pots, knives, &c., or soft goods,—as blankets, prints, calico, shirts, trousers, caps, &c.; and as these English goods were well appreciated by the Maoris, we generally had plenty of enquirers or barterers, whenever they had produce for sale. A large and constant supply of pigs and potatoes was required by the Station. Sometimes, however, we knew what it was to want—for a season, especially in times of drought and scarcity; but the shell-fish (principally cockles) in the adjoining sea-banks; were always available and prized. At such times we had to purchase Rice and Biscuit from the Stores in the Bay for vegetable rations to our Maoris, and sometimes obtained a large lot of Yams, brought for sale from the Islands further North, for the same purpose. Pork was the only Butchers' meat known to us for many years,—the flesh of wild, or Bush pigs, and very good it was. We had also some fowls and eggs, and fish, too, occasionally, but not a full supply. Milk and butter were not to be had (by me) for many years after my arrival. The sum of 3/-per week (with simple rations) to each of my three Maori pressmen, must *now* seem ridiculously small, but it was not so considered then; indeed, it was the highest rate known. At that time, useful foreign articles of common use among the Maoris were cheap, and they, in their frugal simple way of living, did not need many; and tobacco was under 6d per ., and not yet in common use.—

Some, perhaps, may wish to have their curiosity satisfied as to my own pay, or salary; for several years this was £30 per annum, (fixed by the Home Committee, and to commence on my arrival in New Zealand,) with rations, and a "*whare*" (small house) provided, but no furniture. I did not know anything about either pay or rations until I arrived in New Zealand; I had never enquired in England; I never cared to do so.

II. *Of Rations:*—The rations furnished us, consisted of five principal foreign articles, viz. Flour, tea, sugar, salt, and soap, and whale-oil and ball-cotton wick for a small (shilling) japanned hand-lamp; and also two Maori articles of food—potatoes and pork. The weekly allowance of foreign rations was very small and generally served-out every half-year; it was said to have been the same in quantity as the convicts' allowance in Sydney; a single ration not being sufficient for one person (as in my own case), but a number coming together—as in a large family where all received rations, did better. I have still an official note of January,

1836, from the Secretary Committee of Missionaries, informing me, (in reply to my note respecting the smallness of the rations issued,) that my future "ration of sugar was increased from 1lb, to 1½lb., and of tea from 2oz. to 3oz. per week;" the sugar served out was only the soft brown kind, and not unfrequently obtained from Tahiti. Some, or most of those rations were charged high,

I quote from an official memo., sent to me:—"Flour, 6d per lb.; Tea, 3/-do.; Soap, 9d. do.; Sugar, 6d. do.; Pork (fresh), 3d. do., and (salt). 4d. do."
i.e., in one's wanting any quantity *beyond* what was allowed;—this was done, not to make any profit, but to meet heavy extra expenses and loss. Flour, for instance, when made from wheat grown on the Society's farm at Te Waimate was nearly double the price of the same article when imported from Sydney for the use of the Mission; and we were, in a measure, obliged to take it! The extra price for Flour from the Church Mission Farm, arose in part from the fact, of it being carted thence to Kerikeri across a rough country and no roads, there to be stored, and from Kerikeri to Paihia by boat or small vessel; all which additional charges for land and water carriage were added to that of growing and grinding the wheat.

§ 20. CONCLUSION.

Having thus briefly and somewhat disjointedly brought together and placed before you a truthful relation of matters pertaining to the Introduction of the noble art of Printing into New Zealand—the future "Britain of the South,"—I cannot lay down my pen without making a few final observations.—

- It seemed almost natural,—in this year of universally observed "Jubilee" I—that I, having been so long and closely connected with the "Divine Art," and having also survived the many who were my early co-workers in this Land fifty years ago!—that I should be desirous of placing on record at this period what I knew concerning the Press,—its birth and early yet slow growth, under many peculiar hardships and difficulties; which, however, have long ceased to exist; and which, were they not recorded, could never be conjectured. And all this, I fancy, will be more truly and fully appreciated a hundred years hence, than it can possibly be now.
- I have often looked back with much pleasure to the period of my long connection with the Church Mission and *first* Press in New Zealand; and at the quality the usefulness and the amount of the work issued from it. Notwithstanding it was a time of heavy labours and of much anxiety. The Press rightly used is a mighty power for good, none greater; but it is too often used in the opposite direction; and then, alas! the truth-fulness of the old adage is again clearly shown and seen,—"corruptio optimi pessima"—
- In my coming to reside in Hawke's Bay in 1844, I brought hither with me a small Albion Press and types, which I again found to be of great service; though, having a people scattered over a very large district to attend to, with its consequent heavy travelling on foot, there being then no roads, I could not use my little press so much as I wished.
- Happily there is no need for any one at the present day to attempt a panegyric on the Art of Printing, or the diffusion of light and knowledge through the Press; one might just as well vainly venture

"To gild refined gold, to paint the lily,
To throw a perfume on the violet,
Or add another hue unto the rainbow."—

Yet, the words of an eminent Printer of the beginning of this century, may, I think, be here aptly quoted, in connection with the advent of Printing into this (then) dark Land; (words used by him in vividly portraying the contrast between what existed in the days of the dark ages and the great and sudden change that attended the invention of the Art of Printing;)—

—"No sooner did this bright luminary [the Press] burst upon Europe than its brilliant rays, like the meridian sun, not only enlightened and invigorated mankind, but also dispelled the murky clouds which had for ages cemented the bands of Ignorance and Superstition." And again:—"For our own parts, we never think of the benefits conferred on mankind by this Art, but we feel our bosoms swell with admiration of the Divine Being for this inestimable blessing."—JOHNSON: "Typographia," vol. I, preface, pp. i and xii.

And heartily supporting those truthful noble words and sentiments, with them I close my Paper.

P.S. Printed books and papers, letters, locality map, sketches illustrative, accounts, &c., mentioned, or alluded to in this Paper, were all exhibit at the meeting of the Hawke's Bay Philosophical Institute.

Appendix.

Note A, page 7.

Having mentioned my printing for the Colonial Government on the formation of the Colony, I may here briefly relate a few circumstances in connexion with the same. My work began in January, 1840,—immediately on the arrival of H.M.S. "Herald," Capt, Nias, bringing Capt. Hobson, R.N., our first Governor,—and continued at intervals throughout that year. During the time it lasted my life was truly a heavy one—doubly laborious! and though in good health and strong and willing I was well-nigh worn-out, and obliged at last to inform the Government, (officially through the Committee of Missionaries,) that I could not do any more public printing for them; as much of our Mission printing was sadly in arrear, &c. During that year the new Governor resided at Okiato, (about three miles up the inner S.E. arm of the harbour from Paihia, and on the opposite shore,) where also were the Government offices; but many of their chief officers dwelt in different places on the neighbouring shores of the Bay where they could find suitable residence. A. curious circumstance occurred in the printing of one of the Proclamations of the Government, viz., that proclaiming British Sovereignty over all the Islands of New Zealand, which ran thus;—"extending from 34° 30# North to 47° 10# South latitude," &c. I duly executed the order, and subsequently pointed out to them what I deemed to be an error—*North* for South! Soon after that Proclamation was set aside, and a new and corrected one issued. One of the last works I executed for the Government was the printing of the *first* Government Gazette issued in the Colony, (December, 1840,) in four pages, demy 4to.,—but without the Royal Arms. For all that I did for the Government I never received any pay or recompense whatever from them, neither anything extra from the Church Missionary Society; but I did receive a very handsome letter of thanks, wholly written by Governor Hobson himself,—although at that time from long illness and injury to his arm he was scarcely able to write.

Note B, page 8.

In the early days of the Church Mission in New Zealand, it was absolutely necessary to have a quantity of goods stored for the use of the various scattered Mission Stations, and for barter with the Maoris—wherewith to obtain daily food, &c. At that time and for long after there were neither stores nor shops in the land, and communication with England, or even with Sydney, was very rare, and not to be depended on. And as the Maori tribal wars were frequent and severe, it was needful to have a secure building in a suitable situation to contain the Mission goods; hence the large general Mission Store was erected at the head of the Kerikeri river. It was strongly built of stone on the bank of the river, and was quite a massy structure; certainly in those early days it had a very imposing appearance from there being no other building like it in all New Zealand; its white Sydney sandstone facings being, also, such a contrast to its dark-blue stone walls. It was especially striking in rowing up the long and desolate river, (not a house nor even a Maori plantation nor fishing-village on both its sides,) and coming suddenly upon it on rounding the last bend only a little distance ahead. The doors were very thick and strong, reminding me of those of a prison or a fort; and the windows were also well-secured on the inside with strong iron bars; so that on the whole it was pretty safe both from sudden Maori attack and from fire. The Kerikeri river is navigable for vessels of 100 tons to within three or four miles of the Station, and for small craft (such as the Mission Cutter) close up to the wharf along, side the Store. It was in this building that the Bishop of New Zealand, Dr. Selwyn, securely stored his large and valuable Library during his residence of three years at Te Waimate.

Note C, page 11.

The British Resident, Mr. James Busby, resided in his own house at Waitangi, Bay of Islands; this was about two miles by the sea-beach from the Mission Station at Paihia, with a small navigable tidal river between, and he had no neighbours. A Maori Chief of middle rank had taken offence for some small! matter, (an easy and common thing in those days!) and Maorilike was determined to have his revenge. So, one night, he crept stealthily through the garden up to the house with his loaded musket, and squatted in the front verandah; and having; as he thought, exactly determined Mr. Busby's position (who was sitting writing at his table in his parlour,) from the shadow cast from the lamp on to the window-blind, he took steady aim and fired at his head! the shadow, however, being both enlarged and) raised, the ball, fortunately, passed a little above his head, and lodged in the plaster of the wall of the room. The would-be man slayer then returned to his people and village, not very far off; he was, however, soon known, as he did not attempt to conceal it, rather the contrary. The evil deed naturally caused a great deal of disquietude among the unprotected white residents scattered throughout the Bay; and no small number of meetings and amount of inflamed talk with the friendly Maoris. Mr. Busby

 bore it all very well; and eventually a block of land lying between Waitangi and Te

Waimate was publicly ceded to the British Government as a kind of compensation for the crime.

Note D, page 12.

His kind note which came with them is so highly characteristic of him, that I am tempted to make an extract from it.—

My dear Friend,
Waimate,

March 14th, 1836.

"I herewith send you twelve chapters of Matthew, and will endeavour to have more in readiness very shortly. . . . . While employed in your own particular department you will have the comfort of knowing, that you are fulfilling one of the most important parts of the work, a work without which the rest will be paralysed. I trust when you see the result of your own labours in the hands of the natives, knowing the blessing that must follow, you will be able to rejoice with a joy which will not be intermeddled with. The Missionary body in New Zealand hang together as members of one body, and you may depend upon it, that so far as you are concerned, the rest of the members will do their utmost, not only to remove every difficulty, but to render every assistance which is practicable.

"Wishing you more encouragement in your work, and I hoping that we may rejoice together over it,

"I remain, Yours most truly,

"Mr. Colenso,
(signed) "W. WILLIAMS."

Paihia.

Note E, page 13.

And not only for such a reason as is there assigned. More than once during the printing of the New Testament my household Maori lads (or young men) left me, unexpectedly and suddenly, and that without notice or warning. This, however, was mainly owing to their belonging to the neighbouring tribes and villages. I well recollect on one occasion in particular, (in January 1837,) how I was served by them, and how I also managed to turn the tables upon them! it is worth relating. One morning after School and breakfast, I left my dwelling-house for the Printing-office, as usual; giving directions to the man-cook to get ready the simple dinner. It had so happened that morning, that I had been obliged to say a few words to one of my rowers, (a high-minded young chief named Hatete, lately come to reside with me from his tribe at Waiomio—a village a few miles beyond Te Kawakawa.) On my return to my house at the dinner hour, I found all hands had vanished! taking all their clothing and blankets with them, leaving behind on the table a very laconic note, containing these words,—"*E mara, kua riro matou: hei kona ra*"(= O Sir, we are gone: remain in peace.) Disappoint- ment and vexation having subsided; I found, they had not gone away by water in a canoe, the usual course, therefore I surmised they had gone to the *pa* (village) at Te Kawakawa by an overland route, a long hilly and difficult way, little known and rarely ever used, one which they could not possibly travel over in a single day, and there were no intermediate villages, so I laid my plan accordingly. The next morning early I started in my whale-boat, with four Maori rowers, kindly lent me by Mr Baker, for Te Kawakawa, and arrived there at the *pa* just after the runaways! who were then relating their escapade in a crowded circle of their own people. And so intent were all hands to listen, that no one saw me until I made my *debut* suddenly among them. (This I had contrived, on nearing the upper landing-place with almost muffled oars; my Maori crew entering heartily into the plan; as I feared if the alarm was given (they having arrived before me), they would have secreted themselves or gone farther.) I did not speak to them, at first, but to the chiefs and people, and it ended well,—in matters being cordially made up between us, and in my bringing them back with me in my boat to Paihia, where we arrived late at night. The next morning at the School, their appearance caused much derision. To the credit of their fathers and the old chiefs they all gave them good advice, and roundly took my part, as by the runaways' own showing I had done them no harm, and still further (as the chiefs said) I was engaged for them all on that great work the printing of the Maori New Testament. My prompt and effective acting on that occasion stood me in good service afterwards. All the New Zealand Missionaries had frequently to contend (or

rather, put up) with conduct of this kind on the part of Maori domestics (both male and female) and workmen. Such, too, was sometimes shown when it could not well or readily be met or borne;—even by a guide in an unknown part of the country, as I have too often proved. That *"pokanoa"* (as it was well and expressively termed) = sudden and entire change of mind, or work, without cause; mutability, fickleness;—was a well-known trait of the Maori character, and far too common among themselves.—

Note F, page 16.

One day I had to cross the Bay to Kororareka, purposely to bury one of those poor fellows whom I had known, and who was drowned in attempting to ford this river in his way to the Bay from Te Waimate. I myself have had to swim across at various times; and on one occasion in particular had a very unpleasant time of it. I was returning to Paihia from Te Waimate, on foot, and on my arrival at the river I saw it was under flood, the water being also muddy. I did not like to go back to Te Waimate, as my day had been fixed for my return to Paihia and I feared I could not carry all my clothing over on my heal dry,—it being however the summer season I was very thinly clad. While I was deliberating, and trying the depth of the water near me with a string and stone tied at the end of some rods, (flower-stalks of flax joined together,) a party of Maoris, men and women, (who were encamped in the neighbourhood on the opposite side,) made their appearance through the fern and scrub and squatted down on the bank of the river, watching my movements. Being strangers they would not assist me,—other than to offer to fetch my clothes and carry them across before me, which I would not agree to. It was a time of great embarrassment; the day, too, was passing, and I had many miles yet to travel,—besides the ugly dreaded Whauwhauroa crossing at low tide!) They lined the bank in the sun at the only landing-place; laughing and saying—they wanted to see how well a White-man could swim, &c., &c. As there was no alternative I prepared for the worst—a good wetting of my clothes. I cut flax leaves and tied up my clothing in a pretty compact bundle, which I fastened up so as to carry on my head, keeping my shirt loose in my straw hat. I had previously sounded the depth of the water, and, at last, entered the river backwards, and when out of depth turned and swam till near the opposite shore, when feeling the ground, I again turned, and by degrees put on my shirt, and so got to the bank,—not a little vexed with that party of Maoris; who, however, were loud in their praises (?) of "the cunning White-man;" and who, long after, said, had they but known me, or had I told them my name, they would have assisted me to cross. [To tell one's name, at any time, was, however, not in accordance with Maori etiquette.] The great danger in crossing the New Zealand rivers in the olden time, arose from the denseness of the tangled vegetation on the banks, which also extended overhanging a long way out into the river; so that if you did not happen to hit the one narrow and worn landing-place, through the rapidity of the current, there was little chance of getting to the bank at all.

Note G, page 17.

A notable instance of this kind occured in the summer of 1836. There had been for some time sad variance between two sub-tribes of NGapuhi, respecting the rights to a piece of waste land on the outer coast between Whangaruru and Whangarei; and at last it was agreed by both parties, to take their case to Waitangi, and there for Mr Busby, British Resident, and the Church Missionaries of Paihia, to hear and to act as umpires, and so end the quarrel. At the time fixed, a large party of Maoris assembled there, and Messrs H. Williams and C. Baker went thither from Paihia—I remaining in charge at the Station. In the afternoon their decision was given, which so exasperated the losing side, (mostly wild heathen,) that they flew to their arms, which they had secretly brought and hidden, and fired right and left, killing two and wounding others of the other side who were unarmed. The consternation was great! The killed and wounded were brought to Paihia; one of the two killed was a fine young man of the Station, a married domestic of the Rev. H. Williams named Taha, and one of my best Maori teachers in the adult Maori School, where he had on that morning worked with me! The wounded I had to attend to, and one of them, a chief of rank from Whangarei, was shot very seriously through the groin, so that for some time his life was despaired but he was eventually cured, and became a Christian. He remained several weeks at Paihia in my charge. For a considerable time after that occurrence armed bodies from the wounded party and their friends came continually to Paihia, to meet, to talk, and to combine for war, to avenge their loss; but after some time, through our always meeting with them and advocating! peace, we prevailed. The loss of time, however, was great, all work at a standstill.

Note H, page 17.

The interesting and pleasing visit of Daniel Wheeler and his son George, Members of the Society of Friends, in their yacht "Henry Freeling," should also be briefly noted by me, as it was both unique and of good service. These good Christian men had been making a religious visit to the various Missions in the South Sea, and were now on their return voyage to England They arrived in the Bay of Islands in November 1836, and

remained nearly two months with us; during which time they visited several of our nearer Mission Stations. D. Wheeler, being both aged and rather infirm in body, was carried by Maoris in a chair when visiting the inland Mission Stations. On one Sunday in December, according to appointment, they accompanied me in my Mission boat to Te Kawakawa, whither I went to hold Divine Service, and where D. Wheeler preached in English to the Maoris, I interpreting. It happened to be his birthday (when he attained his 65th year), and this was an extra theme of rejoicing with him. We spent a pleasant day together; a day to be remembered! As we were obliged to land at the lower landing-place owing to the state of the tide, the elder felt the long walk through the fern and scrub to the pa (about a mile), which also caused us to be rather late; on our return we were overtaken by rain just as we got to our boat, but we reached their vessel and the Mission Station, "all right"-save a wetting. I saw them often, and having been formerly well-acquainted at Home with Members of their Society, (also, occasionally attending their places of worship,) I was very much pleased with their visit, and they with the Printing-office and the work then in hand. Their yacht was very nicely found, and their state-cabin or sitting-room was fitted up with an astonishing number of curious articles and natural specimens from the Islands; giving it the appearance of a Museum. I retain many pleasing recollections of their visit. They reached England in safety, and published an interesting account of their long voyage; but have both long ago been gathered to their fathers.

Not very long after they had left us, the Rev. S. Marsden with his daughter and voyaging companions arrived at Paihia; they came by the way of Hokianga and Te Waimate, and remained with us till the 4th July. On Good Friday, (about a week after Mr Marsden's arrival,) I had a very peculiar and unpleasant adventure. [I quote chiefly from my Journal.] Called on, unexpectedly, this morning, to go up the harbour to Ponmre's *pa*, Otuihu, to bury a man who had been murdered by the Maoris two days before, and also buried secretly by them at the foot of the high cliff near which the *pa* stands. There were several Missionaries at this time at Paihia, who had come to see Mr Marsden, but I was told off on this errand. I went with the Captain of the American whale-ship in his boat, from the Station, he taking a coffin he had got made on board, and spades, &c., and a crew of six or seven strong seamen, the murdered man having been his steward. On landing under the cliff, I directed the seamen to disinter the body. A Maori who was there, ran up the hill to the *pa*, to inform Pomare; the Chief soon made his appearance on the brow of the farther cliff, and bawled down to stop! while I encouraged the men to proceed: they however were afraid and irresolute, half-hesitated and talked, and did not work as they should have done. I told them they were not Englishmen!—for they had soon uncovered the body, only slightly put under the earth, (or rather thrown there at the foot of the cliff and a little clay from the face of the cliff knocked down upon it,) and they might have got it easily enough on board of their boat alongside the bank in deep water. Pomare then came down to where we were, in a boiling rage! and first he vented his passion on an unfortunate European who lived there close by in a small hut, (as he had pointed out to us the spot where the body lay,) and not content with striking him, persisted in driving him into the sea! Meanwhile, the crew had token to their boat, with their spades, leaving the coffin, and pushed off into deeper water. I saw that Pomare had been drinking, and I interfered on behalf of the poor ill-used White; this brought the chief on me. I happened to say, in our wordy dispute, that Ruin had turned his head!—which, of course, was Immediately magnified into a dreadful curse! and he got into a lowering passion, declaring, if I were not a Missionary he would kill me! I took off my hat, and lowering my head close to him called on him to strike, &c., &c. He got worse and worse, at length demanding that the coffin should be given up to him; this I was determined to resist and ordered the wondering crew to jump out and take it on board their boat. He demanded, Why I dared to dig without first asking his leave?" I retorted, Why did you, or your men, dare to murder the White-man without first asking leave of us?" He ordered me to the boat; I refused to go; he came up and gave me a shove, I retaliated with another; he repeated it, and so did I: fortunately our handy-work ended here. The Captain and crew, seeing how matters were, wished me to enter the boat, saying, they should abandon the job; on hearing this I requested them to come back, and bury the body deeper; this they did. Pomare now said, I should never again enter his *pa;* I rejoined, I would do so, and then and there that very day before I should leave. He returned slowly to his house, stopping and warning me not to follow. Of course many Maoris were now looking-on, silent spectators. I climbed the high hill, or zig-zag track up the face of the cliff, after Pomare, (much against the expressed wishes! the Captain and his boat's crew,) and went on to the entrance of his large house, and sat down on the door-step; he and many of his people were inside, and a bottle of rum was handed round, of which all hands partook. After some time, I rose to go back (as the boat was waiting for me), telling Pomare, I had fulfilled my promise. On my way down the hill, Pomare came out and called after me to take away the body; but the Captain would not have any more to do with it,—saying, they had done their duty, &c.—I learned afterwards, that the poor steward was greatly liked on board of his ship; he had only gone ashore at the *pa* (below or rather on the strand on the other side, when the grog-shops, &c., were) three days before, in the afternoon on a two-hours' leave, and was returning sober to his ship carrying] a bottle of rum, which some of the Maoris seeing demanded from him; he refused to give it up, on which they pursued him and

he ran into the sea, where in the end they killed him; and then, to hide their deed, dragged the body to the farther side and deposited it at the foot of the cliff, &c. The Captain, in his search after the missing steward, had gathered this (privately) from the White residents, but the Maoris of the *pa* had denied the deed, also the burial; so that it would have been useless to apply to the chief.—This was one of the *few* cases in which during my long residence in New Zealand, (though often is danger,) I was struck by a Maori, or struck one in return; but I would never put up with a blow.—

Note I, page 17.

Two or three rather peculiar events that occurred during this long and dreary struggle of internecine warfare in the Bay may be mentioned; especially as such are never likely to happen again. But, in order the better to understand them one should first know something of the fighting ground and the position of the combatants. Several of the smaller tribes of the Ngapuhi (united) were in arms against the two chiefs Pomare and Te Mauparaoa and their followers and adherents; the head quarters of the Ngapuhi allies was at Kororareka (now Russell), which commanded the outer harbour; that of Pomare and Te Mauparaoa at Otuihu (where these chiefs both dwelt), an almost impregnable castellated war *pa* at the head of the narrower inner harbour, centrally situated between the two navigable estuaries of the rivers Te Kawakawa and Waikare, and commanding the whole of the inner waters, and about six miles from Kororareka. On a fine calm morning in the summer of that year (1837), at a very early hour, when the waters of the Bay were like glass, before the daily rising of the ruffling sea-breeze,—a small canoe with only one man in it was seen paddling in haste from Te Wahapu on the Opposite shore of the narrow harbour (and about half the Rstance between Otuihu and Kororareka,) towards Waitangi on the Paihia side. This man was the (afterwards) renowned chief Hoani Heke. He had crossed over before day from his village at Te Ti on the Waitangi river, to purchase powder from the merchants' stores at Te Wahapu wherewith to carry on the fight; and the eagle eyes of the foe from their eyrie or look-out on the high *pa* at Otuihu had descried the little canoe, and rightly guessed the errand. In a twinkling Pomare's big war-canoe, being all ready at anchor, was manned, and now the exciting chase began! Heke had seen her coming, and well-knew there was no hope for him there—at Te Wahapu—among his White friends, (who also were anxious to get rid of him, knowing they were powerless to protect him;) and so he put out to sea, taking his kegs of powder with him, really paddling for dear life! I suppose there were at least sixty rowere in that fine and handsome canoe; she glided through the water like a fast steamer, only noiselessly; while those on board of her (warriors) who were well armed with guns kept up a continual and rapid fire upon the tiny cockleshell fleeing before them. And Heke! he, too, dared to return the same; absolutely laying down his paddle now and then, and loading his piece and firing at them backwards over his shoulder—in mere defiance and bravado!! All hands in the Mission Station were out on the sea bank looking out, expecting every moment to see him struck with the balls playing around him; and feeling sure he could not possibly escape from the fleet war-canoe rushing after him; death seemed imminent—certain. But when the war-canoe had come down into the more open harbour, clearing the peninsula Toretore beyond Te Wahapu, and getting abreast of Kororareka, the Ngapuhi there, hearing the firing and seeing what was up, had speedily man- ned their canoes, and came out to the rescue and the attack; when Pomare wisely returned. From an entry in my Journal, I find, that shortly after this, the Ngapuhi tribes went up one morning in 36 canoes and boats to attack Otuihu; they landed there and fought, and several were killed and wounded on both sides; among them some head chiefs of note. In the evening they returned to Kororareka, bringing off their own dead and wounded, and also the bodies (chopped up warm and divided among them) of two chiefs of their foes, killed in that day's fight, who had only the day before arrived at Otuihu from the interior to join Pomare; both, too, were good friends of mine. For one of them, in particular, Te Koukou, I felt very much; for he had recently received me and my travel ling party of Christian Maoris very hospitably, on my visiting his *pa* for the first time in my returning overland from WHangarei to the Bay; and had also then given in his as herence to Christianity. Hearing that the Maoris at Te Ti (near us), had got an arm and shoulder of Te Koukou as their *share* of that war-spoil! T walked there early the next morning and induced the chiefs to give them up to me,—the mischievous and brave chief Te Kemara, himself climbing the tall *Karaka* tree to bring them down; to my surprise the whole arm, &c., was still supple! (Te Kemara was a little lithe nimble fellow, though of middle-age, and being fully and closely tattooed so as to be almost black, he always reminded me, when in heroics! (and he just could roll his eyes and grimace!) of one of Dante's demons—in *Inferno!!*) I sub-sequently saw at Kororareka, other and sickening portions of Te Koukou's body, hacked and stuck up on the *tabooed* tend porary fence erected around the body of the great chief Pi, of the Mahurehure tribe, also slain the same day in that fight; Pi with his people had come over from Hokianga on the West Coast to join Ngapuhi in the fight. The body of Pi was laid out in great state, &c., &c.; and as I had visited this large party of allies on their arrival at the Bay, while they were encamped at Waitangi, (before they crossed over to Kororareka,) and addressed them as to possible consequent I now went inside the sacred enclosure, (much to the dislike of many of the Maoris present,) and took my stand close to the dead

chief's body, and there told them my mind.—To narrate the whole scene and what took place on this sad occasion would take too long. However, I could not prevail on them to give me the fragments of Te Koukou, all I could obtain was, a promise they should not be cooked and eaten but two of the head chiefs of Kororareka, Rewa and Te WHarerahi, gave up the portions in their possession for burial.—

Several attacks were made at Otuihu by the united Ngapuhi, who had always several miles of water to cross before they could begin operations; sometimes they turned out twice in the week; while Pomare and his party kept in their *pa* and never once ventured to return the aggression by attacking his foes at Kororareka; yet he did go down more than once into the Bay of Kororareka, in his fine war-canoe, and there blaze away—but not within gun-shot. During this long war we (the Missionaries) had often tried in vain to bring about a peace between the belligerents. The great obstacle, at *first* and for some time, being, that the scales could never be made equipollent; as, according to Maori custom, peace could never be brought about until this was accomplished or nearly so,—losses on both sides must be made square or equal. On the one (lay the Ngapuhi side were the heavy losers in fighting; on a subsequent day the other side were so, too—and beyond what was required! and so it went on.—

One day in particular, towards the end of the war, when (it was said) a decisive assault was to be made by the Ngapuhi, I accompanied the Rev. H. Williams in his Mission-boat to the fighting-ground. Our boat pulled up the harbour to Opua, where we landed on the little beach, and walked out over the rocks to the bold cliff, whence we had a full view of Otuihu on the opposite shore directly before us about half a mile distant. The Ngapuhi had previously landed on both sides of the narrow arm of the harbour, and taken up their position on the two jutting headlands,—one at Opua where we two were, and the one nearly opposite, Oropa,—where they swarmed on the exposed ridges. A large amount of musket-firing was kept up on both sides, but very little harm was done, owing to the two parties being too distant from each other. We two were pretty safe, being partly sheltered by the steep rocky headland and by the large overhanging *Pohu-tukawa* trees that grew there, while with our glasses we could easily watch Otuihu. Pomare's people made some slight advance towards their foes in canoes, from which they kept firing as well as from the cliffy brow of their *pa* above, but only now and then balls fell among or near the Ngapuhi. While this was being carried on a rare thing happened: a reckless bravo (*toa* = warrior) paddled fearlessly from Otuihu towards the Ngapuhi in a little dingy—or very small canoe (*kopapa*) baited for one or, at most, two persons; he actually came over into the open water in the midst of those two headlands, nearly abreast of us two on the rocky point, between the two bands of Ngapuhi! and there he openly defied them in his song, brandishing his paddle, and turning round put his head down in his canoe and smacked his naked posteriors at them!! which done he paddled back to his party *unhurt*, singing as he went.

The Ngapuhi showered balls at him from both ridges; they fell around him like hail, splashing the water around him, but he escaped; I don't think his canoe was hit. It seemed to me as if the fellow really had a charmed life; it was one of the most coolly sustained fool-hardy doings I ever witnessed. We both made sure he must be killed, and marvelled much at his escape, while the Ngapuhi were very savage over it; at the same time setting it down to the efficacy of the *kara kia* (= spells) which had been used, and on which he had relied. They, also, had both seen and heard of similar feats having been performed before—in the olden time.—

On that day, too, I watched some of the Ngapuhi side (raw recruits?) load and fire off their guns, mostly old flint-and-steel muskets; some actually held their pieces nearly vertical and turned away their faces when they fired; while some, in their haste, fired away their ramrods! one, who was very near me, in loading bit off the end of his cartridge and cast it down; seeing it was a printed scrap (a most rare thing! for there were no common Newspapers then, and I never allowed a bit of printed (or waste) paper to go out,) I took it up and on untwisting it found it to be a portion of a leaf of an English Bible, and to my astonishment containing these words—"How long have I to live?" (2 Sam. xiii, 34.) I showed it to Mr. Williams who was equally surprised. I afterwards heard at Kororareka of some books having been stolen by the Maoris there for the purpose of making cartridges, and among them was a Bible; paper of all kinds being then with them very scarce.—

I have mentioned, above, what was at *first* the cause that hindered peace being made; and afterwards—when both sides were pretty well tired of the costly and savage game at which they had been so long playing, and the general planting season near,—the *second* obstacle was the demand made by the Ngapuhi, that Pomare should cede to them certain lands on the adjoining Waikare estuary. A day was, at length, fixed for a meeting at Otuihu and fully discussing the terms of peace, when all the Missionaries then in the Bay district! went up to Otuihu in the big Mission boat, having a white table-cloth flying at the mast-head as a Peace standard several neutral (or related) Maori Chiefs also going thither in their canoes; there we spent that day in endeavouring to bring matters to meet—but, again, in vain! as Pomare would I not yield any land for that purpose, having had also a large number of killed and wounded on his side. Notwithstanding peace was firmly made within a fortnight from that visit; and about the same length of time after the Rev. S. Marsden's last departure from New Zealand.—

Note J, page 21.

I have said, that silver and gold coin was very scarce,—in fact, not required. I never had any; a few small coins (silver and copper) I had happened to have on my landing in New Zealand remained unused in my desk for many years. All our monetary requirements were met by small Orders, which were in high request at the few Merchants' Stores, as by-and-by when they made up a pretty large amount they were exchanged for Bills on the Society in London. The only coins I saw for several years (and then only casually and in the possession of others,) were dollars in silver and doubloons in gold. The American dollars however, were much sought after by some of the Storekeepers; those of Mexico bearing a greater exchange value than those of the United States.

Note K, page 23.

On the 1st January we left the Bay in the Mission Schooner "Columbine"; on the 4th we anchored inside of Tauranga harbour (under Maunganui), and remained on shore till the 12th, visiting the various *pas* there—Maungatapu, Otumoetai, &c., in which were a great number of Maoris some of whom I had formerly seen at Paihia. Here I gained some curious information from old priests. On the 12th we recommenced our voyage, and landed at WHarekahika (Hicks' Bay) on the 16th, there we found Te Houkamau, one of the principal Chiefs of the East Coast district, with a number of his people. I should, perhaps, here mention, that on our leaving the vessel, (which was to proceed to Poverty Bay and there await our arrival overland, by the Coast,)—the steward and others *cried!* saying "They should never see us again!" Such was their opinion of the East Coast Maoris (from the East Cape Southwards), who had long borne a bad name for being treacherous to shipping and to seamen visiting their shores. From Hicks' Bay we travelled on by the Coast to the Valley of Waiapu; astonished at several things both natural and artificial we there saw. 1. the large amount of *grassy* plains and hills wholly unknown at the North: 2. the immense size and strength of their war *pas*, closely filled with houses: 3. the great number of the people, all healthy. We also noticed the absence of some of the commoner and picturesque trees of the North,—especially the shore-loving *Maanawa* (= Mangrove), and the *Pohutukawa;* the *Kauri*, too, was not seen inland in the forests.

We halted at Rangitukia, a very large and well-built *pa*, where we stayed a few days. Soon after our tents were pitched in an open space or square within it, we found that we could not get outside for any purpose! the Maoris were so numerous, forming a compact mass of many hundreds-men, women, and children,—all eager to satisfy their curiosity and see and observe the White-man! At last we were obliged to appeal to the head chief, to have a way of egress and ingress left open to us, and he repeatedly spoke to his people, but in vain; the foremost ranks being hemmed in by those in the rear; (for all the world such as I had formerly seen in a dense London mob.) At length, and as a last resource, the Chief threw off his fine dress mat garment, and went naked to work! rushing up and butting like a ram against the people, who were soon tumbling all of a heap on all sides—mainly from the fear and dread of being touched by his head, which, of course, would make them *tapu* (= sacred) for a season, and so be attended by disagreeable consequences of privation to themselves. However he succeeded in clearing a way for us,—though many high words followed, used by other chiefs of note who were also overthrown pell-mell in the *melee!*

From Rangitukia we went further up the Waiapu Valley to WHakawhitira, a very large pa, the largest by far that I (or we) had ever seen. Its fence was also three-fold, the massy and combined outer one being twenty-five to thirty feet high; its main posts consisting of entire and straight trees; denuded of their bark, with large carved full-length human figures painted red on their tops,—of these figures there were above a hundred. During our stay there, we measured, by stepping, one of the sides of this *pa*, and found it to be more than a mile in length! and the huge carved figures we ascertained to be more than six feet high, with their heads fully and deeply tattooed;—this we proved from one that had been broken off and fallen, and placed upright below its big post I took a sketch of this *pa* (as I had also done of Rangitukia) which I still have.

While at Tokomaru (the large *pa* at the North end of that bay), being tired of cliff climbing and beach walking! (there being no footpaths nor tracks along the coast from one *pa* to another,) we gladly accepted the offer of the chiefs to take us by canoe to Uawa (Tolaga Bay); so, one morning we left Tokomaru *pa* in a big canoe well-manned; but the sea rose high before we had gained the southern headland of the bay, and for some time it was doubtful whether we should] be able to round it—or ever land again, for we were in great danger. Apart from our perilous situation, it was truly a magnificent sight! to see those big ocean billows breaking on the rocks around, and our little bark threading her winding way in the hollows between them. The chiefs, seeing the danger, held a short consultation, whether to go on or to attempt to return to Tokomaru; I believe they would have returned, but they feared to attempt turning the canoe in the great swell we were in lest it should be upset. I was never more impressed with the admirable skill at navigation possessed by the Maori! how readily the rowers (or paddlers) obeyed every command given by the skilled steersman, and how regularly and ably

they wrought! The chiefs, too, and the *Kai-tuki* (= singer of canoe-songs—which is done both to encourage the paddlers and to enable them to keep time,) retained their standing positions in the canoe and never flinched! On grounding the headland we landed in a delightful little cove, called Te Mawhai, having a curious looking high pillared rock just at its entrance, and there launching a still bigger canoe (which was hauled up high and dry and protected under a long covered shed,) we started afresh for Uawa. On arriving at the bar at the mouth of the river, most of our crew jumped overboard and holding-on took us over the bar in safety. I need not remark how glad we were to get safely on shore; not merely on account of the dangers we had passed, but from being cramped up in the canoe during our very long day's paddling—I suppose quite forty miles! While stopping here I conversed with old chiefs who had seen Capt, Cook and his ships when at anchor here in this bay.

I may also mention, that all along the Coast, in many places, we saw small rafts hauled up above high-water mark, each being eight or ten feet long and three or four feet wide, composed of only a few small poles, roughly and distantly but very strongly lashed together with open spaces between them. On these the East Coast Maoris went out to fish in deep-water, one on each; and also, (when opportunity offered) to a ship with a pig, or two, fastened to the raft! They said, these rafts were quite safe, more so indeed than a small or middle-size canoe, as there was no danger of upsetting.

We were nearly a fortnight in reaching Poverty Bay from our leaving the ship, and great was the joy of our shipmates when they saw us! having given us up. After staying some time at this bay, visiting its neighbouring *pas* and villages, we left on our return to the Bay of Islands, visiting also Tauranga (a second time) and the upper Thames (Waiheke, &c.,) on our voyage back.—

I have already mentioned my bringing back with me to Paihia nine youths and young men for Instruction, &c.; two of them became useful pressmen, and served well in the Printing-office. At that period the Rev. Dr. John Dunmore Lang (of Sydney), arrived at the Bay, where he stayed some time on the opposite shore of the harbour; during which he once visited the Mission Station at Paihia. It so happened that I alone was at home on that day and so received him at my house; he sat some time with me, made several enquiries, and partook of refreshments; when he expressed a wish to see the Printing-office, of which he had heard; on our going thither and entering it, he manifested great astonishment and pleasure at seeing the two young Maori pressmen at work, and that, too, by themselves alone in the office. I mention this little incident here, because when Dr. Lang published his account of his visit to the Bay of Islands, be not only said a few unkind things in it of the Church Mission in the Bay, (which he had gathered from the idle and their associates at the port of Kororareka,) but he also carefully abstained from mentioning this circumstance at which he had showed so much satisfaction, or even alluding to it!

I may further remark, that one of those young Maoris learned to write before that he could read! and so, sometime) wrote to his relations and tribe down South. Maoris in our Station School generally learned to read well (beginning with A) in six months; they privately diligently conned their one book in spare hours and in wet weather. In the reading classes in school there was generally great attention and emulation shown to catch one of the older scholars making a mistake—and so taking him down, to which they always good-humouredly submitted.

Another circumstance I should also mention, as forcibly showing the great power of the mind and feelings (superstitions imagination) over a strong healthy man. And this, I have ever believed, is the root of that fearful power formerly so very prevalent among them, and so greatly dreaded, under the name of *maakutu* (= deadly spells and witchcraft); of which even Settlers of to-day have also heard something. Not very long after our return to the Bay of Islands, a serious epidemic suddenly became common, among Whites as well as Maoris and some of the former and many of the latter died after only a very short illness. The attack began with common feverish symptoms, severe headache and determination of blood to the head, soon followed by swelled and sore throat, which quickly carried off the sufferer. I myself was attacked, and indeed brought very low—all but entirely given up! Mr Maori lads (now eleven in number) were all naturally very anxious about me, and scarcely cared to cook food for themselves, or to eat; at the same time they were all well and had escaped this sickness. On the last day of my very severe illness, when it was known that the crisis was at hand; can of those young men whom I had brought from Tologa Bay,—a stout, strong, healthy, able, fearless Maori,—who was much attached to me,—fully believed that I should die that night; he would not be consoled by nor even listen to the Missionaries present, neither by the Doctor, Ford, who also attended closely on him, and by the next morning he, poor fellow! was dead,—and the unfavourable crisis was also passed with me. Dr. Ford always maintained, that there was nothing whatever ailing him physically, on the contrary he was perfectly healthy; it was solely the effects of his imagination!! in which I concurred. Possibly, had he been allowed to *see me*, in my bed, he might have recovered. I have also known of cases somewhat similar occurring among the Maoris; but this is the more striking from the fact, that it was not the fear of *maakutu* falling on the sufferer himself, but on another to whom he was attached.—

Note L, page 25.

On several occasions in former years I had brought this matter, of a new consonant being required for the New Zealand language, before the Committee of Missionaries, but always without anything definite being settled about it. Again, in July, 1841, at their half-yearly meeting, in an official letter to their Secretary, I made the following request (among several others):—

"9. An order, authorizing the adoption of an additional consonant, in order that the deficiency still existing of some character to represent the "*wh*" sound,—a subject of material and increasing consequence,—may be, without any further delay, supplied."—

The reply was,—"Wait a little, until we consult Rev. W. Williams:" (who was then residing at Poverty Bay.)

In September of that year I also wrote to him on this subject; from his letter in reply I make the following extract:——"With regard to the orthography of words beginning with *"w"* and the propriety of making a distinction to mark the *"wh"* sound; I have to make the following observations:—

"If the general opinion be in favor of an alteration which would doubtless make reading easier to an Englishman beginning the language, I do not object to a change. Should such be the decision of the collective wisdom of North and South, I would suggest that your proposal of the letter *"v"* be adopted to make the *"wh"* sound. I have not heard on the subject from the Northern District Secretary. Perhaps an accented *"w"* would be more appropriate, and would do less violence to the orthography.—Turanga, Sept. 7, 1841."

Time rolled by, and another year was half through; and as nothing had been done by the Northern District Committee of Missionaries in this matter, at their subsequent half-yearly Meeting in January, 1842, (and as the Rev. W. Williams did not now meet with them, he belonging to the Southern District,)—in June, 1842, I wrote the following letter to their Secretary:—

"My dear Sir
Paihia

June 13, 1842.

"I enclose for the consideration of the Committee a few printed Maori sentences, as a specimen of certain proposed alterations, which, for some time past, have been had in contemplation by different individuals who have given their attention to the Native language; one of which, it is thought, it is highly expedient should be adopted with as little delay as possible.

"I believe that it is *now* very generally conceded, by all parties understanding the Native tongue and competent to give an opinion thereon, that some character is still wanting to represent that sound in such common use, and hitherto known in oral communication by the combined consonant! *"wh"* Believing this, it is not my intention to say anything further on the *necessity* of selecting some character to represent the same.

"Among several characters that have been from time to time proposed by different persons, to convey the idea of the sound under consideration, the following are the principal viz. the *"wh"* (which has been lately partially adopted by the Wesleyan Missionaries in their books, and by the Rev. R. Maunsell in his "Grammar,")—the inverted comma "' ",—the apostrophe" ' ",—the *"f"*,—and the *"v"*. Printed sentenced containing these characters, I now lay before the Committee on whom it will devolve to say,—which shall be chosen to distinguish this peculiar and hitherto undistinguished sound.

"I beg, also, to offer a few remarks, which I venture to hope may not prove altogether unworthy the attention of the Committee.

1. "That the *"wh,"* though at present in partial use, being two consonants is at variance with the universally acknowledged fundamental rule of all the Polynesian dialects—of no two consonants without a vowel between. If, however, it be urged, that the *"wh"* is here to be considered as only *one* character, then it will, of course, have to stand in the Alphabet under its own proper name; and therefore,—from its possessing a heavy inelegant appearance, from its taking up much room in printing (owing to its size), and much time in writing from its complex shape,—I think it should be rejected.

2. "That the character wanted being intended to represent a true and distinct consonant-sound, and not merely the lengthening nor the shortening of a sound already produced by any one of the present number of consonants, the proposed addition of an inverted comma, or apostrophe, to the "*w*" would not be at all adequate to the thing required! Besides which, either is liable to the same objection as thai already adduced against the *"wh"*—the being at variance with all the printed Polynesian dialects. To say nothing of the very hiatus-like appearance which such marks always impart to printed pages, particularly in long words and with large type.

3. "That in my proposing the *"v"* to represent the character in question, it has been borne in mind,—1. that

it is already in use in several of the Polynesian dialects:—2. that it is a small and neat, and (in writing) a quickly-formed I character:—3. that the Rev. J. Hobbs (at present the Wesleyan Superintendent,) has promised to use his influence in getting the *"v"* substituted for the *"wh"* (now used by them,) should the Church Missionary Committee of Missionaries adopt it,:—4. that the Rev. R. Maunsell has informed me, that he intends using it for the future in his "Grammar," now in course of printing at Auckland, and which will doubtless (if not already in use) be adopted by the Government;—and, 5. that from a similarity (though distant) in the Maori sound, for I. which a character is now sought, to the sound of the English *"v,"* future Missionaries and new-comers generally will be assisted in reading in the pronunciation of the same.

"In conclusion, and with the utmost deference, I beg permission to express my hope, that in the consideration of the matter in question, each Member of Committee will ingenuously dismiss from his mind those prejudices which, too often, unfortunately, stick as closely to the skirts of abstract literary and scientific questions as to other matters whether social or political.

I am &c.,

crest

Harding, Printer, Napier.

(signed) WILLIAM COLENSO,
Superintendent C.M. Press."
"Mr. R. Davis,
Secretary, Northern District Committee."

Front Cover

Ireland's Wrongs Righted, or, the Present Against the Past.
A Lecture
Delivered in Ramsay'S Hall, Invercargill, 14TH SEPTEMBER, 1888,
By Thomas Denniston,
In Reply to a Lecture on Ireland's Wrongs,
By the Rev. F. W. Isitt, Minister of St. Paul'S Wesleyan Church, Invercargill.
Invercargill: Published by Erskine & Co. Printed by the Southland Times Company, Limited, Esk-Street. 1888.

Preface.

THE following lecture is published in deference to the expressed desire of some of those who heard it to possess the full text in printed form; and because of a hope entertained by the Lecturer that its circulation might contribute in some degree towards a just public estimate of the Irish Question.

Some alteration has been made in the forms of expression used in delivery; a sentence has been added here and there in expansion of the argument or in supply of an omission; and, rarely, a modification has been made of terms that seemed too strong for the occasion; but the substance in all cases remains unchanged.

Those who desire a full view of Home Rule and the Irish Question are respectfully referred to the collected speeches of the Right Honourable Joseph Chamberlain, M.P., issued by The National Radical Union, Birmingham,—speeches not more remarkable for their convincing and exhaustive reasoning than for their nervous and attractive eloquence.

Invercargill, N.Z.,

6th October, 1888.

Ireland's Wrongs Righted, or the Present Against the Past.

Mr. Chairman, Ladies and Gentlemen,—

If any apology be necessary for my appearance before you to-night, I must ask you to find it in the fact that I am here in reply to a challenge from my reverend friend Mr Isitt, who has had the first word on the subject of

Ireland, and who is now fulfilling his promise to preside whenever I should take up the gauntlet that he had thrown down. It is my misfortune that, through illness, I was prevented from performing, as I would cheerfully have done, the first part of my compact, namely, to preside at the lecture delivered by my friend on "The Wrongs of Ireland;" and that I was prevented from listening to the arguments to which I had engaged to reply, But, happily for all of us, the reports of the Press admit, in effect, the whole colony to every platform, and place on the same level those who are absent and those who are present to listen. The loss therefore that I have sustained is mainly one of high gratification to myself. I am no stranger to the oratory of Mr Isitt. I know what you must have enjoyed in listening to him, and I can very well imagine the fire of his philippics and the vigour of his invective when he spoke to you of the wrongs of Ireland. Ladies and gentlemen, I make no pretension to the eloquence of which my friend is so great a master, and I know the disadvantage at which I stand in Blowing him. There is one point of superiority, however, on which I reckon. I think honestly that I have to advocate a better cause, and, not by rhetoric, but by the force of facts, I shall endeavour to overthrow the somewhat insubstantial fabric that my friend has set up.

I feel myself, Mr Chairman, in rather a difficult and delicate position to-night. It is clear that I cannot address you in direct criticism of yourself. That would be inconsistent alike with courtesy and with the established relation between a chairman and the person by whom he is addressed. I as therefore, with your leave, going to conjure up for the occasion a third person, a reverend Mr Isitt, truly, but a gentlemen without the suspicion of relationship to the chairman of this meeting. Of that gentleman and his lecture I purpose to speak to you, and if permitted, I shall do so with a great deal of freedom.

The first question then to be asked is, what object had my antagonist in view in dilating to the people of Invercargill on the wrongs of Ireland? It could not have been the desire to create a mere sensation or to stir up feeling inconsistent with Christian love and brotherhood. Whenever Mr Isittopens his lips in public it is with a high moral purpose, and I must acquit him of the remotest design to awaken evil or vindictive passion. Yet, unquestionably, putting aside such an object as unworthy and alien altogether from the charter of the speaker, it is difficult to discover any purpose that would justify the setting forth at a great crisis of our national history the minute and harrowing details of former strife and enmity between two branches of a now united people: the ranging once more in imaginary antagonism two races that since that strife was waged have fought under the same flag, have marched to the same victories, and here, at least, are living in one common brotherhood. Sir, until I can distinguish some end to be served higher and more definite than any that has been made clear in the course of the reverend gentle man's eloquent denunciations, I must take leave to say that he has been unfaithful—however unconsciously—to the principles that he himself has laid down. Mr Isitt is reported in the same address to have condemned emphatically the odious perpetuation of national feuds. He deprecated, as I should de the flaunting in our streets of the faded banners of the [*unclear:* Boyre] and those insignia of party hatreds and party triumphs that ought to find nothing but a grave in a country such as ours—a country that belongs neither to Celt nor to Saxon, to Catholic nor to Orangeman, but is the inheritance of the common offshoots of the British race. That was a beautiful passage, and worthy of its author, in which he blessed and commended the spirit of peace and world-wide goodwill, and adjured his audience to remember injuries only that they might be for given But again I ask, has the reverend gentleman kept in memory his own precept? To what can his burning rehearsal of ancient injuries lead except to the reproduction of such felling as inflicted those injuries and to the creation of two hostile camps in our little commonwealth? Where is the difference between those that shout for "Derry and the Boyne" and the reverend gentleman who holds up England to execration for deeds of the half-forgotten past? If I am told that it is with a political object that these old memories are revived, then I answer that the field of politics even is not exempt from the scope of those maxims of charity to which such eloquent expression has been given.

But I go further, and say without imputing the slightest motive of unfairness, that if the story of Ireland's wrongs was intended to carry political weight, then the balance should have been struck with an equal hand. What are we to think of the historic impartiality of a narrator who has spoken freely of massacre when Catholics were the victims; who has drawn a revolting picture of unequal and oppressive laws enacted by Saxon against Celt; and who yet is absolutely silent about that dark and terrible tragedy, the Catholic rising of 1641, which gave the key-note and the colour to the after history of Ireland? Sir, I am not going to imitate the tactics of my opponent; I am not going to thrill you with the details of that fierce rising in Ulster and in other parts of Ireland in which the Catholic Chiefs played the part of fiends, and the forces, as it were of Hell, were let loose on the unhappy Protestants. I will not attempt to strike a balance between the cruelties and the tyrannies of opposing factions. But surely you ought to know—surely Mr Isitt should have told you—that the wrongs of Ireland, that the oppression, if you will, of Ireland, arose, not out of English malignity, but out of the wild and inhuman excesses of the Irish race itself. I must ask leave, Sir, to give you a picture of the condition of Ireland and of the mind of England towards Ireland before the great convulsion to which I have just referred.

Speaking of the condition of Ireland after the accession of James I to the English throne, Froude says:—"If

the meaning of government be the protection of the honest and laborious and the punishment of knaves, not the smallest gainers from the Ulster settlement were the worthy among the Irish themselves, who were saved at last from the intolerable oppression under which they and their fathers from imm morial time had groaned. Privileges and prohibitions, which had separated the two races, were abolished, so far as statutes could extinguish them, and Irish and English were declared equal in the eye of the law." And he quotes an Irish statute of the same reign, which is in the following terms:—Whereas in former times after the conquest of the realm by his Majesty's royal progenitors, Kings of England, the natives of this realm of Irish blood, being descended of those that did inherit and possess the land before the said conquest were for the most part in continual hostility with the English and with those that did descend of the English, and there fore the said Irish were held and accounted and in diverse statutes and records were termed Irish enemies: Forasmuch as the cause of the said difference and of making the said laws and statutes doth now cease, in that all the natives and inhabitants of this Kingdom without difference or distinction are taken into his Majesty's protection and do now live undr one law; by means whereof a perfect agreement is or ought to be settled betwixt all his Majesty's subjects in this realm: And forasmuch as there is no better means to settle peace and tranquillity in this kingdom, being now inhabited with many worthy persons born in his Majesty's several kingdoms then by abolishing the said laws and giving them free liberty to commerce and match together, so that they may grow into one nation, and there be an utter oblivion and extinguishment of all former difference and disorder between them: be it enacted . . . that all these laws be for ever repealed." *Irish Statutes 13, James I, Cap. 5*.—That, Sir, was the course on which England had entered with regard to Ireland when it was interrupted by the lawless turbulence of Irishmen themselves and by the crowning infamy of 1641.

But I come down to modern times. And, looking at these surely, in contrast with the wrongs of Ireland, we might have heard something of the beneficent legislation by which those wrongs had been redressed. To that task I shall endeavour, lower feebly, to set myself by and by.

In the meantime, as I am challenging the reverend gentle-Ban's method of dealing with his subject, I may refer to his handling of one of the prominent features of the struggle now being waged between the Government and the National League in Ireland. I mean the practice of "boycotting," a practice Dot has made thousands of innocent lives miserable and has turned the country where it has been practised into one great pandemonium of hatred. How has the reverend lecturer dealt with that manifest invasion of one of the commonest rights of citizenship and humanity? He has not condemned it. He is reported to have said that "he did not say boycotting was right "or wrong, but he would say that if it was right *out of* Ireland it was right *in* Ireland." Now, Sir, I am safe in saying that not only was this an evasion of the responsibility he had undertaken, but a notable departure also from the reverend gentleman's habit of dealing with great questions of right and wrong. Mr Isitt is the keeper of the conscience—of course in a Protestant sense—of a large and intelligent section of this community. But besides this, having assumed the office of *censor inorum* of English Governments, past and present, he became a kind of guide likewise of the conscience of the public. Had we not, then, a right to a distinct and categorical deliverance on this interesting point of morals, and am I wrong in saying that had not his subject been one that required great tenderness towards the Irish people, his clients for the time, a decision would have been given in no doubtful form? Mr Isitt is no mean dialectician. He is quite capable of determining a question of casuistry, and, when he has made up his mind, he is not celebrated for keeping his opinion to himself. He does not deal in a gingerly way with the question of slavery. He does not deal tenderly with the drink traffic. He is not content with saying that if slavery is wrong in Morocco it is wrong in Brazil; and if selling drink is wrong in London, it is wrong in New York. No! He tells us that these things are wrong absolutely and wrong everywhere, and launches against them his boldest and most incisive words. In like manner ought he to have spoken out against one of the ugliest blots that have disfigured the Home Rule agitation in Ireland. And here let me remark it is this want of moral fibre on the part of so many guides of public opinion, particularly amongst the Protestant clergy, that has given much of its strength to the Home Rule cause. Instead of robust denunciation of the methods of the League, where these set at defiance the elementary principles of justice and order, we have too often the utterance of flaccid and sickly sentiment and almost a connivance at wrong. I have looked in vain through the reported utterances of my reverend friend for one hearty, emphatic, unequivocal word of condemnation of the crime by which, as its main instrument, the Home Rule agitation is upheld. And what, Sir, have we to set against this conspicuous failure of duty on the part of these guardians of public morals within the pale of Protestanism? Why, the illustrious example of the Head of the Roman Catholic Church Pope Leo the XIII has not shirked the question of boycotting but, to his eternal honour, has set upon it the seal of his unqualified condemnation. But this decision of the Roman Pontiff is too important a factor in the Home Rule controversy to be dealt with in a parenthesis, and I shall ask your further attention to it when I have to speak of the characteristics of the National League.

I pass at present to a still graver charge than any I have yet made against my reverend friend. Let me quote from the *Southland Times, verbatim,* the account given by Mr Isitt of the present political standing of the people

of Ireland. "Under the coercion policy of to-day," says the report, "Ireland is refused the elementary right of freedom. Her sons may was meet even to protest against the military despotism under which they live—freedom of speech is denied them on the plat form and through the Press. Irish members may kid napped at the doors of the House of Commons and shuffled off to gaol in Ireland for using expressions in that land such as are uttered with impunity at every Liberal meeting in England." Now, Sir, that is a very eloquent passage, and, I will add, a very inflammatory one, when spoken in the ears of Irishmen. But, ladies and gentlemen, let me assure you without the slightest imputation on the good faith of my excellent and reverend friend, that there is not one line, that there is not one word, in the statement that an examination of facts will sustain. Not that I would attribute to Mr Isitt the intention in any one particular to mislead or misinstruct his audience; but I do charge him without any hesitation with Having "spoken unadvisedly with his lips;" and I challenge him to produce any act of the British Government that will bear out a single charge that in the words quoted he has levelled against British rule in Ireland.

The matter is vital, and I will take the statements severally in their order. The first is that "under the coercion policy of to-day Ireland is refused the elementary right of freedom." Now, Sir, to begin with, I deny that the Irish policy of to-day can with any fairness be described as a policy of coercion, unless all policy be coercion that holds force in reserve for the ultimate execution of the law. Force—physical force—is and most be at the back of all law. And to use the term coercion as one of peculiar reproach of procedure in Ireland against crime is simply to resort to an odious nickname and a reprehesible misuse of words. Sir, there is just the coercion in Ireland that exists in the countries to which she is united—not more and not less—inasmuch as in all those countries alike the police and the soldiery can be called into requisition to quell active opposition to the law. That is the whole case as far as the principle of coercion is concerned. I will come by and by to the exceptional instances in which the existing law in England and the law in Ireland differ from one another. I simply repeat that the coercive power of the law in England and in Ireland is precisely the same in character and precisely the same in degree.

I have next to deal with the assertion that "Ireland is refused the elementary right of freedom." Of course that refusal is assumed to have been made through the criminal Law and Procedure Act for Ireland passed in 1887. T will there-He call your attention in a very few words to the objects and sanctions of that Act and to its provisions, and I will leave it to you, ladies and gentlemen, to say whether in these there is the shadow of an attack on any elementary right of freedom, What were the circumstances under which that Act was passed? It was, as Mr Isitt well knows, under no normal condition of things such as exists in the sister countries of England, Scotland, and Wales. Society was dislocated in every joint by the action of a League that held Ireland in terror, that paralysed industry, that made free action, political, social and commmercial, impossible, and that organised crime; by a League whose doctrines were the gospel of plunder whose leaders, by their own avowal, were engaged in making lawful government in Ireland impossible; and, who, in the words of Mr Gladstone himself, were "marching through rapine to the disintegration of the empire." Law had been superseded by the dictates of a secret and irresponsible tribunal to the scope of whose real coercion no limit was acknowledged and no exception allowed. This, Sir, was the state of things that called for whatever is abnormal, whatever is exceptional in the administration of criminal law in Ireland I ask Mr Isitt, did the elementary right of freedom exist under the sway of the National League? Was there not under that body a coercion that, besides being unsanctioned by law, was more daring, more absolute, more truly opposed to every right of freedom, elementary or other, than those necessary, moderate and constitutional restraints that the Government demanded to meet a great crisis of national disorder. Sir, I have read the Crimes Act from beginning to end, and you will perhaps be surprised to learn that what, mainly, that great instrument of tyranny does is to provide for the suppression of societies in regard to which the Lord Lieutenant and his Privy Council have satisfied themselves—

- That they are formed for the commission of crimes.
- That they are carrying on operations for or by the commission of crimes.
- That they are promoting or inciting to acts of violence or intimidation.
- That they are interfering with the administration of the law.

Beyond this, provision is made for shifting in case of need, is the interest of fair trial, the place of assize from one country to another; and for the summary prosecution of any person knowingly taking part in a prohibited meeting or publishing the objects of such meeting. Also a warrant directing search for arms or ammunition in houses or other buildings is made valid under the Act. And it is provided that the summary jurisdiction allowed by the Act shall be jurisdiction by a divisional justice or two resident magistrates. Appeal from their decision to be to a County Court Judge and the Chairman of Sessions, or to the Recorder as sole judge. That, Sir, is substantially the whole of the terrible Crimes Act against which such indignant thunder has been launched. And as respects the punishments awarded to those convicted under it, they are, I understand, greatly more lenient than are awarded in England for similar breaches of the law. This, further, is to be

especially noted, that contrary to a common belief and a contention of the separatist partisans, the Act in question creates no new crime. The offences against which it is aimed are crimes in England just as they are crimes in Ireland; only a different, that is to say a summary, method of dealing with them has been dictated by the social condition of Ireland. These statements pre not made at random. They are made on the very highest authority, that namely of Lord Selborne, some time Lord Chancellor, and of Sir Richard Webster, the present Attorney-General of England. I think that I have advanced enough to enable you to decide the issue between Mr Isitt and myself, and I feel confident you will determine that neither in Irish law nor its administration is there a trace of interference with the elementary right of freedom.

Mr Isitt's next sentence is perhaps more extraordinary still. "Her sons," he says, "may not meet even to protest against the military despotism under which they live—freedom of speech is denied them on the platform and through the Press." My reply is simply that such a thing as military despotism does not exist in Ireland. I do not like to apply strong language to any statement of my reverend friend, but it is clear he must have used the term military despotism without any definite conception of what the words imply. Military despotism is that method of government which supersedes ordinary civil law, and acts on its own authority, without reference to a civil tribunal. Sir, is that the state of affairs in Ireland? Has civil law given place there to military law? Can any military authority on Irish ground move hand or foot except at the instance and under the sanction of the civil administrator? No! The military power is not the mister; it is the mere executor of the law; under it and not above it; the servant and not the despot. Let me assure Mr Isitt that here in Invercargill, in free, almost republican New Zealand, he lives as much under a military despotism as they do in Ireland. And my friend may discover this any day if he chooses to make the necessary experiment. Let him only refuse to pay his rent; let him subject himself to a summons of ejectment; let him surround himself, in resistance to that summons, with a crowd of sympathisers large enough and violent enough to endanger the public peace. Let him induce his friends to oppose with deadly weapons the officers of the law—and I promise him, if the police force be not sufficient to quell the riot, then the Volunteers of Invercargill will be summoned in aid of the police, and the recusant will find himself the self-made victim of precisely the same military despotism that he tells you is confined to the shores of Ireland!

"Freedom of speech is denied to Irishmen on the platform "and through the Press." Freedom of speech, Sir, the right to speak at all, is assuredly denied to Irishmen when they meet as members of a certain society, in any place where that society, for the reasons already stated, has been prohibited from meeting by proclamation of the law; and they are denied the right of assembly and speech wherever their meeting and speaking would in the opinion of the constituted authority lead to a breach of the public peace. But this restriction! its principle, is common to both England and Ireland, and is an elementary canon of government. To say broadly they freedom of speech on the platform is denied to Irishmen is simply to contradict the facts of every-day experience in Ireland. In the City of Dublin—everywhere that the National League has not been suppressed by proclamation, the Irish leaders address their countrymen with a freedom or rather with a license of speech that would not be tolerated by any government elsewhere in the civilised world. The ruling powers are assailed with a bitterness, an energy, and I was bound to add, often with an eloquence of invective that are probably without a parallel beyond the limits of Ireland And all this without the Government's moving a finger to stop the torrent of vituperation and hate. Mr Balfour, the courageous and undaunted administrator of the law in Ireland when he speaks at all, meets the daily assaults of personal abuse and obloquy with a calmness and a sarcasm that are

NOTE.—I am now given to understand that, the N.Z. Volunteers are specially exempted from liability to assist the civil power. But if a regiment of [*unclear:* the] happened to be at hand in the circumstances supposed, its services world be availed of: so the illustration loses none of its force.

more effective than a hundred prosecutions. He lets the platform orators bellow as they will, and goes on quietly with that task of resolute enforcement of the law that is slowly but surely working out the pacification of Ireland. But what about the Press—the fettered Press of Ireland! Surely Mr Isitt must be unaware of the existence of such publications as the *Irish World*, the *Freeman's Journal, United Ireland* and a host of others advocating the sentiments of the League. It is true they are not permitted to publish the proceedings of meetings of the League that have been held in defiance of government proclamation. But if my friend will look into their columns for a month he will find them teeming with denunciations of the British Government and with the distinetest treason against the British Crown. He will find them not only politically unfettered, but exceeding in their rancorous contempt of authority all bounds of decency and decorum. Such a study, if it do not provoke a criticism on the unbridled license, will at least silence effectually any pathetic lamentation over the slavery of the Irish Press.

The last statement to be noticed is a very extraordinary one. The Irish Members may be kidnapped at the door of the House of Commons and shuffled off to a gaol in Ireland for wing expressions in that land such as are uttered with immunity at every liberal meeting in England." It is certainly not too much to say that not one word in this sentence will stand the test of fact. I have looked into the dictionary for a definition of the word

"kidnap," and I find "kidnapping" to mean "the act of stealing or forcible abduction of a human being from his own country or state." And I find abduction to mean, in law, "taking away by fraud, persuasion, or open violence." I need not argue the point. Having respect to the English language, and having respect to the facts of the case, is it allowable, even to platform oratory, to aver that an Irish member is "kidnapped" when by process of ordinary law—by the same process by which every man charged with crime or misdemeanour is apprehended—he is, either at the door of the House of Commons or anywhere else, laid hold of and earned off to Ireland? If there are any two things absolutely the opposite of one another—any two that by accurate definition exclude and destroy one another, they are, the process of kidnapping and apprehension by form of law. To make use of an illustration for which I am indebted to another it would be just as allowable to say that Ned Kelly was kidnapped and murdered in Victoria as that Mr Gilhooly was kidnapped when he was arrested at the door of the House of Commons and persecuted when he was dealt with in Ireland according to the law. I acquit Mr Isitt of any intention to misapply terms, but I accuse him of very great carelessness in the use of them, and I submit that he ought not to be case less when he is impugning the justice of the Government of his country. But the conclusion of the statement is that these kidnapped men "were shuffled off to gaol for using expressions that are uttered with impunity at every liberal meeting "in England." It would be tedious, after all that has been said, if I were to insist that it was for no utterance of liberal sentiments that the men in question were laid hold of, but for committing an unlawful act and for inciting their fellow countrymen to a breach of the law. These men might have shouted liberal and even treasonable sentiments until they were hoarse, if they had done so within the limits—wide enough in all conscience—that the Executive permits in Ireland, but they were not to be allowed to fly in the face of a statute that it concerned both the dignity of the Government and the safety of society to maintain.

The allegation that "the Lord Lieutenant of Ireland is armed with authority such as a Governor of Poland might envy" I trust I may treat as a rhetorical flourish, unworthy of serious argument. I do not grudge it to Mr Isitt [*unclear:* as] embellishment of his discourse, unless on the ground that charges against the Government of England, when that Government is engaged in an arduous struggle with disorder that may any day become rebellion ought to be framed less with a regard to the exigencies of oratory than to the rigorous obligation of fact. I contend, Sir, that in dealing with this the most direct and serious portion of Mr Isitt's accusation against the present government of Ireland, I have demolished sentence by sentence, and even word by word, every single count of his indictment, and I will leave this part of the subject with a single personal remark. I venture to think that instead of his becoming the caricaturist and the defamer of English justice—instead of his holding up to obloquy and contempt the action of English administrators in their en daevour to protect the helpless and to free Ireland from a curse greater than she is able to bear we had a right to claim Mr Isitt, as a Christian minister—I will not say, as a Protestant minister, for in this matter the Catholic and the Protestant clergy have an equal duty to perform—we had a right to claim him in his character of a Christian minister, as an upholder and defender of the law. I say, Sir, without hesitation, that if the principle involved in the reverend gentleman's course of action were to guide largely the conduct of his pantrymen, all that is best and soundest in the national character and all that is of value in the constitution would perish and disappear.

And now I have gone through the disagreeable part of my duty—that of traversing many of the statements of my exigent friend. I trust I have done so without hurting his feelings or in any way giving him offence, and I shall proceed to discuss the question of modern English legislation for Ire-fend and the question of Home Rule.

It may be asked, Sir, what we at this side of the world have to do with the Irish question. Can we not leave it to others, and why should we array any New Zealand community in hostile camps on a matter that belongs to Great Britain and Ireland and to Great Britain and Ireland alone? The answer is easy. And it is, first, that Ireland has herself appealed to the colonies, even by sending emissaries among them to advocate the popular cause; and second, that nothing that affects the dignity, the honour, and the integrity of the empire can be of indifference to colonists or out of the range of subjects on which they ought to pronounce a verdict.

I will only say further, as a preliminary, that although I shall not be able to utter such smooth things as my friend, who is on the popular side, has done, it would be a mistake to suppose that anything I have to say will be spoken in hostility to Ireland or to Irishmen. I love Ireland, and will not yield to my reverend friend in devotion to her interests or in admiration of the noble qualities of her sons and daughters. It is not from any indifference, far less from any hostile feeling that Unionists oppose the claim of Home Rule for Ireland, but because they see in that claim neither benefit to Ireland herself nor safety to the empire of which she forms a part.

With regard to the wrongs of Ireland of which you have heard so much, it is not necessary for my argument that they should be either palliated or denied. I certainly am not here to defend the treatment of Ireland by the English Government for a great portion of the last 400 years. While far from holding Ireland herself guiltless, as I have already declared, let us grant the truth of the indictment that has bees brought against English rule in the now distant past. Let a grant that for centuries that rule was harsh, and in many points cruel and unjust. What then? Does it follow that the mutual animosities and fierce struggles of those barbarous times are to dictate and

govern the political feeling of to-day! Is it wise to rekindle national hatred and attempt to shape modern policy by the heat of ancient feuds that had nigh burned themselves out, and of which, if undisturbed, the last spark would soon be extinguished. We are pointed to those old days of oppression and asked if it be possible for Ireland to forget and forgive. The answer lies in reminding Ireland that she herself is far from blameless, and in inviting her to turn from the bitter memories of the past to the ample at comment of modern times. Let Irishmen run their eye over the more recent pages of their country's history, and what will they discover? They will be reminded that within the present century, within the bust sixty years, the conduct of the English nation towards Ireland has been one long effort of conciliations of legislative amelioration, of concession and redress. They will have to admit that, not only, within sixty years, have the great and clamant wrongs of Ireland been one after another determined, but that reform after reform, privilege after privilege, indulgence after indulgence have been granted to her until every vestige of ancient injustice has been swept away and she stands at this moment among the freest and most liberally governed nations in the world. Those who look impartially on the conditions of English rule in Ireland will find it impossible to put their finger on a single political grievance under which Ireland is suffering at the present hour. In 1829 Catholic Emancipation was conceded to the people of Ireland In 1868 the Irish Protestant Church Establishment, and with it the Tithe system that had so often brought Ireland to the verge of rebellion, was swept away. In 1870 a land law for Ireland of exceptional liberality was passed by the English Parliament at the instance of Mr Gladstone. In 1881 another land act was passed, giving to the tenant fixity of tenure, freedom of sale, and a fair rent. This act may be described as even revolutionary in its character, so daringly did it invade what had hitherto been regarded as the rights of a proprietor in the land. It was passed in defiance of the principles, as they had always been read, of political economy, and amounted really to a confiscation in part of the landlord's property in the soil. This may have been necessary in the interests of humanity; it may have been necessary in the interest of public policy; and it may have been necessary to secure the peace of Ireland. These propositions need not be denied; hut it may I think be asserted that a great and liberal boon to the Irish tenant, a great measure of public policy, and a supreme effort to make Irishmen loyal and contented ought to have come from the hands of Parliament at the expense, not of the landlord, but of the State. Contrary to all just policy, contrary to the usage of the British and every other civilized legislature, the tenants of Ireland were relieved, the public feeling was propitiated, and the loyalty of the discounted was bidden for, at the private and individual cost of the proprietors of the soil. But this is not the main point at which I am aiming. I am striving to show all that has been done for the tenantry of Ireland—that for their sake every principle that hitherto had been held to govern the relation of landlord and tenant was strained or set aside; and that the act of 1881, with modifications that have followed and to which I need not particularly refer, has placed the various holders of Irish land in a better position than those of any other nation in the civilized world. There is no hardship under which an Irish tenant may lie from which he cannot be freed simply by applying to the proper tribunal; and, so far from, being the object of pity that he is sometimes represented to be, this interesting individual may be fitly designated the Spoilt child of the British State. Amongst his many privileges mention should be made of a right of purchase secured to him, under Lord Ashbourne's Act. It is actually true, although it seems almost incredible, that a tenant desiring to obtain the freehold of his farm may, if he can come to terms with his landlord, become the proprietor by paying for forty mine years an annual sum 25 per cent, less than the rent judicially fixed. "Repeated Legislation," says the *London Times* in one of its leaders, "has placed the Irish tenants is a position far more favourable than is enjoyed by any other set of men on the face of the earth, and the Plan of Campaign is absolutely devoid of the justification or excuse for violent courses sometimes drawn from irremediable wrongs."

The narative of facts that I have given and this comment on some of them must be my brief reply to all argument founded on the wrongs of Ireland. It will be seen that the unkindness of the past has disappeared. The hearts of Englishmen and Scotchmen beat kindly towards their Irish brethren. If I may venture to apply, as I do without irreverence, the words of Scripture—" Old things are passed away "behold, all things are become new." In times of famine the hand of England has been stretched forth with unstinted liberality towards her suffering sister. There is no part of the British Dominions where an Irishman may not stand side by side with the sons of St. Andrew and St. George—equal in rights, competing for the same honours, upheld by the same sympathy, and with no distinguishing badge of nationality but what he himself chooses to wear. Is it too much to ask of men thus sharing in all the privileges of citizenship in the leading nation of the world to be content with those privilege and all that they signify, and to show towards the British Crown that loyalty and devotion that Englishmen and Scotch men have long delighted to confess.

But I have merely cleared the way for consideration of the great question of Home Rule, which embodies the latest and greatest demand that a portion of the Irish people is making on the British Parliament. In relation to this question I desire to lay down several distinct propositions, which, however startling some of them may appear, are all I think capable of the clearest demonstration. The first is that the present inhabitants of Ireland are not in a position to claim separate government, as a distinct and homogeneous nation The Celtic race, it is

true, predominates in Ireland, but they do not in any true sense constitute the people of Ireland They are not entitled to speak politically for the country or to demand to be made the sole depositaries of political power Not in one quarter alone of Ireland, but throughout, its length and breadth, the Saxon race have, for centuries, largely shared the country with their Celtic fellow citizens. The enormous proportion of the soil is in Saxon hands. The wealth of Ireland is mainly in the possession of men who are of English descent or at least wholly imbued with English sympathies. I do not mean to be in the least offensive when I add that education and intelligence are to be found more largely cultivated amongst the minority that holds by English traditions than in the majority that rejects them. It is calculated, in regard to numbers, that out of the five million inhabitants of Ireland from one and a half million to two millions are avowedly on the side of English rule, and would regard its abrogation as the direst calamity that could befall their country. Protestant Ulster is more sharply cut off by race, religion, and political creed from the Catholic Provinces of Ireland than Ireland herself is divided from the two kingdoms to which she is politically attached. And all this being true, with what reason can it be asserted that it is Ireland as a nation that is demanding virtually to be freed from Imperial rule, and to have her destinies handed over to a Parliament that would be practically independent? I am arguing this point on the supposition that the majority—even the large amjority—of the Irish people are in favour of Home Rule and I contend that, granting this to be the case, yet the demand for Home Rule cannot be accepted as that of a nation; cannot be accepted as the appeal, let us say, of Scotland, might be accepted—a united and homogeneous people,

But I advance a step further and reach a second proposition which may appear strange to many, and it is this—that there ft never yet been forthcoming authentic proof that a majority, at any rate a large majority, of the Irish people are in favour of Home Rule; in favour of it, that is to say, on the true merits of the question and apart from other issues with which it has been mixed up. In the first place, the voice of the electors of Ireland on the question has never been really heard. How could it be heard in the face of the terrorism of the League, which dominated the polling booths and made it more than men's lives were worth to register a vote in opposition the popular cry? At the election of 1886—unfortunotely I have not the figures—but out of the registered voters of Ireland a very large proportion failed to record their votes on either side. Why was it so? It was not through indiffer- ence, for the issues had taken fast hold of the popular mind and were felt to be the most momentous that the constituencies had ever been called on to determine. It was simply through this—that freedom of election had been crushed out by the tyranny of the popular leaders and the National League. The free voice of Ireland on this great question was not permitted to be heard. Mr Gladstone and Mr Parnell may boast of the 86 Irish members that were sent up to the House of Commies pledged to demand Home Rule for Ireland, but it is not as honest boast. No one knows better than those leaders then these 86 men were not the free, spontaneous choice of the Irish people. They were the nominees of Mr Parnell and this subordinates, whose word of command made them what they became; and it is idle to speak of them as representing anything but the will of the League. Not until the power of that great engine has been broken; not until votes can be cast without danger to life or worldly interest will it be possible to say what is really the mind of Ireland in regard to the question of Home Rule. I shall have to speak by and by further of the National League and the secret of its power over the minds of the agricultural population of Ireland. What I wish to emphasise at present is the fact that owing to the League's operation the return of 86 Home Rule members to the British Parliament, however imposing it may seem, deprived of true moral, if not of political, weight.

In most arguments on this question it is customary to assume as proved the two positions that I have endeavoured, I hope successfully, to assail. It is assumed that Ireland is entitled to speak as a nation on the question of being governed by a separate Parliament and a separate Executive; and she has spoken in unmistakable terms in favour of her being so governed. I have ventured to deny both propositions but I go on to this—that even if the truth of both were granted, it would not follow that the form of self-government demanded for Ireland and that Mr Gladstone proposed to fer on her by his Bill of 1885—and still less that any larger measure—ought to be conceded by the British Parliament It is one of the grand fallacies of the Home Rule agitators to speak of Ireland as if she stood alone in this matter, with in tresses that could be separated from all other interests; to speak as if the mere will of the Irish people, or the majority of them, should be conclusive as to the kind of government that Ireland ought to possess. Such a notion is plainly untenable in view of the facts of the case. Ireland does not stand alone, and her interests are not separable from the interests of the two kingdoms with which she stands politically connected. The Ireland of to-day is simply a portion, an integral and inseparable portion, of the United Kindom to which England and Scotland, also as integral portions, belong. And to ask that Ireland should be governed without a primary and dominating reference to the interests of the whole Empire is to make a demand that nothing in her political position can be found to justify. Sir, this is not purely an Irish question. It is not mainly an Irish question. It is a question that must be decided by what is necessary and politic for the great kingdom of which Ireland is a member. There can be no right to self-government belonging to Ireland; there can be no right to self-government belonging to Scotland; nor to Wales; nor to England, that would be inconsistent with the safety and the walfare of all these countries

combined. The right, say of Scotland or of Ireland to manage her own affairs, in so far as these are directly or indirectly Imperial; that is to say in so far as they touch the safety of the State or the interests that the State is charged to protect, is a right that has no existence except in the imagination of enthusiasts incapable of discerning what the union of these countries with one another and with a third kingdom implies, In judging therefore of the defend for Irish Home Rule, the one question for consideration is this—how much of self-government can be given to Ireland with security to Imperial interests and to those interests of the whole Irish people that, in the nature of the case, are safe only in Imperial hands.

Of course my whole argument depends on the fact of the Union between Great Britain and Ireland, consummated in the first year of this century. And I know it is customary for Home Rulers, including their last acquired leader, Mr Gladstone, to treat that Union as if it lacked the force of moral, and therefore political, obligation. It is alleged that the Union of 1801 was brought about by corrupt and dishonourable means, and that therefore the right lies with Ireland to repudiate and annul it. Now, Sir, I wish to say, in a single word, in reply to these allegations, that an enquiry into the history of the Union, however it may concern the character of the two contracting parties and the reputation of statesmen who lived some ninety years ago, is not an enquiry that has the slightest practical bearing on the question of Home Rule to-day. In connection with this question I would no more consent to discuss as a factor in practical politics, the statecraft that accomplished the Union than I would consent to discuss the invasion of William The Conqueror as affecting modern titles to the soil of England; or the question of the Hanoverian succession as determining our allegiance to the Queen. There are certain great historical transactions that once accomplished, are accomplished for ever, and one of these, assuredly, is the Union of Ireland with Great Britain For nearly 90 years the whole course of Irish history has run alongside of the fact that Ireland had become a portion of the United Kingdom. Her whole social fabric, citizenship within her borders, the permanent transfer to her of capital form without, have all been determined by the knowledge that she was integrally and indissolubly a portion of the British Dominion. The families from Britain that have made Ireland their home, the millions of English and Scottish capital that have been invested in the soil, in other real property, and in every branch of Irish commerce—these migrations and these investments have all been made on the faith that the protection of the British Government would never be withdrawn from Ireland. By the events that have thus occurred since the Union the Imperial Government has become the only possible depositary of power, and the relegation of that power to other hands would be a betrayal of trust that no consideration whether political or sentimental could be held to justify. A robust view of the true position of Ireland—divided between races that are almost hostile, torn by faction and rent by religious difference—will dismiss with a kind of impatience the idea of Imperial rule being exchanged for the domination of a party, at the mere bidding of sentiment and to satisfy the hot headed aspirations of mistaken patriotism.

I come now to the question—What is Home Rule—the Home Rule that is demanded by the Irish party for Ireland! The bill of Mr Gladstone is dead, and no new scheme has been formulated either by that leader or by his coadjutor, Mr Parnell. No doubt Mr Gladstone is puzzled; at any rate me attempt has succeeded in drawing from him an avowal of his present purpose. We cannot go wrong in assuming two things—that the Home Rule measure of the future must be such a measure as will satisfy Mr Parnell and his Irish associates—while they in turn must submit to be dominated by the party that stands behind the Home Rule movement and that supplies the money by which mainly that movement is carried on. That there is such a party all the world knows. It has its head quarters on the other side of the Atlantic. Its leaders are refugees from English justice—men stained with crime—desperate in their methods of political warfare—the advocates, the open advocates of assassination and dynamite—men a portion of whose social orgies is the glorification of those who have taken part in murders upon Irish soil. When the Headers of the Home Rule movement go to America, these are the men whose hands they grasp, whose patronage they endure and whose money they receive. Implacable hostility to British rule is the leading principle of these conspirators and of the societies to which they belong. They are avowedly impatient of the slow methods to which the necessities of their new alliance with Mr Gladstone confine the advocates of Home Rule in England. When Mr Parnell speaks to his American supporters he takes up their own parable and tells them that "he never will be satisfied until the last link that "binds Ireland to England has been severed." Now, when such men are the virtual masters of the Irish Home Rulers and the National League; when they contribute the funds that are necessary for the League's existence and necessary even for the return of the League's creatures to Parliament—can it be doubted that the policy of the Irish Home Rulers must be, secretly at least, such a policy as will satisfy these American paymasters and allies? It may take at first the shape of Mr Gladstone's cautious and guarded bill of 1885, and may profess unswerving faithfulness to the British connection and loyalty to the British Crown; but if it is not to be a policy involving falseness to other masters, it will have separation and treason in its issues and at its core. The existence of an Irish Parliament and an Irish Executive, however fenced round with covenants and guarantees, could mean nothing but ultimate struggle for complete and absolute independence. "We can assign no limit," says Mr Parnell in one

of his can- did moments, "to the aspirations of a nation," which, translated into plain English, signifies that whatever professions may be made of the finality of any measure that embodies a continuance of the Union, the foothold of an Irish Legislature might any day be used for an advance to complete severance from the British Crown. And this is the reason, the substantial and wholly adequate reason, why the two great parties into which Britain is at present divided pass under the appellations, respectively of Separatists and Unionists. The latter, the Unionists, are sometimes twitted with the pusillanimity of supposing that Ireland could ever succeed in casting off her allegiance to Britain, with Britain's enormous warlike resources both at sea and on land. But what is this but to say that the desired condition of Home Rule for Ireland is to rest ultimately on a basis of coercion? What is it but to say that we are to trust, for the maintenance of the new Constitution, to those same weapons of physical force the employment of which, in extreme circumstances, has called forth the indictment denunciation of these very patriots. Sir, disguise it as we may, this is in very truth a question of maintaining the integrity of the Union between Great Britain and Ireland and if we are unprepared to see that Union dissolved, we shall resist the first step towards its dissolution, the establishment of a semi-independent Parliament sitting in Dublin,

It would lead me far beyond my limits of time to show with any fulness of argument, that to sever the British and Irish Union would mean danger to the one country and disaster and ruin to the other. The geographical position of the two island will always, so long as Britain holds her position in the world, forbid the idea of separation. She could never consent to have a possibly hostile country or one capable of being made the base of operations against her by a hostile power—she could never consent to have such a country so near to her as Ireland has been placed by nature. The two nations were meant to belong to one another—to be a mutual stay and defence in war, and the support and complement of each other in peace What would Ireland be if the credit, the capital, and the commerce of England were withdrawn from her? And what might she not become if, by the cessation of this fruitless and weary strife of demagogues, she were left in peace to develop the marvellous resources with which Providence has endowed her. It needs only the absolute safety of life and property to induce such a How into Ireland of money and commercial energy and activity as would make her one of the most prosperous countries under the sun. And the heart grows sick to see the barrenness, the desolation, and the poverty to which she is consigned, simply because law has been abrogated, industry has been strangled, and the minds of the people deluded fertile hope of a fanciful and chimerical emancipation.

But apart from the exigencies of her relation to Great Britain, there is enough in the circumstances of Ireland herself to forbid the idea of her having one independent government. Those who have studied the matter most deeply tell us that to institute a Parliament in Dublin would be to light up in the country the flames of civil war. Ulster will never submit to be governed from Dublin, and the great portion of the population throughout the island that is bound to English interests and leans on English protection will never consent to hold its fortunes at the disposal of an Irish Parliament or trust the power of an Irish Executive. And when we consider what these people are and what claims they possess on the State of which they and their forefathers have been for nearly a century the loyal citizens, it will be seen that Britain could not desert them without the most cowardly betrayal of their rights and interests. These subjects of the Crown dread separation, and will fight to prevent it. And can we blame them? What do they see as an indication of the temper and designs of those who seek to be their masters? They see the men who would undoubtedly be in the lead of affairs in the new order themselves outraging law, oppressing those who resist them, forbidding free dealing between man and man, instigating to the repudiation of just debts, threatening reprisal on judges and police when the power they covet shall come into their hands. Are these the dispositions fitted to inspire confidence in the minds of a minority that is asked practically to give up the protection of the British Crown? Mr Gladstone knew that he could not trust in the hands of an Irish Parliament the property of the Irish landlords, and before giving effect to his scheme of change proposed to take over, virtually on behalf of the British nation, the land of every Irish holder that might accept of his terms of purchase. He admitted even, in such ambiguous phraseology as he loves to use, the right of Ulster to consideration of her claim to separate government when the day of Home Rule should come. But Ulster will never, it is certain, get self-government from a party that relies upon Mr Parnell and his associates. These see too clearly that the revenues of that rich province cannot be dispensed with if the new Irish Treasury is to be filled, and they will insist on a common lot and a common purse for those that love and those that would detest their rule. Mystery hangs over the designs of Mr Gladstone and his allies—the fresh designs that they cherish since the collapse of the notable scheme of 1885; but it may, I think, be taken certain that those designs do not include that exceptional treatment of the Province of Ulster that would make Home Rule a possibility and eliminate from its consequences the almost certainty of civil war.

I trust, Mr Chairman, there is yet time for me to say a word on some of the features of this great question—the question of the day undoubtedly for Ireland and the Empire What is really this demand for Home Rule in Ireland that has shaken the three kingdoms to their centre? Is it truly the demand of a people or a large section of a people eagerly desirous of political change and panting for a liberty that as denied them by the

Government under which at present they live? I venture to think not. If I have spoken to any propose, I have shown that for the honest citizen in Ireland then is all the freedom that the heart of man can desire. I finally believe, Sir, that amongst the peasantry of Ireland, who are the bulk of the people, there is in truth no intelligent and ardent desire for a change in their political condition. What ever longing for Home Rule they may entertain has to be traced, I fear, to a more ignoble source. The Irish difficulties is at the root an agrarian and not a political one. And the manipulators of Home Rule have cunningly worked on the agrarian troubles and agrarian desires of the people. The tillers of the soil were brought to be enamoured of Home Rule, not for the political blessings it would confer, but because it was supposed to carry in its folds an object must nearer to their hearts. Home Rule in the breast of the Irish peasant means simply this—the instrument by which the last that he holds from another may be made, without payment his own. And herein lies the secret of the failure of all those generous remedial measures that were passed by Parliament for the Irish tenant's relief. He was schooled by demagogues to believe that he would be a fool to accept at the hands of the law any ameliorated tenure, when there would be shortly within his grasp, if only he obeyed his leaders, the land itself, without the plague of landlordism or the inconvenient obligation of rent. It is not to the credit of the Irish cultivator, but I am afraid it is in melancholy consistency with the human nature that moved him, that this dazzling prospect should make him an ardent Home Ruler; that it should blast the hopes of the Irish land reformers, and should launch the Irish landlords into a sea of troubles. Rents, as we all know, have been refused; evictions have been forced on men whose only crime was an effort at self-preservation and self-defence; and Irish politics have been mixed and confounded until real issues and the real motives of demagogues have slipped out of sight. I believe that when the Irish peasant sees, as his eyes are being now opened to see, that the law is stronger than his leaders and that his hope of filching the landlord's property is vain, the back of Home Rule will be broken, and Mr Pamell's occupation gone.

Indeed but for one disastrous and lamentable feature in this agitation it is tolerably certain that before this time the question of Home Rule would have lost its vitality and would have ceased seriously to disturb the atmosphere of British or Irish life. It was the marvellous transformation of Mr Gladstone into a Home Ruler that in 1885 brought that question within range of the practical politics of the day. It would furnish ample material for a separate lecture to discuss the wonderful performance of the great Whig leader, a performance known in English as a "wheel-about," and in pench by the military phrase, *volte-face*. Hut the genesis of so extraordinary a change in political view and action is worth the rapid tracing, especially as it is easily traceable, and will clear our apprehension of the great political divisions that Home Rule has created, and of the probable fortunes of the Before the general election of 1885, and in the middle of the electoral campaign, Mr Gladstone in plain terms implored the constituencies to give him such a majority in the now Parliament as would make him independent of Mr Parnell. The electors did not obey this behest, but placed him in such a majority only as made Mr Parnell, with his 86 flolowers, master of the situation and able to turn the scale in favour of either Tories or Liberals. That, Sir, is the true secret of Mr Gladstone's conversion to Home Rule. We know that his own Government had dealt in the most stringent manner with the leaders of that movement; that he had imprisoned under a rigorous Crimes Act Mr Parnell and his associates; that he had described in that epigrammatic language of which he is a master and with all the force of his rhetoric, the iniquity of the Land League, "whose steps declared, "were dogged by crime;" that he had denounced boycotting as having behind it the sanction of murder as its ultimate force; that he had characterised the doctrines of Mr. Parnell as the doctrines of "public plunder," and contrasted what he called that gentleman's immoral and degrading doctrines with the opinions of the great O'Connell. This Sir, was the Mr Gladstone of 1881 and up to the close of the elections of 1885, when the exigencies of the Liberal party demanded support from without. Mr Gladstone became a aware at this crisis in the history of his party that Lord Carnarrow had been in conference with Mr Parnell, and was supposed the have become a convert to Home Rule views; and the Whine leader rushed to the conclusion that the views of Lord Carnarvon were the views also of Lord Salisbury and his Cabinet and that another plot was in hand to "dish the Whigs." Then it was, Sir, that Mr Gladstone asked his party to believe—asked the people of England to believe—that for 15 year be had been cherishing Home Rule in his heart, and announced that he was now prepared to offer that gift to Ireland. The position thus assumed is probably the most extraordinary that was ever occupied by an English statesman. Those whose faith in Mr Gladstone will bear the strain of ascribing his change of front to patriotism and not to a desire to grasp at power and secure the interests of his party are of course welcome to their belief and to any comfort that their constancy brings them. But I believe that history will write another verdict, and will proclaim that in an evil hour, prompted by a motive beneath that of a patriot, the great Liberal Chief succumbed to temptation, resolved at all hazards to snatch as power, and to build up the tottering fortunes of his party, as the risk even of the integrity of the Empire. The step was a bold, not to say a rash and audacious one. It was taken without consultation with the leading men of the Liberal following-on his own sole responsibility and in the confidence that wherever he led, there, in the end, his obsequious comrades were bound to follow. But he had reckoned

without his hosts. He had miscalculated the strength of political and moral fibre of men like Hartington and Chamberlain, like Bright and Goschen, like James, Selborne and Argyll, and a host of others of lesser name and note. The first result of the conception and submission to Mr Gladstone's Cabinet of the Home Rule and Land Purchase Bills was the resignations of Mr Chamberlain and Mr Trevelyan. The last was the shattering of the great Liberal party; Mr Gladstone retaining in allegiance to himself no men of mark but Mr Morley, Sir Vernon Harcourt, and the Earl of Rosebery. Nemesis had been swift and unrelenting; and the immoral blunder that was to have made the fortune of the Whigs ended in their sudden and disastrous overthrow. Beaten on his Home Rule Bill, Mr Gladstone appealed to the country, and the country, in so largo numbers, returned Unionist members to the House, that the Government fell into Lord Salisbury's hands. Then was formed, on the basis solely of the integrity of the Union, the famous coalition between the Conservative party and the Liberals that had rejected the dictation of Mr Gladstone—a coalition that has ruled, since it was constituted, the destinies of the country. And it ought not be possible to refer to that remarkable event without experiencing a thrill of gratitude to those men in the Liberal ranks who made so noble a sacrifice of party to patriotism—men who were willing for the sake of the country to sever unhesitatingly the ties of political friendship; to place themselves in antagonism to a Chief they had venerated; and to sake shipwreck for the time of their political hopes and aspirations. What that famous group of patriots did in the crisis of 1886 is, I believe, unique in English Parliamentary history and will form a bright page in the somewhat shady records of party. To their high character, to their extraordinary ability, and to their faithfulness to their new allies is due the safety up to this time of the Union, and the prospect of that safety being assured in the future.

Having glanced at the position of the Unionist Liberals, the temptation is almost irresistible to go a little into episode, and look for a moment at the place occupied by Mr Gladstone—especially with reference to his antecedents—and the remains of the Whig party that still adhere to him. Mr Gladstone is a psychological curiosity that it would be presumptuous in me to attempt to analyse. There are many of his countrymen in all parts of the world, that still cleave to and worship his But there is a large and increasing number who think that by his latest move in politics a great reputation has been tarnished, a great name overshadowed, and a great career virtually brought to a close. His latest tergiversation—the crowing one among a host of others that have marked his course in politics during the past sixty years—has provoked a stringes enquiry into the real claims that he can make to statesmanship, an enquiry that has issued in some very startling results. I will not take it upon me to deal with so great a name, but I will ask as many now hearing me as may desire to form a due estimate of the most noteworthy of our living statesman, to peruse a little book entitled "Mr Gladstone, a Study," by Mr. Louis Jennings, the member for Stockport. If the faith of any of Mr Gladstone's admirers can survive an attentive consideration of the facts which that little volume reveals, I can only say it must be of a heroic character indeed, and faith in which enthusiasm supplies to a large extent the place of reason. Mr Jennings contemplates and dissects the charter of Mr Gladstone in every phase under which during a long career it has exhibited itself. He reviews Mr Gladstone policy and administration in every department of the State with which he has intermeddled; and leads his reader, by a sheer historical record of facts, for which in every case authority is given, to this conclusion—that the great idol of the Liberal party has been in practice everywhere a failure, and it aim nothing but a brilliant opportunist. His admirers will doubt point to the eloquence of Mr Gladstone and to his mash fold genius and acquirements; but these are not in dispute The question is about his success as a statesman; and if the conclusions at which his critic has arrived be true, then the eloquence of Mr Gladstone has been a fatal gift for England In reviewing the Home Rule question we are closely concurred with what Mr Gladstone has done, and with the claim that past gives him to lead England forward to the most moses- tous constitutional change that has been contemplated during the century. The political trustworthiness of their leader is really the entire plea that the non-Unionist Liberals were able to advance when, at the word of command, they declared for an Irish Parliament; and if that plea can be shown to be futile, the prop on which Home Rule has been resting since 1885 must conspicuously fail. But I must leave Mr Gladstone in Mr Jennings' hands. The book I have recommended is accessible here. It is brilliantly written, and will be acknowledged at least to deal fairly and candidly with the subject of which it treats.

I have not time to discuss now the minor lights by which Mr Gladstone is surrounded. They shine, most of them, with no striking, and some, certainly, with no wholesome lustre. Neither can I, after having so long taxed your patience, venture on an estimate of Mr Parnell and his Irish host. That he himself is a man of great capacity, unflinching resolution, and of striking powers of debate will be acknowledged by every one. And it will be equally admitted that among those whom we may call his lieutenants in command are to be found men of singular eloquence and of remarkable real and courage, whatever may be thought of the cause in which they are engaged. They occupy a strange position in the British Parliament, which, however, through the strength and firmness of the Unionist coalition, they have long ceased to dominate or throw into effectual confusion.

The great interest now of course centres in the prospect for Home Rule on the one hand and the Unionist cause on the other. Recently the question as between them has entered a new phase, owing to various

developments, some of them of quite a startling kind. In the first place there can be no doubt that the stringent measures of the Government have been largely effectual in checking the domination of the League and restoring order in the districts where its influence was at one time supreme. Again, there has been the remarkable Rescript of Pope Leo, to which I have already referred, condemning as immoral and forbidding to all true Catholics the use of the two great weapons of the Home Rulers—Boycotting and the Plan of Campaign. It would not be easy to overestimate either the moral or political value of this deliverance by the Head of the Roman Catholic Church. Certainly it super- sedes the necessity of demonstrating to our Roman Catholic brethren, what might be demonstrated on independent grounds that these cherished instruments of the League are then instruments of social tyranny and of fraud. And even for these beyond the pale of the Church of Rome, the decision of the Supreme Pontiff and his Bench of Cardinals—men representing the intelligence and moral sense of every country in Europe—can hardly fail to carry the greatest ethical weight Let the agitators struggle as they may to deprive the verdict of that tribunal of its significance and of its binding force on the consciences of Roman Catholics, it is impossible that it should not prove a most damaging blow to the Home Rule organisation in Ireland.

It would be an error to overlook, in the estimate I am attempting, the critical position that Mr Parnell occupies at this moment in the eyes of the people of the three kingdoms Clearly it would be indecent to offer an opinion on what will be the result of the judicial enquiry that is now being prosecuted into matters affecting the character of the National leader; but on that result will undoubtedly depend what is to be the immediate future of the Home Rule cause. In the meantime the friends of Union and the friends of order have nothing to fear. The Unionist phalanx is strong and unbroken. The Unionist majority in the House of Commons forbids the possibility of triumph to Mr Gladstone, backed though he is by the Irish contingent into whose arms he has thrown himself with the diminished forces of his party. The most powerful portion of the British Press is true to the integrity of the Empire. The English mind is being instructed from time to time by a series of addresses of singular weight and eloquence our the merits of the great question at issue. The conviction remains strong that at all hazards the Union of the three kingdoms must be maintained if the British Empire is to continue unimpaired in honour, in dignity, and in strength. It is a simple question of how far British courage will continue proof against the counsels of cowardice, of surrender and despair. We may trust our countrymen for the result. They will be just to Ireland. They will grant to her when the time comes whatever of self-government she can claim in common with the two nations that stand with her on equal terms in relation to the great Empire of which each is an undivided part But neither to passion nor to sentiment, neither to violence nor to intrigue, will ever be yielded up that IMPERIAL UNITY Which is at once the glory and the safety of the British State.

decorative feature

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Front Cover

"Far South."

Reprinted from the "Southland Times."

Prelude.

THE following notes, written during an interesting cruise to the Southern Pacific Islands in the C.G.S. "Stella," were originally published in the SOUTHLAND TIMES. The interest they awakened and the requirement for descriptive matter to accompany the views, the demand for which has exceeded my most sanguine expectations, must be ray excuse for launching my first pamphlet for public patronage.

I cannot do better than dedicate this effort to CAPTAIN JOHN FAIRCHILD, to whose good management I owe whatever success has attended my expedition.

WILLIAM DOUGALL.

ment to Britain. The interesting process was fully described and we were conducted through the arctic chambers by the genial manager Mr Gray, amidst the corpses of several hundred sheep, which, when struck with a hammer, resound like iron. But it is not frozen mutton I am to speak of, so we must back to our subject and our steamer Regretting the delay of twenty-four hours, we steamed off on Thursday, 19th January, at 9 a.m., and after successfully negotiating Foveaux Straits we made for the south of Stewart Island, where we will anchor, awaiting a rise in the barometer, and let us hope an provement in the weather. For my especial behoof the Captain, who is exceedingly kind and obliging, steamed through Port Adventure (No. 1), and I took an instantaneous view from the bridge, Port Adventure was until comparatively recently the headquarters of the Maori settlement on Stewart Island, but the few natives are now settled at the Neck, where the Government school is located. Post Adventure is memorable as being the place at which Captain Margrave and his companions landed after their enforced residence of twenty months on the Auckland Islands through losing

their vessel, the "Grafton," of which more anon. At 1 p.m. we anchored in Lord River, and immediately had the dingy out and away up five miles to the head of this beautiful river. Our party consisted of Professed Reischek, of Vienna (who on his return to Europe is publishing book, "Ten Years in the New Zealand Forests "), the Captain, there youths, and myself, with a couple of seamen to do the rowing and sounding. So, outfitted with camera and plates, and the others with fowling pieces, we rowed away trying to look and feel our happiest in spite of the continuous rain and wind. The banks of Lord's River are densely timbered with ironwood, and the little coves and tributaries of the river are spots often pictured but seldom seen. Scenes of fairy loveliness, the ironwood was in blossom, and the whole body of boat was resplendent in brightest scarlet. Meanwhile I and my landed on a beautiful island near the head of the river and had two shots on the beautiful stream (No. 2) looking up, and (No. 3) looking down, but pop, pop, and I learn that I am not the only shoodtist, although perhaps the least dangerous. My friends returning with the boat, I learn that they have shot two paradise ducks, and our stock of fowl is considerably added to as we descend the river, including several ducks and paradise ducks caught in the recesses of the rocks with out the aid of the gun. It is seldom that these birds are disturbed her or further south, as there are no moans of reaching this unless you charter a cutter or put in here from unfavourable weather. As we near the vessel we see that the crew have got out the whaleboat, and come alongside we learn that they have been very successful in their fishing venture, they having caught trumpeter, blue cod, and a couple of hapuka (or groper), either of which latter would weigh about 80lbs and are excellent eating, so they will help to make our fresh most hold out a day or so longer. The weather is very stormy, bat we an anxious to get on, and after consultation the Captain decided the unless the weather got worse we would start for Port Pegasus at 6 o'clock next morning; and accordingly there was the usual whir-r-r of the winch, and the engineer's telegraph sounding warned us that we are again under weigh, but as yet only a short sail of 15 miles, and at 8 a.m. we are entering Port Pegasus by the Whale Passage, where we anchored off Evening Cove, amidst the most lovely scenery it is possible to conceive. We enjoyed the prospect very much, the more so perhaps as we only saw it at intermittent intervals on account of the almost incessant rain and hail squalls, which quite obscured the landscape. To get out of the rain we went in and had breakfast, which pleasing duty completed we resolved to land and spy out the land. We also thought that now was the time to see that our water supply was right, as we might not find fresh water for some time to come; so while the Captain and myself ascended the hills the crew filled the water casks and got them aboard. The climbing the hill was no joke, to me at all events, but to the Captain, a man ten years my senior, it seemed just amusement. He cut the way as he went and then kept well ahead of me. He reminded me of a sandfly, here, there, and everywhere. Although the bush here is a perfect tangle and most difficult to traverse, eventually it gets lighter, and after a hard scramble we emerge on the hilltop, and are glad we came. The view is grand, almost at our feet lies the arm of Port Pegasus, named Shipbuilders' Cove, while on our right rise the peculiar bald granite peaks 1400 feet high, known as Frazer Peaks (No. 6). On the summit of the hill where we stand there is no bush, only fern, deadwood, and occasional tussock. So strong was the wind that it was with difficulty we could prevent the camera being blown away. I, however, got a good view (No. 7) and also a stereo. The scenery is grand, and looking down, the water looks very pretty with its dense bush all round, whilst the summits of the hills are bare granite; the soil, if it can be so designated, is very poor, the granite formation being covered by about a foot of peaty matter, which even on the steep sides of the gullies and slopes of the hills holds water like a sponge, so that as you trudge along you go over the boots in this nasty black bog. This renders the travelling bad, and we come to the decision that the locality, with all its luxuriant beauty, will not readily adapt itself to the requirements of settlement. Following the track blazed by the Captain, we find the descent just a little easier than the ascent, the peaty footing being very slippery and our way obstructed with numerous fallen trees. Reaching our boat we embark and are conveyed to a beautiful sandy beach just on the point below Evening Cove and separating it from Shipbuilders' Cove. From this point I took a view across Shipbuilders' Cove and showing Bald Peak, 940 feet (No. 4)—the hill fully justifies the name. I also took a view looking right along Port Pegasus towards Acheron Passage, with the "Stella" in the distance, and Professsor Reischek anatomizing a shag in the foreground (5B). When just about to embark, the Professor discovered a tunnel right through from the one arm to the other, so of course I couldn't resist the temptation to have another shy, and secured (5C) a fine picture of our subject. The tunnel is about 40 feet through, and the bush all but hides the opening until you approach quite close. The entrance, on Evening Cove, is from a beautiful sandy beach, and the exit on Shipbuilders' Arm is between precipitous rocks. I would have liked to secure a picture from the reverse side, but could not get sufficient distance back on account of the water. The day was passing, however, and the officer in charge gave the order, "all aboard." On reaching the steamer the Captain in formed us that the glass had fallen to 29.10, the lowest reading he has recorded for nearly three years; but to help us along as far as possible he resolved to go to Wilson's Bay, twelve miles further along the south coast of Stewart Island and the last anchorage before leaving for the Snares. At 2 p.m. we moved along, and decided to wait there till morning at all events; and as it is quite contrary to our Captain's nature to be idle we had out the dingy almost before the anchor was down, and away to sound and

survey the inner boat harbour. Passing through a narrow and rocky channel we enter one of the most beautiful bays possible to conceive, completely landlocked and perfectly shelled and studded with gems of islands whose foliage dips gracefully the mirror-like water. We notice that the lake is almost fresh, and the usual dark colour of water passing through bush, it is also quit shallow and has a beautiful level sandy bottom. We landed and J cured two views (Nos. 8 and 9) and had a pleasant walk round two sides of the beach. As we returned to our landing place we wade through a field of peppermint waist high, and tons upon tons of it Report has it that at one time whalers frequented this bay and had a miniature settlement here; so, if this is the case, it may account for the great spread of the peppermint. Here, as everywhere in Stewat Island, the bush is very dense. At the north end of the lake a fine stream flows in, altogether it is a scene of fairy loveliness, and would indeed be a pleasant homestead, or a colony on a small scale. The sol is much better than at Port Pegasus or Lord's River, perhaps or account of its being mixed with sand. We feel regret at leaving this lovely spot, but we remember that duty calls us hence, so we return on board, and as the weather looks if anything a little better, we decide to try and make the Snares before the storm breaks upon us, and accordingly we up anchor. Now just here let me say, that our anchor shewed a strong inclination to remain where he was, and we would have saved some coals and a few wet jackets if we had allowed him to do so, but we coaxed him off the rocks around which he had lovingly coiled his cable, and left Wilson's Bay resolving to caution others to be careful when anchoring among rocks. Every mile we travel towards the Snares the sea gets worse, and when the log recorded about had the distance the weather was indeed bad, so with much regret the order went forth, "bout ship;" and as we had had sufficient trouble in our Wilson's Bay anchorage we resolved to return to Port Pegasus. On our way back we passed the brigantine Sarah and Mary under stores canvas, bound for Melbourne. We anchored off Kelp Point at 8 p.m. and all through the night and next day (Sunday) it blew hard, accompanied with bitter, cold squalls. At 6 p.m. The Captain again decided to try and get to the Snares, so our spirits rise and all is bustle; the weather is not very fine, but time is passing and we must be off. After making a tolerably fair passage, at daybreak these landfalls are dead ahead, and at 4.30 a.m. we anchor half a mile from the shore, and on the east side, in 56 fathoms of water. All around these rocks the water is very deep, and the rocks rise precipitously and sink similarly. There is, however, an excellent boat harbour (No 10), well sheltered from all prevailing winds. As we approach the shelving rocks our humourous faculties are exercised by noticing, or rather staring at, compact masses of penguins, with their peculiar bright yellow plumes, like quills behind their ears, they are like batallions of soldiers arranged for review in columns (No. 11), lines, and detachments (No. 11B), they watched our approach, but like faithful defenders of their island home they moved not, and only when we attacked them did they defend themselves by pinching whatever came nearest to their powerful beaks, regardless whether it was a finger or a leg—the penguins had the honour of drawing first blood however, as several of our party got nips as they essayed to secure some trophies. I don't know that I ever saw a more amusing spectacle than was presented when Captain Fair-child went among them and began filling a bag with them neck and crop, indeed they all but tumbled into the sack voluntarily. The old penguins will not feed, but live on their internal fat for a long period; the young ones, however, can be trained to eat like ducks. The Captain expressed surprise at the scarcity of penguins on this occasion as on any former visit they were much more numerous, at least five times as many, while the water was literally alive with them. Ascending the hill under great difficulty, clambering under and over the branches of the peculiar bush with which the island is clothed, we emerge into a clear space, and look back at the eccentric character of the timber. The trees, which are stunted and storm-beaten, have long, rugged, bare limbs, and grow down hill almost parallel with the ground, the wood is very white and soft, and the leaves are about four inches each way and of a light green-gray colour. There were quite a number of young penguins here, and the Captain secured some for museum purposes. On the Snares the penguins are in what are called farms, that is to say in isolated groups, whereas on the Bounty Islands they are all over. Just as I was about to take a view the Captain cropped up from behind some tussock with his arms full of young ones (No 12), and added to the interest of the picture. We moved along northwards, and came on a perfect cemetery of dead penguins lying rotting amidst black sand—thousands upon thousands—evidently cut off by some epidemic. Almost below us we saw a deep cavern tunnelled into the solid rock (No. 13). I would have liked to explore it but time forbade. Having spent an interesting and amusing morning, we steamed round those great, black rocks, closely watching for any signs of life, and bid our penguin friends farewell at 11 a.m. and off to

The Auckland Islands.

Islands which are known the world over, and whose record is one of disaster and suffering. Who can tell how many of the vessels posted as "missing" have ended there career on these Islands? Just as they, buoyant with hope, have got fairly under way, bound for home, the weather thickens, squall succeeds squall, the wind gathers hurricane force, the mist obscures the land, a sudden lurch, a dreadful concussion, and the gallant barque sinks heath the boiling, seething sea. We have painful records of many wrecks—as instance, "The

Invercauld," "The Grafton," "The General Grant," and "The Derry Castle," but who can tell how many have occurred of which we know nothing? the sea burying beneath it angry billows every trace of identification.

If the weather we experienced between Port Pegasus and the Snares was bad I scarcely know how to define the passage to the Aucklands. It was a fearful one—mountainous seas, with a westerly wind of hurricane force—and as we were steering south our good craft had her work cut out. Some of the seas she shipped came over with tremendous force, and we encountered bitter squalls of rain and hail. None of us thought of sleeping; and I occupied myself by reading; occasionally going up to the bridge to admire the grandeur of the scene. About 7 a.m. on 24th January, we sighted the Aucklands right ahead, a very good landfall by dead reckoning, thanks to a perfect compass and an able navigator. The Auckland Islands, which lie about 300 miles to the southward of New Zealand, were discovered on 18th August, 1806, by Captain Abraham Bristow, during a whaling voyage in the ship Ocean, belonging to Mr Samuel Enderby. The discoverer named tie islands after Lord Auckland, and formal possession was taken of them in 1807. They extend over 27 miles north and south by 15 miles in breadth and are very mountainous, the altitude of the ranges being from 950 in the north to 2000 feet in the south. We saw the reef on which the Derry Castle struck, and passing south entered the magnificent harbour of Port Ross, the site of the Enderby whaling settlement, founded in 1850 by Mr Charles Enderby, and abandoned some years later. The first thing that claimed our attention was a monstrous sea lion disporting himself on the beach, occasionally going down to the water and returning to the bush and tussock. All available bands now went ashore, and before dinner the captain had a boat-house erected, and a dingy, provisions, and matches, along with instructions to castaways, carefully stowed within it. While we were engaged at this work the sea lions came ashore as if to superintend the operations going on on terra firma. They are very unwieldy creatures, and are only dangerous if when passing through the deep tussock you disturb one in his lair, when the chance of your getting away, except as a uniped, would be small. We saw some dogs, rabbits in hundreds, and seabirds in myriads. The captain tried to shoot the dogs but failed through having bad ammunition. While the boatshed was being built I photo, graphed the huts erected by the survivors of the Derry Castle (No. 15). These are compactly built of tussock, several of them being bound with thongs of sea lion hides. Near them, a wooden building formerly used as a depot, bears the following inscription:—"B'que Deny Castle, Limerick, lost north side Island March 22, '87, 8 survivors gone to depot other side harbour—matches inside, 18th June, '87, J. McGhie, passenger." I also took a general view of Erebus Cove, with the Derry Castle's signal in the foreground (No. 16)—one of the ship's life-belts on a firm square post and visible a long way off. Adjoining this signal was another post with a rag or two still fluttering from it—the remains of their distress flag. After dinner on board we started again to try and reach the scene of the wreck of the Derry Castle, but could not get to the beach for want of time, and so I photographed the reef from the shelves of the cliffs (No. 14). The rocks rise here quite precipitously, with very few breaks, to a height of from 200 to 400 feet, and our wonder was that any of the crew were saved at all. The sea breaks on the reef and on the precipitous rocks with great force, hurling the spray and drift right over the cliff. Getting on board again about 8.30 p.m. we steamed up to the depot at Erebus Cove, Port Boss. We landed provisions, clothing, boots, matches, and tools, and came across several interesting mementos of maritime disaster. The first thing was the canoe which the Derry Castle's survivors built, and which carried them from Enderby Island to Erebus Cove. The canoe is quite a wonderful piece of work, and must have tried their patience and stimulated their inventive faculties. The paddles are constructed from the blades of oars washed ashore from their ship, with handles of rough wood spliced on. The canoe is built of boards carried overland from the scene of the wreck, two and a half miles distant, and through a piece of dense, tangled scrub. The seams are covered by pieces of tin tacked on, and the canoe as a whole resembles a flat-bottomed duck punt (No. 17;. Entering the depot, which is one of the houses left by the Enderby enterprise, we found inscriptions all round, one of which informed visitors that the eight survivors of the Derry Castle bad been 91 days on Enderby Island, ten of these days without fire and without food other than such shell fish as they could pick up bitting at home with even the most meagre fare and comfort it is impossible to conceive the distress they must have suffered. They could see the depot at Erebus Cove from their huts, but between them and it the sea rushes angrily through three deep channels. With what longing eyes they must have passed their time; seeing, almost within their grasp food, clothes, fire, and, comparatively speaking, every comfort, and yet being unable to reach them. Over the mantleshelf were two slates—one of them framed, the other a fragment. The larger bore the following inscription—"Sacred to the memory of the Captain, first and second officers, and twelve of the crew who lost their lives by the wreck of the Derry Castle, on the north side of Enderby Island, March 20, 1887, The eight survivors were taken from the island by the schooner Awarua July 21, 1887." Then followed the names of the survivors and of those lost, so far as known, The inscription on the broken slate reads:—"Sacred to the memory of 68 persons who lost their lives on May 14th, 1866, by wreck of the ship General Grant, on Auckland Isles." The writing on the first mentioned slate is done with burnt shell, but that en the other is apparently scratched in by a sharp nail, and is very neatly done. The margin of the land all around here is clothed for about 400 feet up with a stunted growth of small trees, and above that with ti-tree,

red fern, and tussock, interspersed with creepers, bearing red and violet flowers. The soil is, if anything, better than that at Port Pegasus, Stewart Island, and at Erebus Cove the English grass wis knee deep. We landed a few sheep (supplied from the Wreck Fund, Invercargill) as there were no signs of rabbits or dogs. On Wednesday, 25th, we steamed to the head of the harbour, known as Sarah's Bosom (No. 18), in a bitterly cold rain, accompanied by severe squalls—quite as severe as those recorded by the author of "Wrecked on a reef; or Twenty months on the Auckland Isles"—one of the survivors of the Grafton. Indeed, from the time we reached the islands the bills had been almost constantly obscured by storm clouds. After landing and putting up a sign-board directing any persons who might be ship, wrecked to the provision depot, we took our departure. But as we got below the depot we saw a blue painted boat ashore and two square; columns, so we hove-to and went ashore we found the remains of a boat and two columns about 4 feet high and 18 inches square; also a flag of cement about two feet square and nine inches thick, which had doubtless at one time been the cap of one of the columns, and bearing the inscription:—"German Expedition, 1874." This marks the spot where the German scientists observed the transit of Venus, and also where Captain J. C. Ross made his observations in 1840. After we got aboard and under weigh we went as near as possible to Ross Island and saw quite a number of sea lions disporting themselves on the tussocky grass. The captain ordered the boat out, and with several of the hands we went ashore, the sight which greeted our view being worth the; voyage, even if we had seen nothing else. I "took" several groups of the lions (No. 19) but had exposed all my plates when a compact lot of 29 gathered together. In the course of my record I must characterise some statements made by former writers as somewhat "tall," bit when I say that these 29 seals were grouped within a square of from 45 to 50 feet 1 am very near the truth. I will go further and say that at one time I stood with my camera less than six feet from a pair of the largest, and you may rest assured I was ready to run at short notice—one thing in my favour was that these animals cannot travel fast. I don't think anyone ever saw a more humorous sight than these 29 sea lions making tor the beach. It was sublime; it was ridiculous; we laughed, and laughed again. The sea lion is of comparatively little commercial value, and I was indeed sorry that the close season for for seals protected also the sea lion, or hair seal, or we could have had some splendid specimens. When full grown I should imagine that each male, or "old wig," as the sailors call him, will weigh about seven or eight hundredweight, and each female about six. They live in groups one old male guarding several of the gentler sex, and should one of the latter desert without leave the chastisement is very severe. At one place we saw a female seal with a great portion bitten out of her side, probably the punishment inflicted on her by her lord and master. They emit a sort of bark or grunt when attacked, but will not fight unless provoked. The day being well advanced we had to push ahead. So on board we went and off to Carnley Harbour at the other end of the island, with its treasured mementos of the Grafton. The weather was still rough and cold, with heavy seas running. Passing round the north of the island we came on some very bold cliffs. The sealers tell as that they swing down cliffs 700 feet high, but we must allow a little for exaggeration, as the highest of the cliffs on the north and all along the west are not more than 450 feet in altitude, with one or two jutting headlands of from 450 to 600 feet. The seal caves are as numerous as the fur seals are scarce, and again I may say I think it scarcely worth while protecting the seal fisheries of New Zealand. There is no doubt that the seals frequenting these islands are only wanderers from their home further south, and for three months at a spell a sealer might work away at the Aucklands and report on his return that his seals were taken at Macquarie Islands (which are not annexed), a statement which would be difficult to disprove.

There are waterfalls in abundance on this island, but owing to the Mountainous seas it was impossible to photograph any of them. I made a rough sketch, however, of a crest of the cliffs about 300 feet high, over which five streams of water were falling. The peculiar feature was that a few feet below the edge of the cliff the strong wind caught the water and turned it completely back, so that the appearance was that of five jets of steam leaving the face of the rock and flying up in fine spray about 150 or 200 feet. A prettier effect I had never seen, and the same thing was noticed at several points during that day's costing trip. We sailed inside of Disappointment Island, as close as possible to the land, and soon reached the spot where the "General Grant" is said to have gone into a cave when she was wrecked on the night of May 4th, 1866. Now, I don't care about taking all the romance out of a good story, but on the west coast of the Auckland Islands there is not a cave into which a cutter could find her way; indeed, I question very much if you could get into one of them with a ship's whaleboat. Therefore the cave part of the General Grant narrative is a "yarn," and if the steamer Southland found the cave, as was reported; those on board were smarter than this South lander, and got ahead even of Captain Fairchild, who has carefully examined the whole coast and is confident that no such cave exists. We entered a fine harbour on the north, and another on the south east, and took soundings, The latter is also a good harbour, but is not to be compared with Carnley Harbour, where we anchored at 8.30 p.m. While we were fossicking about for a site for the boat-house a heavy squall came on, the mountains, although close to us, were hidden, and the spray from the seas breaking on Monumental Island flew across the steamer like pellets of ice. To say that spray was cold is to describe it mildly.

On the 26th January the second mate and four others went albatross hunting, and had a rough experience, having had to travel eight miles each way through a thick scrub. I took the ship's whaleboat and went to Monumental Head and Monumental Island. I was very much interested with this part of the trip, having just read "Wrecked on a Reef," in which work was a picture of the mausoleum which I admired. I could indentify the place and that was all (No. 24). In the romance referred to there is a picture showing Monumental Island as closely hemmed in by cliffs of 400 to 500ft. whereas the passage here is about a mile across, with Monumental Island just in the centre. I took several photographs as we picked our way up hill (No. 23), our path being surrounded by sea lions. The cliffs from the top look very imposing, but truth compels me to state that they are not more than 170 to 200 feet high (No. 22). The seas which enter Carnley Harbour by this entrance are fearful, the surf breaking about 50 feet high and the spray flying over our boat a quarter of a mile off. Returning to the steamer, we landed stores for castaways at Camp Cove, a pretty little spot covered with bush of no great height but so dense that I could not find a single point from which to get a view, so I had to take one from the steamer's deck. There is no refuge for castaways, except a store room 7x6, but any distressed persons could construct a hut and make themselves tolerably comfortable. Some of the stores consisted of matches (in hermetically sealed tins), boots, clothing, and blanket which were placed along with the food. Returning to Monumental Head we picked up our hunters, who were laden with albatrosses, living and dead, and albatross eggs in abundance. The mist came down very dense about 5 p.m.. and we very cautiously groped our way and sounded around Fig. 8 Island, where we landed a ram and ewe as the feed looked good, the grass growing about, though rank, being very juicy, It was amusing to see the sheep take stock of the sea lions among the tussock; they evidently looked on them as very ferocious dogs. We now made for the scene of the wreck of the Grafton, where we anchored for the night.

The captain and I went ashore, and secured several relics of this noted wreck. We also found the remains of Epigwaitt (No. 28), the house for so long of the Grafton's crew. The remains of the house consist of the uprights made out of the vessel's masts. On the following day (27th) I took several photos of the Grafton (Nos. 25, 26, 27), one of them showing the skids or ways by which their re-constructed boat was launched. She has evidently been a very strongly built craft, the chief part of her planking and the knees being of blue gum. There was also some box and Oregon timber about her and one of the masts is of Western Australian mahogany and the other of gum. We also found her stove which we nearly brought away with us, but satisfied ourselves with some remnants of timber and copper bolts. Just as we were leaving I found the original hammer and took possession of it. The is a fine beach where she went ashore, covered with small boulders, and from which the water deepens rapidly. Indeed she could not have touched ground more than 30 or 40 feet from dry land. There are no rocks near and only about 1¼ miles of harbour water, so that even with a very stormy gale it would be quite impossible for an over whelming sea to get up. The locality resembles an inland lake and is not open to any sea. On reading "Wrecked on a Reef' I felt very much for the poor creatures described as being perilously drawn to land through enormous breakers, and alongside of great rugged boulders, but, alas for the romance—the Grafton could scarcely have gone ashore at an easier place for landing. I think that on the Auckland Islands there is better soil than even in the southern part of Stewart Island, and they might be successfully settled by and by, by a colony of say 1000 people. The bush just skirts the water, and the higher land is covered with tussocky grass. Volcanic rocks peep out on all the hills, and the boggy surface is very bad. The anchorage off Epigwaitt is, Captain Fairchild declares, the best he knows of in the islands. Within a quarter of a mile off the Grafton's homestead we cast anchor in five fathoms of water. Getting on board again in the evening we steamed off en route to the East Coast Sounds of the islands, a number of which cut far into the centre of the island, and are not laid down on any chart. In one of them, "Waterfall Inlet," (No. 20) the water was So deep that the steamer's jibboom was amongst the trees growing on the vertical cliffs, and the younger members of our party amused themselves by picking ferns off the rocks from the end of the jibboom (No. 21). These cliffs rise to a height of 300 feet at least, and are densely wooded with iron wood to the water's edge. We filled our tanks here with excellent water. The inlet is one of the finest sheets of water I have seen. We steamed out at 3.30 p.m. and made for

Campbell Island.

We made a rough and disagreeable passage, and arrived off this island on the 28th, but we had great difficulty in following up the land on account of the dense mist and bitter squalls. However, we were glad when we dropped anchor at 10 a.m. in Perseverance Harbour with the fine, well defined Beeman Hill on our right (Nos. 29 and 30), a fine inlet among steep hills, clothed with tussock, but no bush. The land appears as if it could be easily turned to account for sheep pasturage, unless the great quantity of moisture would be detrimental. We were quite stormbound all day, and were thankful that we had picked up Sugarloaf Island when we had run the distance from the Aucklands. We were obliged to run out a second anchor off a point aptly

named "Tucker Point," where the N.Z. Government maintain a provision depot for shipwrecked persons, (No. 33). It was from this harbour that some four years ago the Sarah A. Hunt, an American sealer, dispatched two whaleboats sealing, under the charge of the two mates, to the other side of the island, without provisions of any kind, and as soon as they were well out of sight the vessel stood out to sea. On her arrival at Lyttelton the captain reported that all hands had been lost, and that he and the steward had had to work the vessel singlehanded. The Stella, on visiting the island, found the second mate and crew of one boat, and consequently got at the truth of the matter; and not only so, for it came out that the captain had thrown a seaman overboard off the Cope of Good Hope. As this had not happened in British waters no charge could be laid against him. It appeared that he shipped a crew in America, and outfitted the vessel, in defiance of our laws, for a sealing expedition at the Aucklands, thinking that as the seals had been protected for some time previous he would make a good haul. On arriving at the islands he found no seals, and he, owing the seamen and party a considerable amount as wages, schemed to send them on an expedition, fully intending to desert them with the vessel. The first mate and his crow have never been heard of, and the second mate and his party, who were rescued by the Stella on the 20th December, 1883, were a week off the island in their boat, but were ashore when found They were terribly exhausted, and had to be helped into the boats. They were landed at Port Chalmers on Christmas night, 1883.

The next day (Sunday, 29th), as the day looked fine, Capt. Fairchild moved to the head of the bay called Garden Cove. We saw no trace of the oak, elm, and ash trees planted there by Dr. Chambers, of the Imperial cruiser, Victoria, in October, 1865, nor any descendants of the pigs, geese, and guinea fowls landed by the same vessel, but we saw the remains of the pedestal formed of stone and cement, which the French used to observe the transit of Venus in 1874. In all the accounts I have seen of Campbell Island, including that in the "New Zealand Pilot," it is described as densely wooded, but I am certain could not get a green stick over inches in diameter on any part of it. We were glad to see the sheep and goats lively and looking well. I ascended one of the highest hills, Mount Honey, 1866 feet, (No. 30B) amidst hundreds of nests of the albatross, surrounded by nothing save the unvarying tussock, fern, and ti-tree scrub. We came on the first albatross about 800 feet above sea level and after reaching the crown of the hill, 1000 feet, they were sitting in their nests, and flying abort close to the ground in hundreds. (Nos 34 and 35). Apparently the albatross lays but one egg each year, but one of the parties found two nests containing two eggs each. It was suggested that this was only; a freak of nature, although it is known that the gannet of New Zealand lays two eggs, one of which is hatched by the male bird.

Unfortunately just as we got to the top of the hill, the fog or mist, which is so prevalent in these latitudes, came on, ending in rain, which sent us back to the ship soaked. As the glass was falling we remained at Penguin Bay, our next run being one of over 460 miles. Campbell Island was discovered in 1810 by Fred Hazelburgh, master of the brig Perseverance, owned by Mr Robert Campbell, of Sydney. The island is about 30 miles in circumference, of an irregular egg shape, and has two good anchorages, but is exposed to peculiarly stiff squalls of wind. We expected to have seen a number of sea lions here but they had evidently migrated to some other locality, as is their habit occasionally Campbell Island might be made a successful settlement, as the soil is very much superior to that of the Aucklands and the southern portion of Stewart Island; but the short days of the winter season and the prevailing fogs and high winds would be serious drawbacks. The formation is volcanic, and in many places the rocks are eaten away into pilasters of two tiers or more, the dividing line being sometimes secria and sometimes a light red or brown soft stone which wears away by the action of the elements faster than the intervening rocks. The weather was too rough to attempt obtaining specimens of this columnar formation, as it occurs principally on the west and south exposures, and is almost incessantly under the action of heavy seas. This day (30th January) the barometer read lower than it has done on board the Stella for two and a half years. As in the face of such warning it would have been folly to leave shelter and chance a storm in so small a veasel, we steamed round the island and examined the harbours. Entering a sheltered gulch in the rocks on the west coast we saw a number of seals on the beach, so we got out the boat with the camera on board, and after negotiating the surf with some difficulty we effected a landing, and I proceeded to secure a negative of "the natives." One of these was a regular giant about twelve feet long and probably four feet or over through the thickest part of his body. He had a fine mane like a gigantic frill round his neck. He sat up about 15 feet from my position and looked at me and the instrument as much as to say," Now then, photographer, there's a smile for you, fire away," and I did. The other seals, principally females, and more shy, waddled into the water and watched the performance from the crest of the surf. Getting on board again we steamed away to North East, Bay (Nos. 31 and 32) to wait for better weather. On going up the bay we encountered a very strong and bitter gale, and on looking clear of the land could see that the sea was running the proverbial mountains high, which made us thankful we were under the lee of the land; for the Stella, although a tight little craft, is not a deep sea vessel, besides we had used so much of our coal that she rolled about like an empty drum. Being also very fine at both ends she was not likely, especially in her then trim, to run well before a South Pacific gale, with its unbroken 2000 miles or more of S.W. sea. It may be mentioned that our position was nearer to the somewhat

mythical Victoria Land than it was to Melbourne, and the cold was consequently very severe. We were surprised that no fish were observed in the harbours here, and attributed the fact to the muddy nature of the bottom. There were some sea lions about, but not so many as we had expected. The vegetation is pretty dense on the hills, but all stunted, the largest timber we saw being a graceful mountain pine of healthy growth, but never exceeding about five feet in height; then there is the never-tailing ti-tree, which here assumes somewhat the character of a creeper, and covers the ground with a species of net work very difficult to walk through, especially down hill. At the height of 700 feet from the water line the upper margin of the red fern is reached and it extends from that altitude down to the water's edge. All up the sides of the hills wild parsley was growing luxuriantly, often two feet high, while everlasting daisies clothed the ground like a carpet. The cottonwood plant in full bloom was also plentiful. As the top is reached variety of vegetation ends and travelling becomes easier, as there is no growth to impede progress but diminutive tussock, among which are the albatross nests and their tenants. These nests are built up of moss and earth about four inches above the surface of the ground. The material to form the nest is so taken from the soil as to leave a trench all round it, and this keeps things dry for the important object in view. The female never leaves the nest during incubation, a period of about 60 days, and is fed by her consort, who faithfully hunts for food for both. If by chance the nest is left unguarded for a single moment the sea-hawk, which is here in thousands, pounces upon the egg, and "love's labour's lost," at least so far as the albatross is concerned. The albatross is a stupid bird; it will sit, whether hatching or not, till you tumble it head over heels with your foot. At the same time it will resent such liberties, and if it succeed in getting a hold it will take the piece out of trousers, hose, and skin. They are very strong birds. The best way to catch one is to make a feint at its head with the left hand, which distracts the bird's attention, and then quickly seize it by the bill with the right, but be sure you get the grip, as they turn very quickly and would snap your fingers off if they got a proper hold. They build only on the flat plateau of the hills, and so far as we have seen, never lower down than 700 feet from sea-levels The hatching here was much further advanced than at the Auckland Islands. On Tuesday, 31st January, the day broke beautifully and the bay was like a mirror, but the glass was still low. As the day advanced we were enveloped for half-an-hour in one of those dense mists cbaractcristic of this locality, and when it passed, the hills were covered with snow, which however soon melted and trickled down their sides in hundreds of miniature cascades. Looking seaward we saw that a heavy sea was still running, but as time was pressing the Captain resolved to start in the hope that as we voyaged N.E. The wind and sea would favour us and enable us to reach the Antipodes with good weather, go that we might be able to land on that bleak but interesting island. Accordingly we steamed out of the bay at 10.20 a.m. At 3.15 p.m. we were 45½ miles distant, but the island was still well in view. With fine weather and a calm sea the barometer rises, and our spirits with it, When about four miles clear of the land I took a photo to show the general shape and more prominent features of Campbell Island.

The Antipodes.

At 8 o'clock on the morning of the 1st February we were half way between the Campbell and Antipodes Islands, having run 205 miles out of the 406. (No. 51.) The appearances indicated that the fine weather would soon cease, the glass being stationary at 29.28 and the sea gradually rising. The vessel rolled so much that an onlooker would have laughed consumedly to see us try to get breakfast—tea camp stools, personages, cruets, books, and everything else being it extricably mixed up and flying hither and thither, helter skelter. Just as one of the company would put his cup to his lips there would be i sudden lurch, and away he and his beverage would fly, to be brought up under the saloon sofa or in some other inconvenient corner. Towards the afternoon the glass gave indications of rising, and all through the weather was fine, although a heavy swell from the S.W. was running We expected to make the Antipodes about 6 a.m., but as at 7 o'clock we had not sighted the islands we bad to heave to and wait till the sun could be taken at noon. When these observations were made Captain Fairchild found that we had run about thirty miles northwest of the islands, so the ship was put about and half an hour afterwards we sighted land. The Antipodes Islands were at one time, say about sixty years ago, the resort of the Sydney sealers, but on our visit we did not see a single seal or sea lion, nor has Captain Fairchild, on any of his visits been more favoured. The islands rise abruptly from the sea to a height of 1200 feet, with perpendicular cliffs varying in altitude from 200 to 600 feet. The water all round is very deep and there is no fit anchorage for any vessel save a steamer. Even steamers must be kept continually ready to get under weigh, owing to the frequent changes of wind, and the fact that when it blows it does so with a vengeance. The island proper is about three miles long, egg shaped, and is surrounded by bold precipitous black rocks. There are a great many sea-formed caves, and also a remarkable archway, formed by the water eating its way through between two rocks. (No. 36.) As the weather looked threatening the Captain determined to go round to the E.S.E. side, where we anchored and landed stores, three goats, and six sheep. An inspection of the depot (No. 40) proved it to be intact, and we discovered that there was abundance of pasture and water for the live stock

we put on shore. There is, however, no vestige of bush or scrub of any description, so we planted some trees and sowed some grass seed in the hope that by and bye they would add to the natural verdure of the island. Penguins and paroquets abound, but although our party got a number of the former, along with several of the albatross tribe, they failed to secure any of the latter. An hour after we anchored the wind changed, and we had to shift our quarters, and again anchored under the lee of the land and eastern islands. (No. 41). On the morning of the third the weather was thick and dirty, while the glass had gone down four-tenths, so we had to dodge round to another anchorage, comparatively close inshore and sheltered by perpendicular cliffs some 400 to 500 feet high. The height of the island is marked on the chart as 600 feet, but this is an error, as the principal hill, Mount Galloway, is 1200 feet above the level of the sea. From seaward this hill looks conical or dome shaped, but on reaching the summit a beautiful clear lake, covering an area of thirteen or fourteen acres, is found, a lake which a little later in the season than the time of our visit is much frequented by the albatross, being virtually surrounded by thousands of these birds. While lying at this anchorage we caught a number of cod but were not sure that they were eatable. They resemble the cod of the New Zealand waters, but when alive their gills are of a bright yellow, the colour disappearing when they die. A *post mortem* disclosed the fact that their stomachs were full of broken shells and seaweed, while their flesh had been honeycombed by maggots about an inch long. On Saturday, the 4th, we were still stormbound under the shelter of the island, and had been unable to effect a landing since the previous Thursday. As the glass was beginning to rise we hoped to be able to get ashore on the following day, but it was quite useless to attempt to go to sea in such weather. We were very glad that we got the observation which enabled us to pick up the island when we did, as a strong gale had been blowing ever since-During our forced sojourn at this place we had to amuse ourselves by watching the penguins ashore. Every sloping rock, boulder, and bank was crowded with these curious creatures, and their incessant chatter or yelp reached us above the howling of the storm three-quarters of a mile away. We ventured ashore to take one or two photographs, and although we made for a boulder beach the very heavy surf made landing a difficult and dangerous operation. Sunday opened stormy, but by noon the wind had died away, although the glass warned us of another change very soon. We landed again, and on ascending an almost precipitous ledge of rock and tussock we found a piece of totara board with the remains of an inscription, apparently marking a grave. So far as decipherable' the inscription reads as follows:—

To the M———Foster, chief officer of the Schr. Prince of Denmark, who was unfortunately drown———ke the Boat Arbour———14th day of December in the———1825.

We carefully examined this interesting and sad memento, marking the wild and lonely resting place of one who had perished on this inhospitable shore, and we hoped to glean further information concerning it upon reaching the mainland. Doubtless the Prince of Denmark was a sealer which visited the island 63 years ago, and after our experience of the difficulty of landing we could not feel surprise upon learning that an attempt to "take" Boat Harbour, for so we interpreted the inscription, had been attended with loss of life. I took a view of a natural arch, way here which is at the entrance of the Boat Harbour, and also shows, the grave referred to (No. 37). Passing the depot we came in sight of the bold north headland, a grand long solid rock about a mile in length and not less than 500 or 600 feet high, slightly veiled in mist and absolutely precipitous (No. 38). Returning to the boat harboar we see the Stella in the distance, and are surprised at her diminutive size, forgetting that we are measuring her by gigantic cliffs mi pinnacled islands in the foreground (No. 39). The surf breaks with terrific force, and rolls the boulders about as if they were so many; bubbles. As the weather continued wild and threatening, and as the barometer was falling rapidly, it was decided to remain another 24 hours at the Antipodes before making for the Boundies. We were all anxious to get back to the mainland, but after waiting so long we could not think of passing over so important a part of our duty as visiting the rocks I have last named. Several albatross parties had been ashore, and all had returned laden with the spoils of the hunt. Our vessel had the appearance of a floating menagerie, troops of penguins promenading the deck like soldiers on parade, while albatrosses were walking about and lying around in all directions. Unfortunately we could not get these birds to swallow a morsel of food, although we had two nellies on board, which are reckoned valuable birds, and which were beginning to eat. We also began teaching the young penguins til they would have to eat, and it was rather amusing to see the cook and one or two of the hands catching the youngsters in turn and forcing their breakfasts down their throats. I also took on board some grasses and a few pieces of the rocks. Among the latter were some well-defined black crystals, bat not being a geologist I was at a loss to decide as to their nature and value. These crystals do not occur in the rocks on the beach, but are plentiful at an elevation of about 300 feet above sea level. On Monday afternoon we wore still waiting a "slant" to get off to the Bounties, but we could not start till the evening, as we wanted daylight when approaching these dangerous reefs. About 4 p.m. we got under weigh, and steaming from the Antipodes, we made

The Bounty Islands

about 4.30 a.m. The following day, after a tolerably fair passage of 130 miles. We had great difficulty in landing on account of the rocks being so precipitous and the surf so heavy. The New Zealand Government had a provision depot here, but by some means unknown it has totally disappeared. There can be no doubt but a depot is wanted at this place, as the islands are in the route of homeward bound vessels and although the chances would be against any shipwrecked people reaching the shore, on account of the incessant heavy surf, still a few might manage to do so. The greatest want in such a case would be fresh water, and the castaways would have to devise some means of collecting the rain, that which falls upon the rocks being useless because of the guano deposit. The Bounty Islands, discovered by Captain Bligh, of H.M.S. Bounty, in 1788, are a compact group, fourteen in number, and consist wholly of bare rocks jutting up from the deep Pacific. They are absolutely destitute of vegetation and are covered with guano, which makes walking or climbing just about as difficult as it can be. To glide over the ice upon skates would seem travelling a rough road in comparison. You feel particularly good humoured when you slip, and putting out your hand to save yourself your arm is buried to the elbow in a pool of semi-solid guano. The aroma gives you vigour to get up, and it is needed. The penguins, mollyhawks, and ice-birds, make the islands their breeding place, the first named being more numerous here than in any of the other Islands visited. The fourteen islands which form the group average about thirteen acres each in extent, and I should think there were at least a dozen penguins to every square yard, while the water all around is alive with them. The peculiar method they have of diving reminded me strongly of the performances of the porpoise. The mollyhawks are more plentiful than formerly, being at least five times more numerous when we called than on any of the previous visits of the Stella. The Beets are shaped like those of the albatross, and are built of guano that is nearly hard. I suppose the birds have no alternative but to use this Material, no other being available on the islands. With the utmost difficulty we got the camera on the top of the island, and I was able to take several negatives (42 to 50). Without these photographic proofs some of my statements might seem incredible, but fortunately 'the instrument cannot lie,' whatever its carriers may, on account of the slippery footing, have done in that direction. I don't want to tell a Wrecked on Reef' yarn, but I believe I am right in saying that you can smell the Bounties before you see them, and that the odour is not Cingalese. Talk of the pleasures of sleeping on a bed of roses—they are nowhere—try the Bounties. We collected a few sacks of molly, hawks, penguins, and ice-birds, and wended our way to the gulch, which, after much hesitation, we had selected as the point for our debarkation. We first got our birds aboard and then threw ourselves in one by one as the boat surged past. I managed to fall. Fortunately for myself I fell in the right direction; unfortunately for the birds I fell on feathers. When we got to the Stella the steward blocked our way, and demanded that we should discard our unsavoury garments before entering the saloon. We divested ourselves of all the clothing: we could conveniently spare, and then we were kindly allowed to pass. It was then dinner time, but, alas, we had left our appetites ashore. The ice-bird is a very pretty creature about the size of a pigeon, a beautiful pale blue in colour, bright and clear. They are found in hundreds under the shelves of the rocks, and sit quite patiently until caught, never attempting to get out of reach. Having thoroughly examined the islands, and having found no signs of any wreck or more recent visit than that of the Awarua, we steamed off at noon,

Homeward Bound,

and at half-past four o'clock on the morning of the 9th we made fast alongside the Port Chalmers wharf, thus concluding one of the most interesting trips it could be the lot of anyone to accomplish. Were I to yield to the temptation to romance, I daresay I could make my diary of thrilling interest, but as it is I have merely stated the bare facta, I Of this I am confident, that for a total change of everyday life, as a cure for *ennui* and as a health restorative, there is no trip to equal this one of 1600 miles on the South Pacific. Then there are the attractions afforded by views of myriads of penguins, acres of albatrosses, and mobs of sea lions, so that altogether I think the Union Company would be fully warranted in making at least one trip per year to the Snares, Auckland, and Campbell Islands. Although the weather from start to finish was anything but pleasant, the disagreeable features were all but put to flight by the uniform courtesy of Captain Fairchild and his officers. Without the assistance which these gentlemen so willingly accorded I certainly would have been very much "at sea." In con-elusion I would tender them ray very sincere thanks, and if again I am in a position to indulge in a maritime trip, I trust my lines may fall in equally pleasant places. However long I may live I will always re-member with pleasure my cruise "Far South" in the Stella.

By way of appendix I may state that the sheep and goats left on the islands were supplied out of the Invercargill Wreck Fund, per Mr John McPherson; and the trees, grass seed, wattles and broom by Messrs Nichol Brothers and R. Cleave. The goats and sheep were distributed as follows:—Snares, 2 goats; Erebus Cove, Auckland Islands, 5 sheep; Adam's Island, 5 sheep; Figure-eight Island, 2 sheep; Tucker Cove, Campbell Islands, 6 sheep and 2 goats; Antipodes Islands, 7 sheep and 3 goats. Grass seed was sown at the Snares, at Erebus Cove, Terror Cove, Sarah's Bosom, Adam's Island, Camp Cove, Figure-eight Island, and Epigwaitt in

the Auckland Islands; at Tucker Cove, the bead of N.E. harbour and N.W. in the Campbell Islands: and at the Antipodes Islands. Assorted trees and plants, consisting of gums, firs, wattles, and Scotch broom, were placed on the Aucklands, Campbells, and Antipodes.—I would like to mention that at Erebus Cove and Camp Cove, in the Aucklands, we found letters from Captain Drew, of the sealing schooner Awarua, giving a thoroughly satisfactory explanation of his reasons for taking a portion of the stores.

decorative feature

Southland Times Co,'s Print, Esk Street, Invercargill,

LIST OF "FAR SOUTH" VIEWS.

No.

- Map, showing position of Islands*
- Port Adventure, Stewart Island*
- Lord's River, Stewart Island
- Lord's River, Stewart Island
- Bald Cone, Pt. Pegasus, Stewart 1s.*
- Evening Cove, Pt. Pegasus, Stewart Island
- Evening Cove, Pt. Pegasus, Stewart Island
- Natural Tunnel. Stewart Island
- Frazer Peak (1400 ft.) Stewart Isd.*
- Shipbuilder's Cove, Stewart Island
- Wilson's Bay, Boat Harbour, Stewart Island*
- Wilson's Bay, Boat Harbour, Stewart Island*
- The Snares Island, Boat Harbour
- Penguins on Snares Island*
- Penguins on Snares Island*
- Penguin Farms on Snares Island
- Cave on Snares Island
- "Derry Castle" Reef, Auckland 1sd *
- "Derry Castle" Huts on Enderby Island*
- "Derry Castle" Signal, on Enderby Island*
- Depot and Derry Castle Punt, Auckland Island
- Sarah's Bosom, Auckland Island
- Sea Lions, Ross Island, Aucklands*
- Waterfall Inlet, Auckland Island*
- "Stella" Watering, Cascade Inlet, Aucklands
- West Entrance, Carnley Harbour, Aucklands
- Adam's Island, Carnley Harbour, Aucklands
- Monument Island, Carnley Harbour, Aucklands
- Wreck of the Grafton, Epigwaitt, Aucklands*
- Wreck of the Grafton, Epigwaitt, Aucklands
- Wreck of the Grafton, Epigwaitt Aucklands
- Remains of Epigwaitt. Aucklands
- Beeman Hill, Campbell Island*
- Beeman Hill, Campbell Island
- Mount Honey (1866 ft.) Campbell 1s
- N.E. Harbour, Campbell Island
- Albatross Hunter, N. E. Harbouy Campbell Island
- Tucker Pt. and Garden Cove, Campbell Island*
- Albatross, Summit of Campbell 1sd
- Albatross, Summit of Campbell 1sd
- Remarkable Arch., Antipodes 1sd
- Boat Harbour, Antipodes Island*

- North Head, Antipodes Island
- Antipodes Island
- Government Depot, Antipodes 1sd*
- Eastern Islands, Antipodes Group*
- Penguins and Molly Hawks, Bounty Islands*
- Penguins and Molly Hawks, Bounty Islands*
- Molly Hawks and Penguins, Bounty Islands*
- Molly Hawks and Penguins, Bounty Islands
- Penguins and Molly Hawks, Bounty Islands
- Penguins and Molly Hawks, Bounty Islands
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Some Suggestions on Reform of Local Government and Decentralisation of Parliament.
By *Samuel Hodgkinson, M.H.R.* FOR WALLACE.

Reform of Local Government and Decentralisation of Parliament.

The great value and importance of a good system of local government has been fully recognised by the most eminent writers, publicists and statesmen. De Tocqueville, speaking of England and America, says "I have heard citizens attribute the power and prosperity of their country to a multitude of reasons, but they all placed the advantages of local institutions in the foremost rank." The distinguished author of "The Dutch Republic," Mr Motley, does not hesitate to speak of local Government as the "life-blood of liberty." Mr Goschen, one of the wisest English statesmen of the present day, may also be quoted to the same effect, and when advocating a reform of the English county system he says that "He would lead the rural districts to political life through local life. Let them learn practically to manage their own local concerns, and then they will be better fitted to take part in the management of Imperial matters." At the present time, however, both in New Zealand and in England the incomplete and imperfect state of local government is fully and generally acknowledged and the necessity of a reform in it admitted.

Before suggesting any measures of reform of local government in this colony it may be well, for the better understanding of the question, to consider briefly:—I. What is meant by local government; II. The conditions essentially necessary for its successful tad beneficial working; III the present condition of local government in New Zealand; and IV. The defects in its present constitution and working in New Zealand.

I.—Local government then, as contrasted with general or national government, is a comprehensive term and includes all local governing bodies having control and charge over local districts of various areas and over natters of greater or leas importance within these areas. It exists under many names and with reference to its territorial extent is variously known by the terms "pariah" or commune," "county" or "shire," "district" or "province" or "state." Where population is concentrated it exists under the form of town boards or municipal corporations. The political unit or smallest territorial local governing body varies in different countries according to the nature of the soil and climate, the density of population and the occupation of the inhabitants. In agricultural countries, where the population is come paratively dense, this unit is known by the name of parish or commune in Europe and of township in North America, and usually comprises an area seldom exceeding 23,000 acres, which is the area of most of the townships in the new states of the American union. In England the parish varies greatly in area, from fifty or a few hundred acres to 10,000 acres or more, Some local government reformers in England have, however, advocated that the Poor Law Union should be the political

unit, and on an average each union comprises about twenty-three parishes, there being 650 unions in England and Wales. Between the political unit and the national government there are in England, the Poor Law Union and the county; and in North America the county and the province or state. In France there are between the political unit and the national government the canton, the arrondissement, and the department. In England it is expected that a bill for the reform of local government will be introduced during the present session of the Imperial Parliament, and the correspondent of a New Zealand journal informs us that—"The subject was discussed by the Farmers' Alliance who passed a resolution declaring that no scheme will be satisfactory which does not provide for the direct representation of all ratepayers and complete control by them over the administration of local government; also recommending that the county, the polling district, and the parish should be the areas of local authorities; the county board being at the head with district boards and parish vestries under it." It thus appears that it is now proposed to retain the old parish as the political unit, but to constitute a second body intermediate between the parish and the county, thus providing for three local governing bodies as in Canada and the United States; and to place them all under the control of the ratepayers, which has not been the case hitherto as respects the English county, for under the present unsatisfactory state of English county government the administration, and the imposition of rates is vested in the Lord-Lieutenant and Court of Qaarter Sessions or Justices of the Peace—the sound principle that there should be no taxation without representation being departed from.

The chief duties and functions of these local bodies both in Europe and America are the construction and maintenance of roads and bridges, gaols, lunatic asylums, the relief of the poor, and power to make bylaws or local regulations on matters of local interest. In both England and New Zealand there are various other local governing bodies, such as sanitary boards, school or education boards, land boards, and hospital and charitable aid boards, and it is recognised that the functions of some, if not of all, of these boards might advantageously be devolved upon one or other of the three territorial local government bodies first mentioned.

II.—As to the conditions necessary for the beneficial working of local government. The work must be judiciously divided amongst territorial governing bodies of various sizes and with functions in proportion to their area; that is to say between bodies of the first, second and third rank, according to the nature of the country and the occupations of its inhabitants. In an agricultural country such as a large part of New Zealand is, the political unit or smallest body must be of comparatively small area, corresponding somewhat with the European parish or commune, the North American township, or with our own New Zealand read boards, but in a thinly-peopled pastoral country such as the greater part of Australia and South Africa, then the political unit may be of much greater area, corresponding somewhat with the English and colonial county or the French department. Between the political unit and the general or national government in an agricultural country there are usually one, or two, or three other bodies, such at, in England, the Poor Law Union and the County; in France, the canton, the arrondissement and the department, and in North America, the county and the province or state. The importance of the functions and powers of these bodies having a correspondence with their areas. These institutions should be permanent, not liable to extinction at the caprice of the ratepayers, as has been the case with our New Zealand road boards, but only by a special Act of Parliament. They, or the larger of them, should have power to enact bylaws or local laws on matters of local interest. They should have power to raise all the money necessary for carrying on their functions without requiring pecuniary assistance from the general government, though it may be necessary for the latter to limit their powers both as to borrowing and levying rates. There should be a complete separation between general government finance and local finance. The credit of the general government should never be pledged for works or loans of local bodies, nor is it desirable that subsidies or grants-in-aid should be given to them. And, though this has been done to a large extent in New Zealand and to some extent in England also, it is condemned as being impolitic by Mr Goschen and other eminent public men, as being calculated to sap the independence of local bodies, and to encourage a lavish and reckless expenditure.

To sum up, the essential conditions of success are:—(1) A suitable political unit must be established, and between it and the national government such other larger territorial local bodies as the peculiar nature of the country may require. (2) To give then ample powers to raise all revenue necessary for the accomplishment of all works devolved upon them without the necessity of procuring assistance from the general government. (3) A complete separation between local finance and general government finance; as indeed, in the case of New Zealand, was most emphatically promised by the Premier and Colonial Treasurer, Sir Julius Vogel, in hit financial statement of 1876, when the Abolition measures were carried. (4) There should not be too many local governing bodies, as is the case at the present time both in England and in New Zealand, but the work now done by the sanitary boards, land boards, education boards, and hospital and charitable aid be ards should be devolved upon one or other of the territorial boards, whether county, district, or province. (5) The functions of each local body must be clearly defined (6) These bodies must not be liable to extinction by a vote of the ratepayers but only by Act of Parliament.

III.—As to the present condition of local government in New Zealand: To understand how the present unsatisfactory state of things came about we must go back twelve years, to a date previons to the destruction of the old constitution of New Zealand, by tie Abolition of Provinces Acts and other supplementary measures. At that time the territorial local governing bodies in existence were the road boards and the provinces With the exception of certain defects and abuses of the provincial system which needed reform, this system of local government worked fairly well, though no doubt as settlement progressed and the country districts became more populous it might have been expedient to constitute another local governing body with a larger area and larger powers than the road boards and intermediate between it and the province. This requirement was recognised by the Provincial Government of Otago which passed I Counties Act, not actually creating counties but making it optional for the ratepayers to form them by combining the areas of several road boards into a county; the road board* still retaining their previous areas and functions. The settlers, however, did not avail themselves of this permissive bill up to the date of the abolition of the provinces, which seems to show that at that time a third body, was not considered necessary. There were also school committees empowered to levy rates, erect school buildings and administer the common schools: also, in Otago, there were the hundreds, whose Wardens had control over matters connected with the depasturing of live stock on waste lands of the Crown within the hundreds. The party of Abolition having by promises of ample subsidies and substantial endowments, obtained a majority at the elections, succeeded in abolishing the provinces, and in showing how much easier it is to pull down than to build up, for it signally failed in providing any sufficient or efficient substitute for the old form of local government which it bad destroyed; In place of the nice provinces about seventy comparatively small local governing bodies under the name of counties were established. The old road boards were allowed to remain, and it was left optional with the settlers to put the County Act in full force or to allow it to remain in abeyance. Provision was also made that, even when the counties were organised and rates levied, the work of road making, Ac., could, by arrangement, be devolved upon the road boards, so that the county in that case required no staff of engineers, overlookers, &c., and in a few cases the counties have not been organised at all. A provision having also been made that road boards might, on a vote of a certain majority of ratepayer*, be merged into the counties and so cease to exist, it has happened that in some cases all the road boards in a county have been merged and thus the county has become the political unit or smallest territorial local body. There are also the land boards, education boards, and hospital and charitable aid boards. The result of the Abolition measures has therefore been the present mixed and as it may even be termed, chaotic state of things which we now see around us.

IV.—As to the defects and evils in the constitution and working of our present system or rather want of system of local government. These are now fully recognised by nearly all those colonial politicians who assisted in abolishing the provinces. Some of them bad no intention of establishing a centralism such as now exists, but were actuated by a desire to abolish the petty centralism which, as regards the distribution of the land revenue, unfortunately did exist under the provincial system. By the arrangement made in 1856 though the Constitution Act gives the control and administration of waste lands to the general government, these were then practically devolved upon the provincial governments. The proceeds of tales and leases going into a common fund, the provincial treasury, and the expenditure being voted by the provincial councils—it resulted as it now does under the present colonial centralism that the most money was expended not where it was most wanted, but where there were the most votes to allot it. Hence too much of the land revenue was allotted to the more populous districts, whilst the outlying districts in which it accrued were neglected, or it may be said were plundered. This evil might easily have been remedied by the constitution of land districts of moderate area with a provision that not less than a certain per centage of the land revenue, say from 50 to 70 per cent, should be secured to them, and Indeed this was petitioned for by the settlers in the neighbourhood of Oamaru. Unfortunately however the leading politicians of the day seem to have been actuated more by feeling and prejudice than by reason and sound statesmanship, and were determine d, not upon reform, but upon revolution; an d having succeeded in bribing the electors by promises of large subsidies and substantia endowments, they accomplished their pur" pose. In place of the nine provinces abolishede' about seventy new road boards under the name of counties were set up, for practically these new counties were only road boards and somewhat larger scale than the old road of boards, and with some increased powers making bylaws. Many of the Abolition party have Lad the candour to acknowledge this as, for instance, Mr Hurst house, M.H.B. for Motueka, who, speaking in 1881, says, "1 shall be ready to give an intelligent vote, I hope, on any system of local government which will be better than we have at present. My own '.view is that county councils should be entirely abolished. I have a great respect for the road boards of the country and little or none for the county councils. There are same exceptions, but I consider it will come to this, that the General Government will have to take over the main roads and bridges leaving the road boards to maintain the by-roads and carry out similar works in their several districts. The present double-barrelled system of local government is very unsatisfactory" (see Hansard, June 15, 1881, page 49). Sir F. Dillon Bell also speaking on the county question said—" Without

going into the very wide question raised by the change which Abolition had made in the form of government, he would express his own opinion that the county system as a substitute for the provincial form of government had been a conspicuous failure. . . . Whereas the cost of the legislative bodies of the provinces had amounted to less than L40,000 a year, the cost of the county' form of government already amounted to L80,000 a year without any good work being done. "(See Hansard, vol. xxix, page 363). Indeed the impotence of the county system became apparent even so early as the very next session of 1877, when demands for money for roads and bridges were made all round the House; the first to set up a claim being the member for Waikaia, who had voted for Abolition, and who moved a resolution that all main roads and bridges should forthwith be undertaken and maintained by the colonial government. Notwithstanding the pledge given by the Premier during the previous session that roads and bridges were never to be heard of in that House except by way of congratulation that they had all been made by the local bodies without the necessity of parliamentary assistance, the House entertained the proposal for general government help. However, before the existing Ministry could take action in the matter they were displaced the same session and succeeded by the Grey-Macandrew Ministry. The new Ministry insisted on the new form of local government being put on its trial, and resisted all claims for money for local works exclusive of the subsidies already guaranteed by Act of Parliament. But towards the close of the next session of 1878 a great flood having carried away all the bridges on the Olutha river they yielded to pressure brought to bear by many Otago members, and placed fifty thousand pounds on the estimates—nominally as a loan to the counties on the Clutha—but in reality as a gift for replacing these bridges, for the so-called loan has never been repaid, but taken over by the colony. No further action in this direction was taken by the Grey Ministry, a vote of no-confidence having been carried against them early in the next session of 1879. The Hall Ministry coming into office in the second session of 1879 with a very small and doubtful majority supported a vote of about L165,000 for roads and bridges north of Auckland, and thereby gained the votes of four Auckland members and made its position secure. Since then in addition to the subsidies large sums of money have been voted for local works all over the colony and which together with the subsidies have up to the present time amounted to probably not less than three millions. Nominally these amounts are voted out of the consolidated fund, but in reality they have come out of loan and have increased the debt of the colony by that amount. This money has been supplied to the local bodies in various ways: by the subsidies, by special votes, by the Roads and Bridges Construction Act and by the Loans to Local Bodies Act, passed by sir Julius Vogel, under which Act the credit of the colony may be pledged to the extent of L200,000 a year in direct violation of the pledge given by himself in 1876 that the credit of the colony should never be pledged for local works, The result of these abolition measures in addition to the public works scheme has been to degrade the Parliament of New Zealand from its proper status as a legislative body and to pervert it into a huge board of works in which log rolling and localism have run riot. The squandering and misapplication of public money and the enormous increase of the colonial debt are not however the worst evils of the present system of combined centralism and localism. For much of the time of Parliament is taken up with local matters and the votes of individual members, and even the fate of Ministries has been determined by these local questions. The sessions have been much prolonged and too often the proper national business of Parliament has been hurried over in a perfunctory manner or totally neglected owing to the great amount of time given to comparatively small local questions. Moreover for years past the constituencies have returned men to Parliament much less with reference to their capacity as legislators than to their suitability as agents or brokers to obtain concessions and votes of money for local works, or as the phrase is "to get all they can for the district," and in some cases it has been expected that the M.H.B., should give or withold his support to a Ministry not with reference to the good of the colony as a whole but simply as it might conduce towards obtaining concessions for his own district, In short it is not using too strong an expression to say that under the present pernicious system of combined centralism and local, ism the constituencies have been corrupted, the Parliament degraded, and the Ministry demoralised, whilst at the same time the colonial debt has been greatly increased.

To come now to suggestions for reform of local government. The essence of the reform needed may be gathered from the Financial Statement of the Premier and Colonial Treasurer, Sir Julius Vogel, delivered in 1876, part of which it may be well to give from Hansard, vol. xx., pave 287:—"We purpose then to constitute districts divorced from the towns, and not possessing powers of lezislation, but endowed with clearly defined duties, revenues, and authority to augment revenue. We shall call them counties; and we aim at separating them from road districts, towns, and the colony in regard to their duties and finance. With the finance I have chiefly to do; and the essence of our plan is that the counties, the road districts and the towns will not be able to pledge the credit of the colony, whilst their own credit and revenue will be sufficient to enable them to perforin the work assigned to them. Mr O'Borke, I dreaded doing away with the provinces, because I thought we should have to sit here in judgment on local works, and that gradually we should find creeping upon us the demoralising system of mutual compromise, called by the Americans 'log-rolling.' Bat we have avoided this difficulty. If our system be carried out, the name of any particular road or bridge or of any work indeed, bat the

buildings for the Government services and the main railways of the country, should rarely be heard in this House—at least not for the purposes of supplication, though it might be as the subject for congratulations as the triumph of the form of local government that could give to the country the works it required, without the necessity of Parliamentary intervention,"—Had the promises then given been fully carried out the new system might have bees fairly successful; but as was clearly foresees and predicted at the time by many members of the House, it was impossible in the nature of things that such a scheme could succeed. Very soon log-rolling—which it was prefessed had been guarded against—became rampant, and instead of congratulations that all necessary local works had been made without the necessity of Parliamentary intervention it was loudly and incessantly proclaimed in the House that the new bodies could not undertake them and demands for parliamentary grants of money sprang up all round. Bad as the new system it it will no doubt be difficult to remedy its evils. It has existed now for twelve years and the settlers have become so accustomed to general government help that it may be very difficult to induce them to forego it. However, necessity will effect what nothing else could, and now that it is no longer possible for the colony to go on borrowing enormous loans and scattering money broadcast amongst the local bodies the settlers must perforce consent to be weaned and no longer crave for general government milk. Supposing it to be practicable to consolidate the small Counties by reducing them to, say, twenty, and to maintain the present road boards and to revive those which have been merged, making their areas and boundaries the same as those of the ridings, then a county system night work well and its powers might be increased and the work of the education boards and charitable aid boards, and perhaps the control and maintenance of the police Bight be devolved upon the counties, it is, however, doubtful whether the settlers having been for twelve years accustomed to these small counties, will consent to have them merged into larger ones; for hitherto the tendency has been rather towards subdivision than towards consolidation. It may therefore be more expedient to allow the counties to remain as they are and to constitute other local governing bodies with much larger areas and greatly increased powers. Unless these new local districts comprise large areas it is obvious that they will not be able to undertake the main roads and bridges. This became apparent in 1878 when the small counties on the Olutha river failed to replace the bridges carried away by a great flood but immediately begged for pecuniary assistance from the Colonial Government, and by dint o! political pressure in the House of Bepresestatives succeeded in obtaining it. The boundaries of these new local districts should be as far as possible adapted to the natural and geographical features of the country, so that they may include a large tract of country whose inhabitants have interests in common. In some cases the present education districts might be adopted, as in the die of Southland and probably Taranaki. The former province of otago might be subdivided into three districts—North, South, and Central—Canterbury into three—the northernmost one including a portion of the present provincial district of Nelson. The remainder of Nelson, Marlborough, and Westland, one each, making ten local government districts in the South Island. In the North Island there might probably be eight local government districts, say two for Wellington, one for Napier, three for Auckland, and one for Taranaki, Recognising the great evils which result from allowing these bodies to depend upon the General Government for subsidies and grants-in-aid (which, if charged nominally on the consolidated fund, yet practically come cut of loan), and the necessity of their being independent and self-supporting, the great difficulty involved is no doubt their finance. In addition to the license fees, dog tax, &c, it may become necessary either to hand over to these local districts the proceeds of the present General Government property tax or to pass a permissive local government property tax act, with a provision that it can be put in force only by a vote of a majority of votes within the district. In England the local government reformers advocate this course as regards the English counties. They justify the proposal by showing that all classes, whether resident in the towns or the country, benefit by the main roads and bridges, and that it is unfair and impolitic that, the whole coat of these should be devolved upon the owners and occupiers of land; that other property holders in the towns, such as brewers, millers, manufacturers, merchants, and people of independent property also benefit by them, and should therefore contribute to their construction and maintenance.

Amongst those who have studied a reform of local government there is some difference of opinion as to whether the large towns should be included within a local government district or should be kept apart with distinct powers and revenues. In deciding this matter it is necessary to recognise that the large centres of population and business owe their prosperity and even their existence to the country, for it is the country which supports the towns. Without the capital, labour and enterprise of the country settlers there could be no towns and, moreover, it is a well-known fact that in all countries the toil of the country settlers enriches the traders and distributors of commodities in the towns more than themselves. Both equity and expediency therefore require that the towns should be included in the largest of the territorial local governing districts, and should contribute towards its revenues. Of course in the event of a property tax being levied for the benefit of the local district, then it would follow that all property-holders should have votes the same as ratepayers. As all these local bodies are administrative and economical bodies, devoid of legislative functions of a national character, a property qualification for voters is both politic and just. As to the mode of election of members of the largest

local governing body, some have advised that it should be mediate by the road boards or members of the county ridings. Though mediate election in some cases is undoubtedly the best method it is probable that it would be inexpedient in this case, and that direct election by ratepayers as at present would be preferable. Another obstacle in the way of a general acceptance of any scheme of local government reform which did away with subsidies, grants-in-aid, and loans might arise from the fact of certain districts of the colony having benefited more than others by the large government expenditure which has been going on for the last sixteen years. Some parts of the colony have received but a small share—or no share at all of the enormous loans which have been raised and spent. The in- habitants of these districts would naturally urge that having for years past been taxed to pay interest on these loans it was not just or fair to deprive them of the benefits they were intended to bestow; that they ought in equity to be put in the same position as the rest of the colony. As some of these districts are unsuitable for railways or large works it might be reasonable and expedient to square the account with them by a vote of money or some pecuniary concession. However, if anything of this kind were done, it should be done once for all—a definite and final settlement of all claims should be made, so that afterwards the district should be entirely self supporting and have no claim upon the General Government, These large local government districts might also be given greater powers of making bylaws than the present counties possess. The functions of the education boards, hospital and charitable aid boards and land boards might also be devolved upon them and perhaps also the maintenance and control of the police, as in the case of the English counties. Another very important duty which in the original drift of the New Zealand Constitution Act, as prepared by Sir Geo. Grey and accepted and endorsed by the then Colonial Secretary, Earl Grey, was entrusted to the provincial councils, namely, the election of members of the Legislative Council might also be assigned to these district councils.

In conclusion, the reforms now suggested are not such as in the abstract are the best possible, but such as seem to be practicable under existing circumstances. My own conviction is that a system of government resembling that of the Canadian Dominion would have been the most suitable for New Zealand, owing to its peculiar geographical configuration, its great extent in length from North to South, the fact of its having originally been colonised from six different centres, and to the absence of any one natural and national centre of commerce and population. But the past cannot be recalled and we must recognise that the impolitic and injurious legislation of the last twelve years has brought about a state of things very difficult to remedy. A remedy should, however, be attempted, and those politician whose inexperience or rashness brought about the revolutionary changes which have proved so disastrous are bound both in honour and in duty to exert themselves to the untmost to remove the evils they have occasioned.

decorative feature
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Privilege: MR. Larnach, M.H.R., and the "New Zealand Herald."
Debate in the Rouse of Representatives, on Tuesday, 14th August, 1888.
Wellington. 1888.

Privilege: Mr. Larnach and the "New Zealand Herald.

Debate in the House of Representatives, on Tuesday, 14th August, 1888.

Mr. Larnach.—Sir, late last evening a paper known as the New *Zealand Herald*, published in Auckland, was placed in my hands, and that paper contains an article that is libellous and scurrilous to the utmost degree upon myself. It reflects very considerably and it refers to a circumstance which is known to honourable members, as recently was suddenly called south on account called south on account of very serious illness in my family; and this paper has taken up the ease in a most scurrilous way, and has referred to it as though my pretended absence was simply an excuse to be away from Wellington to attend to my own private affairs. Now I will ask the Clerk to read the article, as, Sir if you wish, I will myself read the article referred to. What I would like to explain to the House is that I was unexpectedly and suddenly called south by my medical man as account of illness in my family; and when I arrived south I found the illness was so severe that I was detained there until a serious and dangerous operation was performed; and it the other day that Dr. Cough trey allowed me to conic here, as it was supposed all danger had passed. Well, Sir, to my great surprise after coining here I was brought face to face this scurrilous article. As I am about leave New Zealand and to settle again in Australia, where I resided for some years and am known there to many friends, if this article were published in

the papers of Australia, unless contradicted it would [*unclear:* reflect] seriously on my character and prospects,

Mr. Speaker.—Do you move that it be and by the Clerk?

Mt. Larnch.—Yes, Sir.

The CLERK read the article, as follows:—

"The incident referred to by our [unclear: Wellington] relation to the absence of Mr. [unclear: La] from the Assembly, and his continuing to drew honorarium, illustrates a phase of [unclear: par] life that the public of New [unclear: Zealand] lay to heart. It shows an instance [unclear: of pulous] dealing with public moneys which has unhappily been too characteristic of [unclear: ntary] proceedings in the past; and [unclear: the] of the honest man in New [unclear: Zealand] due to the honourable member for Bay of Islands, Mr Hobbs, for his manliness in under taking the unpleasant duty of exposing the scandal. Everybody knows that Mr. Larnach has left the colony and entered into business in Melbourne. The Press of the colony everywhere chronicled his farewell treat to the heads of the departments of the Civil Service, at which his intention of permanently leaving the colony was distinctly announced: in fact, it was the cause of the banquet. Yet notwithstanding this, and despite the fact that Mr. Larnach has actually left, he apparently continues to draw; honorarium by a scries of 'leave of absence obtained on the motion of members in the House. In the latest motion so made the permission is asked on the ground of 'illness' in his family. It is so that 'illness' not exactly in a member's family, but of himself, is, under the 5th clause of the Parliamentary Honorarium and Privileges Act, aground for a member's being granted leave of absence, and consequently drawing honorarium when absent. In sheer and shameless excuse for plundering the country this alleged 'illness in his family' is put forward by a member in the House. The statement may or may not be a fact—most probably it is not; but that it should be adduced in Parliament, and that, with the exception of Mr. Hobbs's apologetic protest, no voice of indignation was raised, will go to confirm the fast-growing conviction in the public mind that Parliament as it exists should be swept away and give place to something else with better comprehension of the fitness of things, and more in accordance with the common-sense of the community."*

Mr. Larnach.—There is some telegraphic correspondence that went from the paper's correspondent in Wellington which I wish to have read also.

The CLERK read the following:—

"With reference to the motion of Mr. Fish to day, that leave of absence for fourteen days be granted to the Hon. Mr. Larnach on account of sickness in his family, Mr. Hobbs subsequently brought the matter under the notice of the House. He stated it was customary for members while sick to draw honorarium, but he never heard of members drawing honorarium owing to the sickness of members of their family. He had inquired from officers of the House, the Sergeant-at-Arms and Mr. Otterson, and had been informed that Mr. Larnach would be paid his honorarium under Mr. Fish's resolution. It was well known that Mr. Larnach was leaving the colony. He had given a dinner to the Civil servants, and was not likely to return. Mr. Larnach was still a member of the House, and, as such, would travel free on all the Victorian rialways He (Mr. Hobbs) had no personal feeling about the matter, but he thought the country should know these things.

Mr. Walker said Mr. Hobbs knew more about Mr. Larnach's business than his own. He had received a cablegram that day from Mr. Larnach.

The Speaker said the honourable member for the Bay of Islands had anticipated events. The matter was one for his consideration as Speaker, rather than of the officers, and he would consider the matter when the accounts came before him.

Mr. Hobbs said he knew the Speaker was the ultimate authority, but he had asked for the information at the hands of the usual officers of the House."

Mr. Larnach.—I would like to say this: that during the twelve years I have been in this House I have never on any single occasion drawn any portion of my honorarium during the currency of a session; and I do not think that, under the circumstances, any one with a spark of manly feeling would for one moment think that, on account of money matters or anything relating to the honorarium, even supposing it were a hundred and fifty times as much, I could think of doing what has been suggested in the article. If I am in order, Sir, I beg to move, That this article is a breach of the privileges of the House.

Mr. Hobbs.—I wish to state that, as soon as I found I had conveyed an impression to the House and the country that the honourable gentleman intended to draw his honorarium, I took the earliest opportunity next day, at the meeting of the House, to contradict that, and to express my regret; and I may further say that I sent to the honourable gentleman a telegram expressing my regret for having mistaken the reasons which had taken him away, and I received from the honourable gentleman a telegram in which he accepted my apology.

Hon. MEMBERS.—Will you read it?

Mr. Hobbs.—I may say that the telegram was anything but courteous.

Hon. MEMBERS.—Read it

Mr. Hobbs.—I wish I had it with me.

Mr. Larnach.—I can give you a copy of it

Mr Hobbs.—I can only say it was not at all gentlemanly*.

Mr. Speaker—I think you will have to qualify an expression of that sort.

Mr. Hobbs.—I will withdraw that remark; but, still, I am sure that I made sufficient amends to the House,—and any gentleman would say so. It is my regret that I introduced the name of the honourable member for the Peninsula at all into the matter. The remarks I made in the House, and the question I raised, simply stated what I had been informed—that members of this House had done so, and that in this particular instance it was possible for the honourable member to do so; and the mistake I made was in having assumed that he intended to do so. And I thought, knowing the honourable member, and he knowing me as he does, he would have at once accepted what I said. I have nothing to retract I have nothing to be ashamed of as far as regards raising the question of members drawing their honorarium when absent through illness in their families. I expressed great regret for having introduced the honourable gentleman's name. But, on the question generally, I may say I do not intend to let the matter drop It a member of this House thinks that an about has crept in—and in this case the matter dose not come before the Auditor-General, but is dealt with by the officers of the House—I say it is his duty to try and prevent the abuse l do not feel at all hurt at anything that may be said about me—any discourteous remarks this may be made about me. I am prepared a accept things of this kind in discharging as public duty. I exceedingly regret that I say anything to pain the honourable member. I know that some honourable gentlemen have said to me, "You never knew Larnach to do a mean thing;" and I say I never knew have to do a mean tiling. I may say that, as to the question generally, I intend at another time to go into it.

Mr. O'callaghan.—Is the honourable gentleman in order in making the remark that he intends to see if honourable member have done that generally?

Mr. Speaker.—I do not think the honourable gentleman was out of order.

Sir H. A. Atkinson.—I think there can be no doubt at all in the mind of any of us that this is a gross libel; and I think the honorable gentleman has done well to bring it under notice of the House. The unfortunate part of the thing is that we are not able as a House to deal satisfactorily with these matters. I do not know what further steps the honourable gentleman proposes to take in this matter. I shall be very glad indeed to assist him in any course that he might think desirable to clear his character, if such a thing is necessary but my own opinion is that the honourable gentle man is known far too well to render it advisable that this House should take any further action than express its opinion very strongly as to the breach of privilege of this article and the [*unclear: g*] untruth of it. I must say, in regard to the honourable gentleman who has just sat down that I think the way he brought this matter before the House was very unfortunate. It seems to me a member is not justified in being matters of this description forward in the way this was brought up. The Parliamentary Honorarium and Privileges Act is quite class in what it says. Parliament in its wisdom last seen fit to give its authority to grant, as it were a dispensation to members if the Speaker should think there is a sufficient cause. Illness is considered a sufficient cause; and in other circumstances which the Speaker may think justify a dispensation, it may be granted. That being so, it seems to me that my honourable friend made a mistake in bringing the matte forward in the way he did. We should not be always fouling our own nests. I deeply regret that in the Press of the colony there are a large number of papers always ready to seize upon anything, and to assume that every honourable member is doing something that is disereditable to all public men: it does not matter which side of the House they are on, or whether they are little or great, it is just the same It seems to me, I am sorry to say, that there is a sort of desire to hold up public men in the colony to the reprobation of the public, as though they were living upon the public in a disgraceful way. This article goes so far as to talk of the necessity of abolishing Parliament in consequence of a particular member having done something which he ought not to have done. We cannot so much complain of that if our own members start a thing in a wrong way. We must look at home before we look abroad. I do not know what the honourable member proposes to do; but I can assure him that anything I can do I shall be most happy to do to vindicate him in any way he thinks is necessary; but I confess I should like to see the House simply declare this a breach of privilege, and then "the honourable gentlemen could take an action against the paper, and I have not the least doubt it would reap its due reward. I am sure I am speaking the views of the House when I say that this House has perfect confidence in the integrity of the honourable gentleman.

Mr. W. D. Stewart.—I think the honourable member for the Peninsula is to be thanked for bringing this matter before the House; and I am glad Premier has taken up the position he has done on this important question. There is no doubt whatever that there is nothing more easy than to set in circulation the basest rumour about almost any man in this House. Nothing is more easy, and no-thing seized upon more readily by the Press of the country than anything which tells against any member of this House. When you trace this matter you sec that the honourable member for the Bay of Islands has not done enough in expressing regret for what he did This is not the first occasion on which the honourable member has done this, and I am afraid it will not be the last. It seems to be constitutional with the honourable member to indulge in side-attacks of this sort upon other members of this House; and, curiously enough, while expressing regret for what he said with reference to the

honourable member for the, Peninsula and that he was of opinion the honourable gentleman would not do such a thing, he said he put this question because he was afraid he intended to do it.

Mr. Hobbs.—I beg your pardon——

Mr. W. D. Stewart.—He said he had a suspicion the honourable member was going to do so.

Mr. Hobbs.—I did not say so.

Mr. W. D. Stewart.—The honourable member said on the previous occasion "he would like to express regret for having assumed that the honourable member for the Peninsula purposed to draw his honorarium during his absence."

Mr. Speaker.—The honourable member cannot refer to a past debate.

Mr. W. D. Stewart.—I venture to say that this article may to a certain extent be excusable on this ground: that the honourable member, occupying the responsible position which he does as a member of this House, distinctly made insinuations against the honourable member for the Peninsula, which, of course, the Press were justified in assuming he had some foundation for. I venture to say this, further: that the honourable member for the Peninsula is one of the last men in this House who would take money under circumstances of doubt. Underlying these remarks of the honourable member for the Bay of Islands there is. Sir, a distinct reflection upon yourself—that is, that you would not do your duty. Subsection (2) of section 5 of "The Parliamentary Honorarium and Privileges Act, 1884," is as follows:—

"The preceding provision as to the deduction to be made in the case of absence of any member in attendance on Parliament shall not apply where such absence is caused by reason of illness, or from any other cause which shall, by the Speaker of the House giving the certificate hereinafter mentioned, be therein stated to be unavoidable."

It was indicated clearly in the speech of the honourable member for the Bay of Islands that the honourable member for the Peninsula intended not only to draw his honorarium, but that he intended to avail himself of his privilege as a member of this House to travel over the railways in the other colonies. I say the insinuations of the honourable member for the Bay of Islands were really unworthy of any member of this House; and for him to hold opinions such as he expressed regarding any member of this House indicates, to my mind, a state of feeling which I should feel ashamed of. I shall be very glad to give the honourable member for the Peninsula any assistance I can in seeing justice done to him; but, probably, after the expression of opinion which this House gives, or has given, upon the subject, it will not be necessary to prosecute the matter further. This House should distinctly reprobate these groundless attempts to undermine the honour and character of other members of the House; and I think that, if no other object is accomplished than that, it will serve a good purpose.

Mr. Verral.—Sir, I should like to propose that this business be adjourned, to give the honourable member for the Bay of Islands a couple of days in which to make such an apology as will be received by the honourable member for the Peninsula, and to give the editor of the newspaper which has printed the article also the same time to apologize. I think we should waste no further time about it, because there is not the least doubt they will give an apology such as the honourable member for the Peninsula demands.

Mr. Bruce.—I rise, Sir, to very briefly give expression to the indignation I feel at such base and cruel charges being levelled against a gentleman who has for many years occupied high positions in this colony, and who has, I venture to say, occupied an equally high position in the respect and esteem of all with whom he has been brought in contact. Under the circumstances, the charges levelled against the honourable gentleman are of a peculiarly cruel character. I am very glad that the honourable member has brought the question up before the House, because of the effect such statements might have in Australia; and the fact that he has brought the matter forward will give those with whom he will be there associated an opportunity of seeing that our honourable friend holds such a high place in our respect and esteem, and that, in selecting a new home in Australia, he leaves this colony with the regret, I will venture to say, of almost every member in this House.

Mr. R. H. J. Reeves.—It was with very great pleasure I heard the manly and straightforward expression of opinion that came from the Premier. It was what we might expect from him. Any one who knows the honourable member for the Peninsula must know very well that he does not come to sit in this House for the sake of the paltry honorarium he gets here: but when we have honourable members who takes such steps as the honourable member for the Bay of Islands has done I think we ought to endeavour at all events to put ourselves right not only in this colony, but also in the adjacent colonies; for there is not the slightest doubt but that the article published in the Auckland paper will be republished in Australia. It is all very well for the honourable member for the Bay of Islands to say he has apologized; but, as the honourable member for Dunedin West has said, it is easy enough to blacken a man's character, but it takes a great deal to bring it back again to its original state. There is nothing that any public man should be more sensitive over than he is over his character. The honourable member for the Bay of Islands—who, I think, can take Past-master's grade in certain transactions—ought to feel in an unenviable position, or, perhaps, in an unviable one, according to his own ideas. He said he was able to take his own part, and did not care what any one said of him. Well, such a state of

mind as that I dare say may be considered by him and by certain of his colleagues as being creditable; but I think, according to the feelings which actuate most members of this House, that view will not be accepted. I hope the honourable member for the Peninsula will press this, and that it will not be allowed to drop, for I feel certain that if the publisher of that paper is brought to the bar of this House as he ought to be, and as I hope he will be, with certain other persons who are connected with that paper—I feel confident in my own mind that evidence will come out that will bring most damming proof against certain members of this House as to their complicity and connivance and as to the information they gave. I am not going to repeat what has been said by the honourable gentleman who has brought up this matter, which is, if I may be allowed [*unclear:* to] the term, one of the most contemptible charges that could emanate from any member in any Legislature throughout the world. I do not know that if we were to search the whole of of the Australian Colonics, or if we were to search the whole of the British dominions, you could possibly find any one who would be guilty of such gross and contemptible conduct, if I may be allowed to say so, as has been displayed by the honourable member for the Bay Islands. The honourable gentlemen the morning after, when he found the way as which his remarks were met, immediately talk graphed down to my honourable friend the member for the Peninsula to this effect: "Very sorry for my hasty remarks of yesterday. Made under misconception. Accept my regret Sorry to hear of your family troubles." What a sympathetic tone there is in this "Sorry to hear of your family troubles"! Did not the honourable gentleman know that it was because of family troubles that the member for the Peninsula had left?

Mr. Hobbs.—No.

Mr. R. H.J. Reeves.—Did not the honour able gentleman know? "No!" Why what the motion moved by the honourable member for Dunedin South? Was it not to this effect asking leave of absence for the honourable member for the Peninsula on account of serious illness in his family? That was the motion, Sir; and, in the face of that, the honourable member for the Bay of Islands puts this question on the Paper. Sir, it is in keeping with the conduct of that honourable gentlemen and of one or two other honourable gentlemen that I could name, but will not name.

Mr. Speaker,—I cannot allow any refection on honourable gentlemen.

Mr. R. H. J. Reeves.—Well, [*unclear:* Sir] telegram was sent by the honourable member for the Bay of Islands to my honourable friend the member for the Peninsula, expressing such keen sympathy with him in his family affections. Sir, it is a pity the honourable gentleman's family afflictions should be brought as the floor of this House—it is a great [*unclear:* pity] now that it has been done I hope the mater will not be allowed to rest. Then my honourable friend replies in the most corteges manner to the honourable member for the Bay of Islands, and says "Sir,—Whether on public or other grounds, your reference to my sheet absence was unfriendly, unmanly, and contemptible; but as a fleeting shadow of delicacy has passed over you, I accept your apology Now, Sir, look at the magnanimous way is which my honourable friend has accepted it In conclusion, I hope, now that the matter has come before the House, that the House, in order assert its own honour, will not allow matters to repose, but will have the publisher of the paper, together with the special correspondent and his satellites, before the bar of the House.

Mr. Levestam.—I also should like to make a few remarks on this subject. I regret very much that from time to time charges of this kind have been indulged in by members of this House. The honourable member for the Bay of Islands said just now that it is our duty investigate abuses. Yes, Sir; but [*unclear:* be] he brought this matter before the House his should have been sure that there was an abuse He assumed, without rhyme or reason, that my honourable friend the member for the Peninsula was going to, if I may say so, sponge upon the country—that is, to draw money to which he was not entitled. As my honourable friend the member for Inangahua has pointed honourable gentleman had no right and no reason to say that he did not know what the cause of absence was, because the never of the resolution stated distinctly that have of absence was asked for upon a certain ground-namely, on account of illness is the honourable gentleman's family. Sir, the honourable member for the Bay of Islands [*unclear:* ted] one occasion that he had asked his bearers to pray members of Parliament, because they greatly needed the prayers of the people here, Sir, he has given us an sentence that members of Parliament do need the prayers of the people to make them mend their ways. I must agree with the honourable member for Inangahua in expressing a wish that this matter should not be allowed to drop, because I really do think the time has arrived when an example should be made of those [*unclear:* per] who are continually trying to bring our institution into disrespect. I also wish to express my pleasure at the way in which the: Mers Premier has treated the matter, and I feel sure that every member of the House holder the same opinion that he holds, that the honourable member for the Peninsula would do nothing unworthy of him as a member of this House or as a man; and I believe that every member of the House fully recognises that great injustice has been done to him, and that the honourable member for the Bay of Islands is in no way deserving of being lenieatly dealt with.

Mr. Allen.—Sir, I believe that matters of this kind can be looked at from two points of view first of all, from what I might call pastel one; and I consider this is especially a painful proceeding when it is connected

with such as estimable gentleman as the honourable member for the Peninsula. I say "estimable" because I do not suppose there is in this House or in this colony a gentleman who has with an excessive amount of generosity; and an know that he would not be capable of everything of the kind that is suggested in this newspaper or in the telegram therein. [*unclear:* Apart] that I think it has a good effect, too, in that it arrests what I might almost call the downward progress of moral feeling in this House and in those whom this House represents. I have felt often, Sir, in this House that every now and then there was a slight check needed to stop us on the downward path and to put us on a higher gentlemanly platform. And I feel quite sure that remark may also be applied to the Press. I should be sorry to think that any member in this House, descending to anything that was not gentlemanly, or that any newspaper, descending to write any paragraph that is scurrilous and untrue, should be taken as representing the people of the country, whoso enlightened, honest, and gentlemanly feelings are not represented by such feelings as are expressed in papers containing matters of the kind of that we have now under consideration.

Motion, "That the article and the extract which have been read are a breach of the privileges of this House," agreed to.

Mr. Larnach.—I now move, That the proprietors of the paper—William Scott Wilson, Joseph Liston Wilson, and Alfred George Horton—be ordered to attend at the bar of this House at half-past two o'clock on this day week.

Sir H. A. Atkinson.—I should only like to say on this question that, while, as I have said, I sympathize very warmly with the honourable gentleman, it is right to express my opinion that no good can come of this proceeding. The machinery which we have at our disposal, and which the honourable gentleman seeks to put in motion, is so cumbrous as to be almost unworkable; and in my experience, which has now been pretty long, we have always failed on occasions of this sort to bring home adequate punishment to the persons who have committed a wrong against us. The Whole machinery will have to be altered before we can get any satisfaction for attacks of this kind. I therefore hope that my honourable friend will be able to see his way to be satisfied with the resolution which has been passed by this House, and not proceed further. However, if he will not withdraw the resolution, but presses it on, I say at once that I shall vote for it, although I shall regret that he has proceeded further.

Sir J. Hall.—When the Premier rose I was about to rise to make remarks to the same effect as he has done. I need not add to what has already fallen from so many honourable members an expression of my indignation at the abominable statements in the newspaper which has been read with regard to the honourable member for the Peninsula. I think we have only done our duty in declaring this article to be a gross breach of privilege. I further say that, if the honourable gentleman presses his motion that the publishers be called to the bar of the House, I shall be compelled to vote for it. But, as an old member of this House, and as an old friend of the honourable gentleman's, I suggest that it would be much bettor to leave the matter where it now stands, and be content with what we have already done. We have de- clared that the statement is a breach of privilege; and the honourable gentleman and the House should now treat the matter with contempt. I agree with the Premier that the usual procedure on the part of this House in connection with breaches of privileges is upon a most unsatisfactory basis. I have known many cases in which action has been taken; but i have never known of a case being brought to a satisfactory issue. I have never known the House in any one of these cases get out of the difficulty in a satisfactory manner. Therefore I suggest that, even supposing the honourable gentleman's character required vindication—and it stands so high both in this House and in the country that it requires nothing of the kind—it has been amply vindicated by the resolution we have passed; and I hope he will think it unnecessary to go further. However, as I have already said, if he thinks it advisable to do so I shall certainly vote for the motion that he has made.

Mr. Verrall.—Sir, evil communications, we know, corrupt good manners; and, as I am sitting so near the bar of the House, I hope the honourable gentleman will withdraw the motion, in order to save me from the danger of sitting so near to the persons whom it is proposed to call to the bar.

Mr. Fulton.—I should like to add my opinion to those already expressed by the Premier and the honourable member for Selwyn, and advise the honourable member for the Peninsula to be content with the action that the House has taken in declaring this article to be a breach of privilege. The honourable gentleman's character stands so high that, if for one moment any reflection could be suffered to rest upon him, surely such expressions of opinion as have been heard this afternoon, coupled with the resolution that, without one dissentient voice, has been passed, render it quite unnecessary that he should take any further action. I trust that he will see his way to allow the matter to rest where it is.

Dr. Fitcmett.—I am sorry that I cannot agree with the last speaker. The House owes a duty to itself. It seems to me that, unless this House is going to allow itself to be made an object of contempt throughout the country, it should maintain its own dignity when it is attacked in the disgraceful way in which it has been attacked in the present case. It is true that a scandalous attack has been made upon the honourable member for

the Peninsula. It is equally true that the honour of the House is attacked. Fortunately, the honourable member's character does not need any defence. With the House it is different, for one of its own members is the assailant. The Premier says—and the honourable member for Selwyn supports him in it—that, this resolution having been carried, the honourable member for the Peninsula should be satisfied; but it seems to me that, if the matter be dropped now, the consequence will be that libellous attacks on honourable members will be made with impunity, because the publishers will know that the machinery of the House is such that no punishment is likely to follow. If our machinery is not perfect, that is not a reason for taking no action; it is rather a reason why we should make our machinery perfect. For my own part I hope that the motion will not be withdrawn. So far as the honourable member for the Peninsula is concerned, he very well afford to treat the libel with contempt; but I regard the question as one affecting the honour of the House.

Mr. Samuel.—In theory, no doubt, the honourable member for Dunedin Central is perfectly right; but perhaps he has not reflected upon the practical aspect of the case. There are three courses that might be [*unclear:* adopted] the motion of the honourable member for the Peninsula is carried. In the first place the publishers of this false and scandalous libel—for such undoubtedly it is—[*unclear:* might] brought to the bar of the House. Then they would be called upon to make some [*unclear:* state] or explanation; for people in such [*unclear:* cases] usually called upon for their defence before the House proceeds further. Then, these persons having made some statement, it will be for the House to decide what shall be door Then there would be several courses opening The first and the most usual course acceding to the precedents that I have hastily the suited, would be to severely reprimand the publishers for the offence committed. Another course would be to commit the [*unclear:* publishers] prison. In several cases that has been does but, so far as I am able to see, the [*unclear:* power] only been exercised in times of public [*unclear:* troc] or where the libel has attracted such [*unclear:* un] sal attention outside that it has been [*unclear:* sary] to take some strong action. A their course would be to order a State procession. That is usually done when the which house is reflected upon. We have [*unclear:* had] stances of prosecutions of that sort, [*unclear:* and] know what has been the result. We know that in one case in this colony a [*unclear:* prosecution] instituted by the State, and the [*unclear:* result] very unsatisfactory: and the person [*unclear:* prose] was returned as a member of the House [*unclear:* wi] a few months afterwards. Now, looking at the matter practically, it does seem to me [*unclear:* that] advice given by the Premier and the honourable member for Selwyn is sound [*unclear:* advice]. doubt, in such a case an honourable member placed in the position of the honourable member for the Peninsula is not the best judge a to the course to be adopted. He [*unclear:* would] more than human if he did not [*unclear:* resent] strongly this scandalous libel, and [*unclear:* des] If most full investigation into the facts [*unclear:* mage not readable] think it would be well that we [*unclear:* should] go further in the matter, and put the publishers of the libel in the position of [*unclear:* mar] for I very much regret to say that in the present tone of public morality I [*unclear:* am] that such would be the effect. I [*unclear:* am] that many people, instead of [*unclear:* deprecation] attacks, will, give the printers of [*unclear:* the] credit for boldness in writing and [*unclear:* printing] matter irrespective of consequences to the selves. For these reasons, and not [*unclear:* from] with that these men should be in any way suffered to escape the punisment they richly deserve, and which I greatly regret I cannot see any means of inflicting, I hope the honourable gentleman will not proceed further.

Mr. Tubnbull.—At the first blush I thought it would be the proper course to pursue to call these persons to the bar of the House; but there is this peculiar circumstance to be considered: that it is really a member of the House who is the culprit—the person who supplied the information. The persons who published this statement have only accepted and published information which they had received from a member of the House. In fact, they have been misled by a member of the House; and, if punishment is to be inflicted at all, it should be inflicted upon the member who was the cause of this breach of privilege rather than upon the publishers. No doubt they would consider themselves justified in apposing that information was correct when it came from a person of such reputation as the Honourable member who has given this Information. Taking this into consideration, I do not think we should proceed further. Fortunately, we know that the honourable member for the Peninsula occupies a high position in this House and in the country as a man of the very highest honour and integrity, and I am sure he will not have been harmed by this libel. For the reason I have given I do not think that the House should proceed further, and I hope the honourable member will see his way to take that view.

Captain Russell.—I also should like to age honourable gentleman not to proceed further: not that I fear that if we go further the gentlemen who have published the libel will be elected members of the House, but I feel that the powers which we have in this matter are such as are not at all suited to giving effect to what would be our wishes in such matter. People may almost defy this House to do its worst, because, although we might go through the form of sentencing persons who are guilty of breaches to be taken charge of, as a matter of fact there is no punishment in that. In fact, I think that the honorable gentleman who has been attacked might have been content to take no steps in the matter at all. A member occupying his established position could have afforded to laugh at a paragraph reflecting upon him in this way; for, as has been already pointed out, there is

probably no man in New Zealand who is more thoroughly respected than the honourable gentlemen, or who is more above suspension doing mean or dishonourable acts why therefore, he should have taken such section to this I do not quite see. But, Sir, think that the unfortunate gentleman who has been the originator of the scandal that has been published, if he is, as I believe him to be, a man capable of entertaining generous emotions, has had to bear sufficient punishment by [*unclear:* tening] to the course of the debate this abstersion Any punishment that we could inflict upon the publishers or printers would sink into absolute insignificance as compared with what he must have felt: and that, in itself, is a reason why we should not proceed further.

Mr. O'Callaghan.—The difficulty in connection with accepting the proposal to take no further action seems to be, to know where we are going to draw the line. We shall not know how or where to put a stop to this thing. Hero we have a gross libel committed against a member of the House. Where is it to stop? the next libel may be upon a dozen members of the House; or we may nave the Premier libelled.

Sir H. A. Atkinson.—I am quite used to that.

Mr. O'Callaghan.—The difficulty is really to say where the line should be drawn. The honourable member for the Bay of Islands, I would point out, has already had a very strong warning from his friends of the danger of making rejections upon members of the House. We know that some tune ago he was at a meeting in this city, where it was proposed that members of the House should be prayed for, and he said that members were past praying for, and that he would not sit in the House, only he realised that it was the will of the Lord that he should be here. He was warned by his friends in this House that it was an unjustifiable remark for him to make, and he made a sort of an apology. He has made a sort of an apology again to-day. But he is going on from bad to worse, and the question is us much whether we can compel him to do rightly as whether we can prevent newspapers of the colony from being guilty of the conduct of which this northern newspaper has been guilty. I really think that even if we do no more than bring the proprietors to the bar of this House, and there show them the action of which they have been guilty, and fine them, as I believe we have power to do, and touch their pockets, it will, at any rate, act as a warning, and show them that they must not do the same kind of thing again. I am sorry to hear so many members of the House advise the honourable member for the Peninsula to let the matter drop. I do not think he ought to let it drop, but I think we should support him in his motion to bring the offenders before the bar of the House.

Mr. Larnach.—Sir, after the kindly and generous expressions of feeling that have fallen from the Premier and other honourable members, I am disposed to leave the matter entirely in the hands of the House, and, if honourable members think such a course as suggested by the Premier would be desirable, I am quite willing to withdraw my motion.

Mr. Barron.—I think, if the honourable member were to ask for another day for the discussion of this matter, and if the debate were adjourned, it would be the better course, because that would give him an opportunity of coming to a decision as to whether it would be more advisable to let the matter drop, or to proceed with his motion that the offenders should be brought to the bar of the House. I presume that the motion would still have precedence as a question of privilege if now adjourned; and, if he should not now decide to withdraw it, such a course would give the honourable gentleman an opportunity of considering whether or not he should go on with his motion.

Mr. Levestam.—I trust the honourable member for the Peninsula will not withdraw his motion. It has been stated on all sides of the House—and we all cordially agree—that the honourable gentleman has a character so high that an accusation of this kind cannot hurt him. I quite agree that it will not hurt his character; but will the honourable gentleman stand any the less in the estimation of his fellow-members if he follows up his motion that the publisher of the article be brought to the bar of the House? We have been told that it would be difficult, and that the machinery is very elaborate: and it is true that we cannot inflict any real punishment; but we could very well order that a prosecution should be undertaken against the offenders at the expense of the country in a case of this kind the honourable member has been most grossly libelled; and it is too much that when an honourable member has been exposed to libel simply because he is a member of this House, and has done his duty to the country, he should be put to the expense of a private prosecution. The House and the country might well order a prosecution at the public expense, and I hope the House will agree to such a course.

Mr. O'Conor.—There are very few members of the House who sympathize more heartily than I do with the honourable member for the Peninsula at the present time. I do not think, however, that the assertion that the publication of this article is a broach of privilege would at all adequately express the offence of which the writer has been guilty. I am not one of those who think that matters of this kind should be treated lightly, or should be spoken of in an uncertain way. I think that, to the fellow-colonists who have known the honourable gentleman for so long, the announcement that we consider the article as a breach of privilege will not convey at all what we feel about that honourable gentleman. Members of this House will feel as much soreness and resentment as he can possibly feel on the subject; and it is just as well for us to take care that we do not take up a position which our outraged feelings would lead us to take. To arraign the proprietors of the paper before the

bar of the House would be giving those persons a notoriety which would scarcely do them any harm, and would not mete out to them any punishment at all adequate to their offence, nor would it perhaps bring in the other persons who are also guilty. A resolution of the House condemning the article as untruthful and full of calumny, and as one that might be said to have been maliciously directed against the undeserving head of the honourable gentleman, would be better than a resolution declaring the article to be a breach of privilege. Breaches of privilege may be committed in many instances in connection with which our feelings would not be sympathized with by the public. In this case, however, we, as member of this House who have been associated with the honourable gentleman in that capacity far so long, feel as an insult the cowardly means taken to give the honourable gentleman a such in the back at a time when he is about to take his departure from the colony. I hope, how ever, the honourable gentleman will not alive himself to be influenced by those who urge high to press on his motion, but that he will leave the matter to be dealt with by the Press and the people of the colony. If any thing follow from this House it should be a resolution condemning, as representatives of the people, the action of the paper in publishing an article containing so gross and untruthful a calumny.

Mr. Fitzherbert.—I understand the honourable member for the Peninsula had signified his willingness to leave this matter is the hands of the House. I am one of there who think we should support our privileges as all risks, and that it is most improper to allow statements of this kind to be made in the newspapers without taking some serious nation of them. At the present time there is any doubt that these newspaper proprietors are saying that nothing will come of this mater and if we pass no resolution we shall be laughed at by this and every newspaper in the colony. Some honourable members have and that the honourable member for the Bay of Islands is responsible for what appeared in this paper, and that he gave wrong information and misled the proprietors. I have no doubt he has done so. This being the case—that the proprietors have been misled in the matter—I think we might give them to, say, this day week to apologize; and, if they refuse to do so, then let them appear at the bar of the House. This will, I think, meet everything. If they are sorry for the mistake they have made will have an ample opportunity of making a suitable apology. But if, knowing that they have been misled and that they have make a mistake, they still adhere to it by not apologizing, then they should be brought up at the bar of the House. I would suggest, therefore that they be informed that, if they do not apologize by Tuesday, by telegram, they shall be brought up at the bar of the House this day week. I think this is a fair proposal, [*unclear:* and] that should be viewed as such by this House and by the country.

Mr. Moss.—I should like to point out to the honourable member for the Peninsula that if this motion is put we are bound to carry it, because to negative it would be place him in a false position. At the same time I should like also to say, as an Auckland member, and knowing the proprietors of the Auckland *Herald*, that I am perfectly sure [*unclear:* no] would more regret than they the line that has been taken in that paper. Let us remember, to justice to the writer, that the first mover in this matter—the honourable member for the Play of Islands—is a gentleman of great piety, a gentleman leading in religious movements a the Province of Auckland, and who these fore, from his position and from his pretensions, would be regarded as an authority not to be doubted. No one would for a moment suppose that that honourable gentleman could part the part of Paul Pry, or that he would delight, in a baseless innuendo. A charge made by a gentleman of such pretensions, and in his position in the House, would naturally be accepted by a newspaper man as coming with greater weight than if it came from an ordinary member of the House. As an Auckland member, I have more than once regretted that charges of this kind in connection with small things, which other members would think unworthy of their notice, have become characteristic of some of us Auckland members; and I take the opportunity of saying in vindication of the people of Auckland, that I am sure conduct of that kind is as little to the taste of the majority of the people there as to other members of this House, or to other portions of the colony. It is the people of Auckland whoso reputation is largely affected by proceedings of this kind. There are small great men who try to make for themselves a miserable reputation by meddling in small things, and aspersing their fellow-men. But they are not supported by the people at large,—only by a few select persons who believe they are better than their neighbours—a belief in which their neighbours do not share. I should be very glad if the honourable member for the Peninsula—though I do not presume to advise him in the matter, there is no member in the House for whom I have greater regard or respect—would see his way to adopt the suggestion that has been made, that the motion be withdrawn.

Mr. W. P. Reeves.—I should not speak on this question, being a young member, and not an authority on questions of precedent, but I am a working newspaper man and have been concerned in newspaper management for a number of years. I have the pleasure of knowing the proprietors of the *New Zealand Herald*, and I know the way in which articles of this sort find their way into newspapers. I feel no doubt that the paper in question which we know to be a highly respectable one, has been simply misled. Its correspondent here has received information which he thought he was entitled to consider correct judging from the source from which it was obtained. This information he has transmitted to the paper, and the editor has written this exceedingly improper article. The proprietors and publishers of the paper, who are well known as highly respectable men of business,

knew nothing of the article, and I do not suppose they knew any thing at all of the matter until they read it in their own paper, and, when they did read it, probably their opinion of it was that is was truthful and correct. Knowing these gentlemen as I do, I feel certain that, if resolution stigmatizing the article in proper terms is transmitted to them, they will at once cause a suitable apology to be inserted in their paper. I am sure that the last thing they would wish to do would be to libel a member of this House. Therefore, Sir, if the honourable member for the Peninsula will withdraw his resolution, I shall move one to this effect: That, in the opinion of this House, the article in the *New Zealand Herald* attacking the honourable member for the Peninsula is untruthful and improper; and that the attention of the proprietors be drawn to the matter. There is no doubt that this is a gross breach of privilege, but I also know that the general opinion among proprietors of newspapers is that calling them to the bar of the House is simply a cheap advertisement for them. They look upon it as a comicality and a joke; and if the House wishes to turn this matter into a joke it will order the proprietors of this newspaper to be taken into custody by the Serjeant-at-Arms. That will give them any amount of publicity, and the chances are, as the honourable member for New Plymouth has pointed out, that the editor will be returned to this House at the next elections. I feel sure that if we pass such a resolution as I propose an ample apology will very soon appear in this newspaper.

Mr. Fish.—It appears to me that the proper course for the House to pursue is to pass the resolution which is now before it. I have not the slightest doubt that the editor of this newspaper has written the article in question on information supplied to him. Still, that does not do away with the necessity for a retractation being made by the paper. If the resolution is carried, and the editor has acted on insufficient information, I feel sure that it will be a great pleasure to him to apologize at once; and then the House could stay its hand. If, on the other hand, the editor does not take that course, then the House will have a right to believe that the article was written with malice prepense; and the proprietors should be summoned before the House. I do not think that the punishment which the House can mete out to a person of that sort is so light as has been indicated by the last speaker. There is no doubt that under certain circumstances the House may lose dignity in attempting to punish individuals; but, still I believe it has the power to sentence a person to three months' imprisonment in gaol, and not merely in the custody of our genial Serjeant-at-Arms.

Mr. Speaker.—Any committal would be terminated by the prorogation of Parliament.

Mr. Fish.—Then the punishment would be slight. However, I am under the impression that the article has been written under a misapprehension through wrong facts having been supplied, and therefore that the writer would be only too glad to apologize.

Mr. Lance.—I have listened with very great pain to this debate, and the more I think over the matter the more am I convinced that the honourable member for the Peninsula would do well to withdraw his resolution. The universally-expressed opinion from all sides of the House as to the action taken in this matter is so strong that if I were in the honourable gentleman's place—and the best way to form a judgment is by putting yourself in the place of the person interested—I should at once decide to treat everybody connected with this transaction with the utmost contempt, and take no further action in the matter.

Mr. Hobbs.—There have been several insinuations made that I supplied certain information to the correspondent of this newspaper in Wellington. I wish to say that I have not had any conversation or communication directly or indirectly with that gentleman. Any statements which I have made were made on the floor of this House, and have been published in *Hansard*. I have no other remark to make, except that I regret very much that honourable members should choose, year after year, to refer to a matter with which I was connected when I attended a Church anniversary in this city and took the chair, and where I was reported to have sail' that the members of this House were past praying for. I never said that. What I said was that they were not past praying for.

Mr. T. Thompson.—I desire to express my full sympathy with the honourable member for the Peninsula in this matter, and I also desire to express my regret that such an article should have appeared in an Auckland newspaper. I feel sure that the course suggested by the honourable member for Cheviot is the right one, and I have reason to believe that the honourable member for the Peninsula will adopt that course. If not, however, I shall vote with him. I am sure the honourable member for St. Albans is correct in saying that the proprietors of this newspaper have little or no knowledge of the matter; and possibly the persons managing the paper have been misled by the statement made in this House. I have known the proprietors of this paper for more than thirty years, and I am sure they will regret, as much as any member of this House, that an article such as that complained of should have appeared in their journal.

Mr. Beetham.—I hope the honourable member for the Peninsula will listen to the view so plainly expressed that this matter should not be pressed to a division; but, if it is, I shall vote with him rather than place him in a false position. A great many remarks have been made with regard to the newspapers of this colony; but to me it seems that they are to a great extent a reflex of the opinions, often too plainly expressed, of this House. The Premier has drawn attention to the necessity for care in the remarks we make here relating to the character of

honourable members. If we are not careful we have no right to express surprise that the newspapers should follow our example. In this case I think remarks have been made with respect to the honourable member for the Bay of Islands which are not warranted. I acknowledge that his action has indicated misdirected zeal, and I do not wish for a moment to defend that action. I believe that the zeal for economy which has so influenced the Auckland members on several occasions made him outrun his discretion, and I quite admit that he was in no way warranted in making such a statement as he did. The character of the honourable member for the Peninsula stands so high that he may fairly leave the matter with the first resolution, which has been carried. From what we have heard said with regard to the proprietors of the *New Zealand Herald*, I think we have every reason to believe that that paper will tender a full apology.

Mr. Larnach.—I have already said that I am willing to withdraw the motion, and I now go further and express my desire to withdraw it if the House will give me permission, leaving myself free to act otherwise.

Motion, by leave, withdrawn.

Mr. Seddon.—I think something more should be done. The article in questional now be embodied in the record of our proceedings; and, having heard the expressions of sympathy of many honourable gentlemen for the honourable member for the Peninsula, I desire that we, as a House, should express that sympathy in a formal manner. Persons who real the record of this day's proceedings of House will read the article, and I think they should at the same time see what the recorded opinion of the House is on the question, I therefore move, That this House expresses its sympathy with the honourable member for the Peninsula, and regrets that such an untruthful and libellous article in reference to him should have been published in the *New Zealand Herald*. I think the House will be unanimous in passing that resolution. I may also say speaking of this paper, that I have always looked upon it as one of the leading journals of the colony, and one not at all likely to go in such a direction as this. I am also acquainted with the gentleman who is acting as its corespondent here, and I am sure his correspondence, as a rule, does not go in this direction and other honourable members must also have seen that he always gives fair-play. It is very unfortunate affair the honourable member for the Bay of Islands has done all he can to repair the mistake he made, which he himself acknowledges was a very serious one. He having apologised, I do not think other members of the House should fall too heavily on an honourable member who did what he conceived to be his duty. I hope this will be a lesson to him, and to other honourable members not to question the probity of or throw aspersions our their fellows.

Colonel Fraser.—I have great pleasure in seconding the motion. I have been for years acquainted with the proprietors of this journal and I may say that it is one of the best conducted periodicals published in New Zealand From what I know of the proprietors, I am sure that, after what has passed to-day, they will make the fullest reparation to the honourable member for the Peninsula. I think it is nothing but right that the expression of feeling of the House should be recorded on this unfortunate matter.

Mr. Lawry.—Sir, I have only briefly to say that, although I have known the honourable member for the Peninsula for but a short time, I can indorse everything that has been said about him by honourable members in this House this afternoon. I may further say that I have been myself intimately associated with the *New Zealand Herald* as one of its correspondents for a very long period of time, and I feel assured that the proprietors of that paper will not only feel, but will express, extreme regret that the article was written from a misconception of the facts of the case. I may further state that I know personally the special correspondent of that journal, and I think the members of this House will agree with me when I say that he simply sent a fair record of what occurred on the floor of this House, and nothing more or less. I have also reason to know, Sir, that the article in question, which is a most scurrilous and [*unclear:* tcuthful] one, was written without the knowledge the proprietors of that paper. It was written at the North Shore, and the writer himself next day expressed regret that he had written the article which was published in the

Mr. Whyte.—He wrote another article two day after quite as bad.

Mr. Lawry.—Whilst I thank honourable gentlemen for the expression of opinion towards the proprietors of that journal, I can only express my extreme regret that article ever appeared in its columns.

Mr. Parata.—I am sure every member of this House is sorry at the cause that took away the honourable member for the Peninsula from his parliamentary duties, and still more sorry that his going away on that occasion should have been made the opportunity of bringing charges against him. I have" known that honourable gentleman a considerable time, and I know that the Maoris in the South Island have a very warm regard for him. I am sure we all regret learning that the honourable gentleman will shortly leave this colony; but, no matter where he goes, we shall all bear in mind the good work he has done, and shall all regret his departure from amongst us. I feel impelled on this occasion to say something on behalf of the Native members of this House. When I first had the, honour of a seat in this House, that honourable gentleman personally, and every member of the Government, assisted me in every possible manner in doing what they thought was best in the interests of both races. I am extremely gratified that the honourable gentleman has given way to the wish of the House and withdrawn his resolution. But he deserves our thanks for having brought this matter forward,

because the manner in which he was referred to was derogatory and improper. I regret the honourable member for the Bay of Islands stated what he did.

Motion agreed to.

Front Cover

Point Resolution Land Purchase Royal Commission.

Mr. W. J. Napier's Speech.

W Mccullough, Book and General Printer Auckland High Street

The Point Resolution Land Purchase Royal Commission.

THIS Commission, consisting of Dr. Giles, R.M., and Lieut.-Col Roberts, sat at Auckland from 5th to 15th October, 1888, to enquire into the circumstances under which acres of land at Point Resolution, Auckland, were conveyed to Mrs. G. S. Kissling under the Special Powers and Contracts Act 1886. The land was originally owned by Trustees for the benefit of neglected and destitute children of both races, and Mrs. Kissling's husband was the lessee. In 1885 the Government required a portion of the land for a fortification, and instead of taking only the area they required, they by arrangement with Mr. Kissling took the whole of the property nominally for defence purposes. They afterwards conveyed the portion they did not require, about 3½ acres, to Mrs. Kissling and paid her in addition £1118, the Trustees getting £632. A Bill was brought into and passed by the House of Representatives in 1888 to set aside the transaction, but was rejected by the Legislative Council Thereupon Sir George Grey, K.C.B., the original grantor of the land, urged the Government to appoint a Royal Commission to enquire into the matter, which the Government consented to do.

Mr. Napier was retained by Sir George Grey to represent at the Commission the orphans and others interested in the conservation of the Trust.

Point Resolution Land Purchase Royal Commission.

Mr W. J. Napier's Speech.

Specially reported by Mr. J. M. Geddis, "New Zealand Hansard" Staff.

MONDAY, OCTOBER 15, 1888.

MR. NAPIER rose to address the Commission at 2 p.m. He said:

May it please the Commission; I have listened with perfect attention to the speeches of both my learned friends upon the subject of this enquiry, and while I am free to admit that both If them, from the standpoints from which they viewed this translation and the proceedings out of which it arose, have done their best for their respective clients, yet I must confess that it was with some surprise, not unmixed with regret, that I noticed that both of them studiously avoided or failed to appreciate any of the principles which were worthy of being' taken into consideration, and that are involved in this transaction—any of the principles, in short, underlying it, and on which it appeared to be based. Both of my learned friends laboured the question from the aspect of value and the view as to whether or not the *cestui que trusts*—the persons who were to be benefited by the conservation or injured by the deprivation of this trust—as to whether or not their interests have really been conserved, and as to whether a sufficient sum of money has been paid for the interests which they possessed in the land that was taken by the Government under the circumstances deposed to in the course of this enquiry. Now whilst I admit that that aspect of the case is entitled to some consideration, and whilst I shall myself devote some remarks it the beginning of my address to such consideration, yet at the same time, I contend that it is a matter of an entirely subordinate character—a matter which, compared with the other issues involved in this enquiry, with the facts which have been clearly and unmistakeably elicited here, and with the principles upon which those facts are founded,—I say that in comparison with them that question of value is altogether a very insignificant litter. First of all, then, I shall deal with the question of value for the purpose of dismissing it, not that I can say I view it in the same light as my learned friends, or that it is a matter with which this Commission ought to be very much concerned, but at the same time I shall devote some of my remarks to the question whether or not, even putting it on a simple arithmetical basis, (his trust has been fairly dealt with. Now, the whole of the evidence that has been adduced before the Commission goes to show this; that a calculation was made as to what the rental which the trustees were obtaining from this land would amount to in 48 years. That was the first

element of the calculation that was entered into; and secondly, what amount of money receivable now would, if properly invested and carefully preserved, yield a sum of £6000 in 48 years from the time at which this money had been paid. But there seems to me—and I do not profess to be an actuary or a highly skilled arithmetician or anything of that kind—to be a fallacy underlying the whole of these calculations, and that is; they take the present value of a sum payable 48 years hence and they attempt to represent it as the existing value of the land. Now, this is a feature of the matter which appears to me to be not entirely undeserving of the consideration of this Commission. If the trustees are to share equitably in the advantages accruing from this sale their share ought to be a proper share of the money that would be paid 48 years hence. The question then arises, what their share under those circumstances would be? No doubt appears to have been entertained by the trustees themselves that their interest should have been the present value of whatever sum would be payable 48 years hence. Now, it must be manifest that unless the country is, for the next 48 years, to pass through a period of absolute stagnation in which no progress at all will be made, this sum of £6,000, which represented the value of the land in 1885, must necessarily be largely increased to represent the probable value of the land 48 years afterwards. Taking the most meagre view of the matter into consideration and eliminating everything that is mod favourable to the trust it is manifest that the sum of £6,000 does not fairly represent—unless, as I say, the country is to retrograde—the value of the property 48 years hence. Yet the calculation appears to have been: What is the trustees' share of such sum as will represent the present value of the land payable in 48 years time. That, to my mind, involves a fallacy. As to whether or not that is a correct view seems to be of very trifling importance. What we have to consider on the money question is—What is likely to be the unearned increment of this land in the future? And it is not a case in which the interests merely of private persons are involved; it is a case in which the members of a corporation are involved—a trust with permanent succession and not limited in its benefits to the neglected and destitute children of the present day or of any generation, but one designed for the benefit of neglected and destitute children of all generations for ever. The land was given to these trustees to be held in trust for ever for the neglected and destitute children of both races in this colony and other South Pacific Islands. It is therefore, I repeat, not merely a question of the interests of the children now in the custody of the trustees being benefited or properly conserved, but whether or not the permanent and unchangeable interests of the trust have been conserved or defrauded by the transaction that has taken place. That is the question, and we respectfully ask the Commission to consider first of all what were the objects of the grantor of this land—the objects for which this land was given him and accepted by the Bishop of New Zealand to whom it was granted, and to consider also in coming to a determination as to whether or not the trust has been benefited or otherwise, what has taken place in other countries, and what has been the history of similar institutions in other lands. Of course, this country being yet, so to speak, in its birth-throes, we can hardly look to it for illustrations, and therefore I submit we ought to see what has taken place in other countries, and of course the country to which we most naturally look is the one best known to us—our own mother-country. We find there that for a long period Of time—for many centuries, in fact—it has been the custom to endow with lands trusts of this nature devised for the purpose of relieving the general taxpayer. That was the practice that was adopted in the very earliest period of English history—at all events, after the country had become settled, and what are the results that have been achieved by it? I have been looking up these results and I find them positively astounding. I have found that institutions endowed a few years ago with a small piece of land in some town or country village are now the most powerful and wealthy in the land with revenues that are almost incalculable, amounting as they do to hundreds of thousands of pounds, to be devoted to the philanthropic objects for which the original endowment was made. And all this enormous increase of value has been the direct consequence of the growth of population and the advance of the country—an increase of value that must have been absolutely inconceivable to the persons who granted the land. Now this has occurred in some cases within the last century. There are cases dating from the last century where lands of no greater value than the property under our consideration—in fact less value than when it was taken by the Government—were granted to various trusts, companies, schools, and other institutions, and the result is that many thousands of pounds are now annually derivable as incomes from these lands which would not have been derivable if the original assistance had been granted in any other form. Indeed, it is a matter so notorious that it is not necessary to comment upon it at any length. I submit, therefore, that land is a security which is far more likely to achieve the ends which the grantors had in view than any other kind of security. In fact I submit that any other security is no security at all, if I may say so, as compared with land. In the first place take money. Money at best is but a changeable, Situating species of security. It is liable to be lost if it is placed in the hands of persons to invest who like all other individuals are subject to human infirmities, and who, therefore, may make away with it; and it is subject moreover to depreciation, whereas land preserved in a trust, as this land was intended to be, is entirely imperishable and unchangeable. And I submit that this is the reason why we see that in all ages and in all countries the greatest efforts are made by states and persons to endow with land either institutions, families, or individuals for whose permanent and abiding prosperity they are concerned And so prevalent is this feeling,

not only among institutions but among persons, that to come down to this transaction which forms the subject of the present enquiry we shall find it explaining the reason why Mr. Kissling was so desirous of acquiring this freehold. Seeing that he had a lease of the land, for which he had merely to pay a trifling, a nominal rental of £17 a year, why otherwise was he so anxious to possess himself of the freehold? He was in undisputed possession for the rest of his life, and possibly also the lease would have extended over the lives of some of his children. I submit that the answer is obvious. It was the very reason which has actuated all men and from all time in endeavouring to acquire land, viz., that land is a commodity to which an adventitious and extraordinary value attaches not by reason of the exertions of the persons who own it, but by reason of the exertions of the whole community. Now, the value of money and its increase depend upon judicious investment, a great amount of foresight, and other considerations which do not exist in the case of land. Land acquires this value by the growth of population, the development of trade and commerce and the consequent increase of prosperity in the community and this is the reason why all persons struggle to acquire the freehold of land. This applies with even greater force in a young country like ours, because we know that as it is only sparsely settled at present there is bound to be a large increase of population, and that as a necessary consequence the value of land must inevitably be increased thereby, more especially when it happess to be in the neighbourhood of towns. I submit that it is not a question as to whether or not the children at present in these orphanages have benefited or otherwise but whether there has been a permanent benefit—whether the children who will of there for the future to all generations will benefit or otherwise by this transaction. I submit that if that view prevails with the Commisson they must necessarily come to the conclusion that this trust has been very materially injured, and that its permanent interests to an almost inconceivable extent—as in fact all the witnesses have said they could not conceive the value of the land 48 years hence—have been defrauded and injured. Take an illustration which was given by Mr. Dacre. Now, Mr. Dare, who is a gentleman acquainted with the current values of land and the ordinary accidents attaching to the value of land and its rise and fall as a commodity, says that this particular piece of land may be worth £12,000 18 years hence. That of course is only a surmise, but it becomes something stronger than a surmise when we consider that some 46 years ago there were no buildings on the site of this city—nothing but tents on the spot where we are now deliberating, and that all the value which it now possesses has accrued in consequence of the influx of people here. Let us also remember that this land into the purchase of which we are now enquiring is situated not much more than a mile distant in a direct line from Queen Street Wharf. Considering all that, then I ask the Commissioners again can we positively calculate how much that land is not likely to increase in value? It has been suggested of course that its value was only attributable to its advantages as a good site for marine residences. I submit, however, that that is a very far-fetched view of the case. That may be the case at the present time, but if Auckland is to continue to progress, as it undoubtedly will, that land by reason of the cutting down of the point, the reclamation of other lands in its vicinity, and other works similarly induced by the increase of population and the extension of trade, will be immensely increased in value—not as a site for marine residences, but as a site for the erection of shops, manufactories and other buildings, which give an immensely greater value to land than buildings which are merely built and occupied for the purpose of residence. We may take one instance of a similar character in the history of Auckland. I refer to the case of Fort Britomart. One of the witnesses said that the whole of the hill at Point Resolution would have to be cut away to make it available for other purposes, and that therefore it never would be cut away, while if the foreshore were reclaimed and a railway were taken round there the value of the land would deteriorate as a consequence. But the point is not so high as Fort Britomart was, and yet that has been cut away while the land there, which 15 or 20 years ago could have been bought for a comparatively nominal sum, now commands several scores of pounds a foot, thus showing that in so short a time an immense amount of money has been added to the value of that land. I submit, therefore, that in the deprivation of this trust of the unearned increment of the land there has been a very material injury done to the trust. In times past, as I have said, in England there have been great foundations where only a few acres of land were originally given. In cases where no greater extent of land than is comprehended by the property now under consideration was granted to particular schools those institutions at the present day have an income and revenue there from that may fitly be described as colossal. Take for instance the case of the foundations made by William of Wykeham and the early Edwards. Everyone knows that all these great schools were in the first place founded without the cost of a single farthing to the State, and that they are enabled by their landed endowments to carry on their operations without any assistance from the State. In one case a gentleman some centuries ago granted about twenty pounds worth of land at its then existing value towards the foundation of what is now a great institution, and the income which that institution enjoys at the present time amounts to many thousands of pounds per annum. Can it be said, for one moment, that if that £20 in money had been merely placed in a bank to the credit of the object for which it was given that that great institution would be in existence at the present day or that the magnificent results which it has achieved would have been compassed?

A contention of that sort would be manifestly preposterous It is well known, and the facts and experience of

every-day life and the teaching of history confirm its truth, that a grant of land is the grant of something that is of indestructible value, and that the objects for which it is given are promoted and achieved by the enhanced value contributed by the labour and increasing wealth of the community, and not simply by the original munificence of the grantor. I submit, therefore, that taking merely the narrow, technical view of the matter the trust has not benefited by this transaction. It appears to me, however, that we have to take up a higher position, and that it is the principles which appear to enter into this transaction, the principles which govern the conduct of the parties and the principles upon which the matter has rested so far that are the most important features in the whole transaction, and it is these principles to which the Commission ought to devote the utmost amount of careful consideration. I regret that I cannot, with my learned friend Mr. Hesketh, say or rather follow him in saying that in my opinion all the parties involved in this transaction have come out of it, so to speak, with clean hands, that there can be no suggestion of impropriety or improper conduct and that as a matter of fact the Commission must wind up with the happy, all-round congratulation of "All's well, that ends well," and the assurance that everyone has acted in the best possible manner according to his lights. It seems to me that such a contention cannot be maintained for one moment, because if we view this transaction in the light of the evidence adduced before the Commission and by the light of the documents connected with it, I submit that we must come to the conclusion that the whole proceedings involve one of two things, either that the parties, or some of them concerned in the matter, exhibited an amount of ignorance that is positively inconceivable, and which could not be expected to be found in any person occupying a Government position, much less occupying the principal position in affairs of that character, or else that there was moral turpitude, and moral turpitude of the grossest kind. Now, I am loth to come to the latter conclusion, and I prefer that the matter should rest simply on that plea of ignorance which has been set up, and that Mr. Brewer, who took the most prominent part in the perpetration of this wrong—if there was any excuse for him—at all events should have his conduct taken into consideration in view of the fact that he was in absolute ignorance of the state of the law. It is difficult, as I have said, to conceive that, because we find that Mr. Brewer was an experienced land officer. We find that for a period of 15 years he had acted in a similar capacity to that in which he acted in this instance, that he had settled some hundreds of claims for compensation, and that he was thoroughly acquainted with the provisions of the law bearing on compensation cases. His own expression is: "I did know the law on the subject of compensation cases at the time I made the arrangement with Mr. Kissling." He knew the law therefore. That was only to be expected from him. As a matter of fact, the law on the subject up to that time was contained within the limits of the Act with which it was his special duty to make himself conversant. As a matter of fact he carried that Act in his pocket. I allude to the Public Works Act of 1882, and this Act became the Alpha and Omega of his professional existence, so to speak, for it was within its four corners that he found all his powers. And yet we find that on every specific point, with one exception, connected with the taking of land for public works and the awarding of compensation there for, Mr. Brewer was in a state of absolute and dark ignorance. Of course it is charitable to suppose that it was so, and that is all one can say about it, but in the light of some of the correspondence and of the telegrams to which I shall presently refer, it is difficult to come to that conclusion and accept Mr. Brewer's statement that he was entirely ignorant of the provisions of one statute and of the most important and vital principles of the other statute. Now, the position which I shall take up with regard to this matter is this: I shall first of all submit to the Commission, having already disposed of the question of value, that the whole of these proceedings are absolutely unlawful, that from their inception to their completion they were founded on falsehood, and that under no circumstances can they stand. The first matter to which I shall allude will be the dictum of a very learned writer with regard to the taking of land from a subject. I shall quote to you an English author and an American author with regard to the taking of land, and as to whether or not the Legislature even can take land from a subject except under special circumstances and conditions. It is laid down by Storey, an American writer, as follows:—"No rule or principle is known under which private property can be taken by the Government from one person and transferred to another for the private use and benefit of such person, whether by general law or special enactment, but that the purpose must be public and must have reference to the needs and convenience of the public." According to that writer, therefore, the Government or even Parliament by statute cannot take land from one individual or from a particular corporation and transfer it to another private individual, that is to say, with the intention at the time of taking of transferring it to such individual, for it is the intention that constitutes the *gravamen* of the whole thing. It is what was in the mind of the Crown at the time of the taking of the land. That is a point for which I ask Special attention, as upon it the legality of the proceedings turns, The only way by which in England under the Common Law the Crown can take land from a subject is by what is termed an "Inquisition of Office." This is laid down by Blackstone (Commentaries, the Eight Edition, by Stephen, vol. 3 page 666), and that Inquisition of Office provided that the Crown was to express a wish to acquire certain lands and that then the matter was to be decided by a Jury of the country, and then, if the jury upon the evidence submitted to them decided that the land could be taken, the Crown was to amply compensate the person from whom it was taken. Blackstone, in commenting on that right,

makes this very significant remark:—"These inquisitions of office were devised by law as an authentic means to give the sovereign his right by solemn matter of record, for it is a part of the liberties of England and greatly for the safety of the subject that the sovereign may not enter upon or seize any man's possessions upon pure surmise without the intervention of a jury." I submit, therefore, that in the absence of any statutory authority the whole of these proceedings would be illegal, that the Government could not have taken the land, and that if they attempted to do so they would be trespassers. But the Government set up a statutory authority, and the statute under which they go is the "Public Works Act 1882 Amendment Act 1885." Now, I submit that that statute gives them no power whatever to take this land, and if they have exercised any such powers purporting to be by virtue of that statute the attempted exercise of such powers under that statute has been a mere *brutum fulmen*. I shall submit to you later on, and I think with justice and also with the authority of law, that the Government has not as a matter of fact ever taken this land and never handed it back. I allude to the three-and-a-half, acres. Now, I shall ask the attention! of the Commission—it has been read and re-read several times—I shall ask your attention specifically to the 3rd section of the Public Works Act 1882 Amendment Act 1885, by which you will see that the Legislature recognises the Common Law practice to which I have referred, and only provides that it is in cases, according to the words of Storey, of public need or public convenience that land may be taken from a subject. The 3rd section of the Act of 188 says:—"The Minister is hereby empowered on behalf of Her Majesty the Queen to take any lands that may be necessary for the construction of any public work and also to require that any lands shall be kept free from obstruction in respect of the use of any such work and from time to time to exercise all such powers and authorities as are contained in the said Act and this Act." The Commission will observe that the Legislature very stringently limits the power of the Minister to the least extent of land which may be necessary for the construction of public works, and that he may require certain portions of land which, he does not take to be kept free from obstruction. It is manifest that under that statute the Government can only take land for the construction of "public works," the application of which term has been extended by the Amendment Act of 1885 to mean and include ail fortifications and other works for defensive purposes, the original Act of 1882 not having included such works. I contend, therefore, that the Government had no power to take any land except that which they actually required for public works however set forth in their proclamation, and if they attempted to take more than was necessary for that purpose such an attempt was *ultra vires* of the Government and could not stand in law. But what do I find? Do they exercise any powers under the Act of 1885 or suggest that they could take those acres of land under that Act for the purpose of reconveying it to Mrs. Kissling?

They do not suggest that they could carry out this arrangement for the handing over the freehold of 3½ acres to Mrs Kiss-ling—an arrangement which was manifestly and notoriously outside the law, but throughout the whole of the papers there appears falsehood upon falsehood from the very beginning to the passing of the Enabling Act, which was made use of as a blind, and Governor, Legislature, and Minister were all deceived by a chain of palpable and connected falsehoods. I would direct attention to the very first memorial laid before the Governor, and which was necessary to enable him to exercise the powers which he possessed and which were vested in him under the Act of 1882. And from that memorial it will be seen that the whole of the land was taken for the express purpose of a "public work" (within the meaning of the Act of 1885), namely, a fortification. The following is the memorial which was laid before the Governor and by which I submit he was absolutely deceived:—"Memorial laid before his Excellency the Governor by the Minister of Public Works in compliance with the provisions of the Public Works Act, 188?, containing an accurate list of lands proposed to be taken for the purposes of defence in the Borough of Parnell, Suburbs of Auckland." Then follows the schedule: 4 acres 1 rood 17 perches, sub-divisions 17 and 18, lot No. 23, section No. 2; . . . . . being in the Borough of Parnell, Suburbs of Auckland. That is the land which is the subject of this enquiry. The memorial concludes as follows:—"I, the undersigned, Edward Richardson, the Minister for Public Works, hereby certify that the above memorial is true and correct in the several particulars thereof."

Now, the law provides that such a memorial as that shall be laid before the Governor and certified to by the Minister of Public "Works, and it is upon that memorial that the Governor may issue the proclamation whereby an actual vesting of land in Her Majesty takes place. It is upon that memorial that the Crown exercises the powers conferred under the Act of 1882, and a similar memorial is required under the Act of 1885, so that the memorial in each case is precisely the same. Now, I submit to the Commission, and I do not think it will be denied, for one moment, that the statements in that memorial are false in fact. Four acres one rood and seventeen perches do *not* represent accurately the area of lands "taken for defence purposes in the Borough of Parnell, suburbs of Auckland," and the statement by the Minister that the memorial is "true and correct in the several particular thereof" is absolutely contrary to fact. Therefore the Governor has been deceived, and that alone is a sufficient reason why the proceedings should not stand but be set aside and the partial revert to their original positions Now, hero is the proclamation which the Governor issued, and which also I submit contains statements at variance with truth, although, of course, not so known to him. Upon the memorial laid before him

by the Minister for Public Works his Excellency issues this proclamation. He heads it "Land taken for defence works in the! Borough of Parnell, suburbs of Auckland:—Whereas the land mentioned in the schedule hereto is required to be taken under; the Public "Works Act, 1882, for a certain work, to wit, the construction of works for the purposes of defence in the Borough] of Parnell, suburbs of Auckland, and whereas the Minister for Public Works has laid before the Governor a memorial accompanied by a map as required by the Act: Now, therefore, I William Francis Drummond Jervois, the Governor of the Colony of New Zealand, in exercise and pursuance of the powers and authorities in me vested by section 11 of the Public Works Act 1882 and of every other power and authority in anywise enabling me in that behalf, do hereby proclaim and declare that the land mentioned in the schedule hereto is hereby taken for works for the purposes of defence; and that from and after the day of the date hereto the land so mentioned shall be absolutely vested in fee simple in Her Majesty discharged from all mortgages, charges, claims, estates, or interests of what kind soever." Then there is the schedule setting forth the area of the land to be taken and its situation in the Borough of Parnell, suburbs of Auckland, and all that is given under the hand of the Govern. I submit that this proclamation contains statements which are not true in fact, and that therefore the Governor was misled, and that it was by falsehood that the proceedings were enabled to be adopted by which nominally at least this land became vested in Her Majesty before being transferred to Mrs. Kissling. That memorial and the proclamation were, as I have mentioned, laid before the Governor and issued under the Act of 1882. The memorial is the same under the Act of 1885, and a fresh proclamation was issued signed by the Hon. Mr. Buckley, who at the time was acting as Minister of Public "Works, and that proclamation, which is dated 8th January, 1886, contains statements which are not true in fact. It is as follows:—" Notice of intention to take land for the construction of defence works in the Borough of Parnell, suburbs of Auckland. Notice is hereby given that it is proposed under the provisions of the Public Works Act, 1882, and the Public Works Act, 1885, to execute a certain public work, to wit, the construction of works for the purpose of defence in the Borough of Parnell, suburbs of Auckland, and for the purposes of such public work, the lands described in the schedule hereto are required to be taken; and notice is further given that the plans of such works and of the lands so required to be taken are deposited in the Public Works Office at Auckland, and are there open for inspection: And notice is hereby given that all persons affected by the execution of such public work or by the taking of such land shall, if they have any well-grounded objections to the execution of such public work or to the taking of such lands, set forth the same in writing and send such writing within 40 days from the first publication of this notice to the Minister for Public Works, Wellington." That proclamation, I submit, contains several falsehoods. In the first place, it was never the intention of the Government to take for defence purposes the whole of this area of land, and they did not take the whole of the land for the purpose of executing certain public works, "to wit, the construction of works for the purpose of defence in the Borough of Parnell, suburbs of Auckland." I submit, therefore, that these proclamations show clearly that the Government, unconsciously apparently—certainly that the Governor unconsciously—lent their names and their acts to a proceeding which was conceived in falsehood, and which was carried out in direct violation and evasion of the plain law on the subject. It is perfectly apparent that under the statute of 1885 and in the exercise of the powers which are vested in the Governor by that statute by virtue of which the Government purported to take this land—that under these powers they could not take the land. As a matter of fact they have not taken it according to law—that is, the three-and-a-half acres—and therefore they have not taken it at all. This is a point which has not been brought forward before to-day, and which does not appear to have been brought under the notice of the House of Representatives. As to the legality of the proceeding, I submit that the Crown, as I have already mentioned, could only have taken this land for "public purposes." They knew well at the time that they did not require the whole of the land for public purposes. Mr. Brewer knew it. He, at any rate, appears never to have contemplated the taking of the whole of the land for public purposes, and it appears that months before it was contemplated to take the whole of the land Major Cautley had marked out the area that was actually required, and it was not suggested, as Mr. Brewer admits, at any time (except some rumours at an earlier stage of the proceedings) to take a greater area than that which Major Cautley had marked out. Major Cautley marked out a little over three-quarters of an acre, so that the Government knew they only required about three-quarters of an acre for defence purposes, and as a matter of fact they did only require that quantity of land. Therefore, I submit, in taking a greater area than they required, and notoriously and knowingly required, they committed an illegal act and their whole action was *ultra vires*. I submit that the Governor could not take more land than he was given power to take by the Statutes. The Government knew that they required only three-quarters of an acre; therefore they cannot suggest, for a moment, that they took more because they thought they might require more, it is notorious that according to the arrangement entered into they admit they knew that they only required three-quarters of an acre, and therefore, in attempting to take more they exercised a power which they did not possess, and in law their act has resulted in nothing. I ask the Commission to pay attention to this matter and to consider it, because questions of law and fact are to be equally considered by the Commission. I ask them to consider whether as a matter of law the

Government did not act *ultra vires* and whether the state of things set forth in the proclamations really existed; also, whether they did not under the Special Powers and Contracts Act of 1886 get Parliament to grant a certificate of title under certain conditions which did not exist. I submit that the three and a-half acres of land were never taken by the Government because they deliberately and knowingly attempted to take and proclaimed more land than they required, and that that land which they did not require therefore in law belongs still to the Trust Board. Now, as to the manner in which this transaction has been carried out. The proceedings I submit, all shew that there has been a deliberate concealment of the real position of matters by Mr. Brewer, not only from the trustees, but also from the Government. I submit that however much we may be inclined to treat Mr. Brewer with the greatest clemency yet that when we bear in mind his telegrams and letters to the Government and his letter to the trustees, and consider at the same time the negotiations he was simultaneously carrying on with Mr. Kissling, we cannot acquit him of some desire—for what purpose he knows best himself—some intention to conceal from the Government and the trustees a number of facts which they had a right to know. Mr. Brewer says he did not act entirely on his own responsibility. He desired to be absolutely safe, and therefore he took the prudent course of despatching a telegram to the Government in order that the law officers of the Crown might advise him whether the proceeding was a right one. That reference was a most unfortunate one, because it is difficult to reconcile that telegram, read in the light of other facts, with an absolutely *bona fide* intention to do his duty without partiality, and faithfully and well, Mr. Brewer suggested to the Commission, when that telegram-was read, that the law officers of the Crown approved of the arrangement which he had made with Mr. Kissling, but of course the telegram does not contain anything at all which could justify such a construction, nor does Mr. Brewer's question which elicited it. It seems to me, too, to be a most artful question. First of all, having obtained from the Government permission to play a free hand—though why he should have *carte blanche* in this matter, and why it should have been wholly taken out of the Minister's hands, at Mr. Brewer's request, it is difficult to say—he next seeks authority from the Government to effect an arrangement. All Mr. Brewer asks in his telegram to the Defence Office, which is under date November 17, 1885, is whether the whole area of land occupied by Mr. Kissling can be taken "under the Act recently passed," meaning the Public Works Act Amendment Act, 1885. He does not ask if it can be taken for the purpose of bestowing the greater portion of it in fee simple upon Mrs. Kissling. He says if he can take the whole of the land he will be able to save the Government £500 or £750. He merely enquires whether or not he has the power to take the whole of the land, and he asks that question with the knowledge which he does not communicate in his telegram that only 3 roods and 13 perches had been entered upon by the Government, and in fact, that that area was all that was required for the fortification. But does Mr. Brewer tell the Government how he would save them the £500 or £750? He appears to have been in considerable doubt as to the legality of his proceedings, and therefore sought to fortify himself in the position he would occupy in taking the whole of the property for the purpose of handing over a portion to Mr. Kissling. He only asks half the question, however, and he would like the Commission to believe that the arrangement he made with Mr. Kissling was a legal one in the opinion of the law officers of the Crown, because of that telegram from the Defence Department. Now, Mr. Kissling's evidence is also strongly corroborative of the view that Mr. Brewer was not altogether free from doubt as to the legality of the position, but did consider it, and must have known what the provisions of the law were, although he might have thought the difficulty could be got over by Act of Parliament, because Mr. Kissling said that he and Mr. Brewer discussed the legality and propriety of the proceedings. It is true that he mixed up with the statement some comments on what took place afterwards. But there is a statement that antecedent to the time the arrangement was made they discussed the legality and propriety of the proceedings, and of course I submit that that is the obvious view every common-sense man must take. Is it Conceivable that Mr. Brewer came up here for the purpose of investigating and settling two or three hundred land claims; that he went to the Waikato for that purpose; that he came up here for the settlement of a claim which he characterised as "a very awkward claim," and in another telegram as "a very troublesome" one, and yet that in settling all these claims he was in actual ignorance of the principal profusions of the Public Works Act of 1882, as well as of the whole of the provisions of the Public Works Act Amendment Act of 1885? Mr. Brewer may say that it is so, but I prefer to remark with Horace "*Credat Judatus*." Now, Mr. Brewer, I submit, knew that while the Government could have taken this land, as apparently the law officers of the Crown did think at that time, yet that he must have known also of the procedure with regard to handing back the portion not required to the person or persons from whom it was taken. This proceeding was necessitated by reason of the law, which I have already quoted in the course of this enquiry, and I contend, moreover, that he was aware of the further provision declaring that in cases of persons refusing to accept the surplus land at the valuation of the Government, the property must either be offered to the adjoining owners or be put up to public auction. He must have known those provisions of the Statutes and that they were applicable in this case. It may be that he thought these sections, which require the Government to hand back an? surplus land taken for a public work under the powers given to them by the Public Works Acts, would not be applicable to the present case, because

notoriously the Government knew and Mr. Brewer knew from the beginning that they took more land than they required. These sections would, perhaps, have applied, but it might have been a question if the trustees had really accepted the land back or it had been sold by public auction whether that proceeding would have been strictly legal, because the initial taking of the land was not legal seeing that the Government knew that they did not require it. They were *never* in the position that the Act contemplates—the position of finding in their possession more land than they required—more than the originally thought they required. These provisions were put into the Act of 1882 for the purpose of enabling the Government to get rid of land which they found they did not require and which had been taken under a misapprehension or through inadvertence and no doubt the Government would not be rigorously and too closely confined to the actual area required for their purposes. The section empowering the Government to take land for the construction of public works would no doubt be liberally construed by any Court, and therefore these provisions were put in the Act to meet cases where the Government found they had taken a greater area of land than they now found they required and to enable them to fairly and equitably dispose of the surplus and turn it into money so as not to be at a loss by reason of land which they did not require being left on their hands. But these provisions were not put in to enable the Government to take a larger area than they knew they required for the purpose of re-transferring it, or a part of it, to other persons. Such a thing, I submit, was never contemplated by the Legislature. The object was to enable the Government to re-convey land taken by inadvertence, and not to enable them to transfer lands which were knowingly and deliberately taken in excess of the area required. This view of the matter is a very reasonable one, and it may fairly be said to represent the view which Mr. Brewer, entertained at that time. "The Government does not require all this land, but only three-quarters of a acre, and therefore the provision about handing back a portion of it to the original owners does not apply" Here the Government distinctly knew at the outset that they only required three-quarters of an acre, and therefore it could not be said afterwards that they had only now found that they had taken more because they had thought they required more. Consequently, I submit Mr. Brewer's position at that time might very well be conceived in the light of that view of the case, and it would be a question of considerable doubt, even if the Government had properly exercised the powers conferred on them under those clauses of the Act, whether Mr. Kissling's case was one which could have been brought within the Statute at all. It would have been a question whether they had strictly carried out the law. I submit that in their attempted exercise of these powers, in the manner in which I have indicated, the Government have done a wrong, not only to the trustees in not offering them back the surplus land which they took from them, and of which from the first the Government intended to deprive the trustees, but that they also did a wrong to the public, who had an interest in these lands, by not allowing them the right conferred by Statute, of bidding for those lands at public auction. How do we know that at that time of inflated values for landed property these three and a-half acres of land with the house and its ornamental grounds might not have brought a higher price than Mr. Kissling was allowed to obtain it for? At that time, I say the prices of land were very much inflated, and what is known as a land "boom" was raging in Auckland. A large number of persons were speculating in land and prices were very much in excess of what they are now. Therefore, I repeat, how do we know that had the Government, in conformity with the law, submitted the surplus area to public auction it might not have brought much more than Mr. Kissling gave for it.

Therefore, I submit that an injustice was done to the public in that they were deprived of their right of bidding for the land it public auction; that a wrong was done the trustees in concealing from them the arrangement made with Mr. Kissling; that a further wrong was done the trustees in not offering them back the portion of the land which was not required. It has been said that Mr. Brewer—and he himself has sought to justify his action by setting up this plea—was entirely ignorant of both these statutes; but I would submit to the Commission that while of course that may be taken into consideration as a mitigating circumstance in the matter, yet it cannot be an excuse, or seriously intended to be an excuse for such a flagrant breach of the law as Mr. Brewer perpetrated in conjunction with Br. Kissling. Mr. Brewer must be presumed both from the position he occupied and from the experience he had had in these matters at that time to have been perfectly acquainted with the law. He says, "I was acquainted with these provisions," or at least "of the provision about handing back to the owners any surplus land which was not required, but I overlooked them, and I say now it was an oversight." Seeing, however, that Mr. Brewer had had numerous interviews with Mr. Kissling, that he had written and received many letters with regard to the matter, and that he had reported to the Government that it was a troublesome job, I ask, coupling these facts with his long experience as a land purchase officer, is it conceivable that he was as absolutely ignorant of the provisions of the law with respect to those matters as he professes to have been? Yet he tells us that he was entirely ignorant of the provisions of the Public Works Amendment Act of 1885, although that measure was passed to legalise the taking of this very land. But in his telegram to the Defence Office he suggests to the Government the very course which that Act was passed in August 1885, to sanction. And therefore I contend he must have been aware of such an Act having been passed, and consequently he must also have been aware that his action was to be based upon this special Act. If he

chose to remain in absolute ignorance of its provisions while initiating an important purchase of this kind, which was the very foundation of this Act—an Act which was intended to stop legal proceedings commenced by the lessee in the Supreme Court—I say that under all these circumstances, and knowing all these facts, if he chose to remain in entire ignorance of the law he has only himself to blame, if at this day censure and not unmerited censure falls upon him. That this censure is deserved, and that it should fail upon his shoulders, must appear to any dispassionate and impartial mind. Either he was in entire ignorance of the law, as contained in the two statutes to which I have referred, and which it was his special business, to make himself master of, or a still more uncharitable inference is forced upon us. It has been suggested by my learned friend, Mr. Mahoney, that there is no evidence to justify the assumption that there was anything in the nature of a conspiracy between the parties to this transaction. Of course, "conspiracy" is a very strong word, and I did not think of using it in the course of these proceedings, but I submit that there is very strong evidence showing that a compact was made, and a compact which was illegal both in its inception and also in the manner in which it was carried out. I do not say, of course, that Mr. Kissling entered into this compact with a full knowledge of the Jaw, and that he intended to do something morally wrong. He is not a lawyer, and his action may be explained in a much better light than the action of Mr. Brewer. Mr. Brewer, from his experience, ought to have been more conversant with the laws and statutes bearing upon the matter than even a practising lawyer. I submit that he ought to be better up in these two particular statutes, which were the beginning and end of his business, than a practising lawyer. So what can be said as to knowledge of the law as far as Mr. Brewer is concerned does not perhaps apply with equal force to Mr. Kissling.

He looked after his own interest, and obtained from Mr. Brewer the most advantageous terms that it was possible for him to make. I submit, however, that it may be said to be really stretching strict business integrity too far when Mr. Kissling conceals—and I say so advisedly—from the trustees his negotiations with Mr. Brewer. Why was it that the trustees were kept in ignorance of the whole of this transaction? Mr. Brewer, of course, has said "I thought that as there were ten men on this Board of Trustees and a Secretary they were quite well enough able to take care of themselves, and my duty was to protect the interests of the Government. But I would point out that the interests of the Government even placing them on a low ground—the money one—could not be in any way prejudiced or jeopardised, because by the arrangement made with Mr. Kissling it was expressly provided that if the trustees were awarded by the Compensation Court a greater sum than £632, or if the Government had to pay a greater sum than that, it was not the Government but Mr. Kissling who had to pay the balance, thereby! shewing that it would have been in no way prejudicial to the pecuniary interests of the Government if Mr. Brewer in his letter of the 19th November to the trustees Bid stated fully, fairly, and explicitly what the actual facts wore. If he had stated "I offer you £632, that is upon the basis of £60,000, being the present value of the combined interests, and I have arranged with Mr. Kissling that he shall get back three and a half acres of the land in fee simple." That most important feature of the transaction, however, he deliberately withholds, and I submit, deliberately conceals. But what does Mr. Brewer further do for the purpose of justifying the course he took to the authorities at Wellington and of inducing the Government to consent to and ratify the arrangement he had made? He writes a letter to Mr. C. Y. O'Connor, dated 21st November, 1885, in which he makes a statement that cannot be explained away, or distorted, or made to bear any other meanly than its plain and simple signification: "Now the trustees cannot sell although they would like to." That, I submit, dearly and simply states that the trustees are willing to sell, and that therefore the trustees would be perfectly agreeable to join in the arrangement which Mr. Brewer sought to carry out with Mr Kissling. That is the natural interpretation to be put on the statement, and there is not a particle of foundation for that statement. You have heard the trustees one by one say that as far as they were concerned they were not willing to sell, and Mr. Bawer had no warrant or ground whatever for making that statement. I submit that it is a very important statement, and must have weighed with the Public Works Department and with the Minister in effectuating this arrangement, and that if they bad had any doubts as to its legality the assurance that all the parties interested were agreeable to it must have influenced them to seek special statutory power for carrying it out. The objec- tions I raise would not have so much weight or be applicable to the same extent if the whole of the parties had been consenting though there would have been much to be said even then on behalf of the *cestui que trusts* in condemnation of the transaction. But in joining in the arrangement the Government under the circumstances might have thought it was the only effectual mode of settling the complicated interests in the claim, and that seeing everybody was agreeable and going into the arrangement with his eyes open that perhaps no harm was likely to be done by it' although it might not be strictly within the limits of the law. Now, that statement in the letter shows that while Mr. Brewer up to that time was without any communication from the trustee! yet he seeks to impress the authorities in Wellington with the belief that the whole of the parties affected by the transaction were consenting to it and perfectly willing that it should be carried out. What are the excuses which Mr. Brewer gives for concealing the arrangement from the trustees? The first is that as the trustees comprised ten men and a secretary they were quite well enough able to look after themselves. The other

is that Mr. Kissling had the greater interest in the property, and therefore was the proper person to negotiate with and with whom to effect an arrangement. But he forgets that in doing so he was going absolutely outside his duties as defined by statute, and that it was his duty to find out all the parties interested. Is it not a fact that the freeholder is of all persons the one who to be primarily regarded and who as regards his interest is to be sought out when the Government desire to take land. Naturally if the Government intend to take land under the Public Works Act they send notice of that intention to the freeholder in the first instance. They ascertain who he is by search in the proper office and send him notice, because in all cases the freeholder interest is paramount, so that that excuse is not sufficient to justify Mr. Brewer in the course he took when he assumed that the freeholders' interest was so trivial that they were not persons who ought to be consulted in the matter. And yet he writes to them or the 19th November, stating that the Government proposed to award them £632 for their interests. He does not ask them to negotiate or whether they consider that a fair price, but he uses a threat or what is practically a threat: "if you do not accept £632 the case will have to go to the Supreme Court." In the very first letter he writes to the trustees and the very first time he has any communication with them he offers £632 as a fair thing for their interests and then threatens recourse to the Court if they do not choose to accept it. This action might not have appeared so strange if it had followed some negotiations with the trustee! but in the first and only communication with them lie in effect says, "Take this, or there is an action at law for you." And naturally enough the trustees considered the offer in the light which they have explained to us in their evidence. They would say "No doubt the Government will treat us kindly." We have received this land from the Government for a special public purpose—the education of neglected and destitute children, now the same sovereign authority desires to have it back again for another public purpose, not unjustly, but after fair compensation is paid and therefore it is not our place to haggle for a higher price—to say "Oh, the price is too little" and probably thereby to wring another £10 or £20 from them. The Government require the land for a public emergency, for the country is thought to be in danger, and we shall be facilitating the operations of the Government by accepting their offer. That is the spirit by which they were animated-not a mere mercenary spirit, but a public and patriotic spirit. But had they known it was the intention of the Government not to take the land for public purposes but to take it nominally for public purposes and to re-convey to Mr. Kissling, why then, as Mr. Pierce has said he for one as a business man would have opened his mouth wider. The trustees would have said, "If you are going to give the land to private persons we shall want more money and we shall want a longer time to consider it, supposing you desire to sell it." It is absolutely untrue that any of the trustees expressed any desire to sell. On the contrary, they say that if they had known of this transaction they would absolutely have resisted it. They did not know that there was any arrangement to re-convey to Mrs. Kissling or they would undoubtedly have resisted the taking of the land because for many reasons, apart from anything mercenary, they desired to retain all these lands inviolable. Therefore they would not have sold even though they had been offered the full and adequate value of their interest in the land. At this point I shall also refer the commission to the letter of Mr. Schwartz Kissling to the trustees; I think it is dated the same day as Mr. Brewer's or the day before, I think the circumstances shew that that letter was written after the arrangement had been concluded with Mr. Brewer, and yet in it Mr. Kissling asks the trustees upon what basis they would like their interest in the land to be assessed. Of course the remarks I have applied to Mr. Brewer do not apply with nearly the same force to Mr. Kissling, but at the same time I cannot altogether acquit Mr. Kissling of some desire to drive a good bargain and to get as much from the trustees as he could by witholding information which should have been disclosed to them. That letter coupled with Mr. Brewer's was calculated to deceive the trustees. They were under the impression that the whole of the land was required for defence pur-poses. Mr. Kissling says in his letter "The Government have taken the whole of the land." He does not add "for defence purposes." Nor does he say the Government are to give back to me or my wife three and a half acres." Mr. Brewer writes simultaneously to the trustees and heads his letter "Re land taken for defence purposes at Point Resolution," and therefore as I say the trustees were deceived as to the actual facts attending the arrangement entered into at that time between Mr. Brewer and Mr. Kissling.

The whole of the proceedings seem to have been gone about with an amount of secrecy that it is difficult to reconcile with absolute good faith. Mr. Kissling says that it was common talk in the streets and at the clubs that he was going to get back part of the land. It is a very singular thing if the arrangement was so generally known and talked about that it never came to the care of the trustees, but that both they and their Secretary remained in complete ignorance of any such intention. Neither was there any mention of it in the public press although a great deal was written and published at the time about the entry of the Government on Mr. Kissling's land and the action he had taken; in the Supreme Court. If the intention had been known at that time or if there had even been a rumour abroad concerning it we all know from the zeal of the gentlemen of the press that it would have been given to the public. I say that there is no doubt whatever that if, as a matter of fact, it had even been rumoured that Mrs. Kissling was to get back this land it must have readied the newspapers or the trustees. But Mr. Kissling must only' have believed it was well-known because of the firm intention he had in his own mind

to obtain the land. Rumours are generally attributable to something—some information or statement which is traceable to a source, but Mr. Kissling does not appear to have told anyone of the arrangement except his brother. Now, I ask the commission to consider whether Mr. Theophilus Kissling ought not to have disclosed the intention with regard to the land to the trustees seeing that he was one) of their number. At any rate Mr. G. S. Kissling does not appear to have disclosed to anyone but his brother that the intention was that the Government should take the land nominally for defence purposes, but, so that his wife might get back three and a half acres. I have already told the commission and shewn that the Governor was deceived in this matter by the memorial that was laid before him signed by the Minister for Public "Works, that the Minister himself was deceived, and that the authorities at Wellington were deceived, and now I submit that in passing the Special Powers and Contracts Act, 1886, the Legislature was deceived. The first column of the schedule to the Special Powers and Contracts Act of 1886 gives the reason why the Legislature empowers the District Land Registrar to issue a certificated title for this piece of land as follows:—

"The land described in the second column having inter alis been taken by Government for defence works at Point Resolution Auckland, by proclamation published in the New Zealand Gazette, No. 32 of 1885, and being in excess of the area now required for defence purposes it is desirable to sell it to Frances Catherine Kissling, wife of George Schwartz Kissling, of Auckland. The amount to be received for this portion of the land which was taken by proclamation to go in reduction of the amount which would otherwise be payable to Mrs. Kissling." That contains a statement which is absolutely false in fact. In the first place the land was never taken for defence works hut was taken for the purpose of effectuating this arrangement which was altogether outside the law; and then again it is not true that the Government now found they required for defence purposes a less quantity or area than they originally had taken. So I submit the Legislature was asked and was practically compelled on the good faith of the Government to place on the Statute Book of the colony a statement, not true in fact. The circumstances under which this Act passed into law also call for some attention and comment. You will see from the papers laid before you that this Act was passed at the close of the session—within the last day or two, I Sieve—and that absolutely no opportunity was given or adequate time for discussion or for the trustees or anyone else to raise objections or to place the real facts properly before Parliament.

Dr. Giles: There was a great deal of discussion before the Bill passed.

Mr. Napier: That was with regard to the general principle of the Bill itself, which embraced a large number of transactions, but I do not think there was a single allusion in either House to the particular schedule which validated this transaction.

Dr. Giles: I believe that is so.

Mr. Napier: As I say, it was the general principle of the measure that was discussed. It is well-known that the members passed the Bill on the good faith of the Government. There was no discussion on the details. I have a letter here from a member of the House—a gentleman who is by no means unfriendly to Mr. Kissling, in fact, I think one who exerted himself so that Mr. Kissling's interests might be adequately protected. I mean the member for Parnell. He distinctly says that the members of the House of Representatives know nothing of the arrangement that had been made with Mr. Kissling, that the Act was brought down at the last moment, and that in passing the House there was not a single enquiry about this matter, but that it passed wholly on the good faith of the Government. That is also abundantly manifest from the papers laid before the Commission. There is another matter, however, that I have not yet mentioned, and which perhaps I ought to have mentioned in an I earlier connection. I would like to ask why Mr. Brewer so Hgprly accepted the assessment by Mr. Kissling of £6000 as the value of the combined interests in the property? Now, Mr. Kissling, for the purpose of protecting Mr. Brewer and of extolling him as a most conscientious and painstaking public servant, paid in his evidence that Mr. Brewer seemed to him to be driving a very hard bargain for the Government. I ask the Commission to consider the nature of the bargain and how Mr. Brewer drove it. The first and only assessment placed before him by Mr. Kissling was that representing £6000 as the value of the joint interests. There does not appear to have been a single valuation outside of that, and it was for some time a mystery where that assessment was obtained. But now Mr. Kissling says he must have suggested it because he obtained a valuation of the whole property from a land agent, who set it down at £1250 per acre, and that as he regarded the improvements on the place as being worth £1000, he thought £6000 would be a fair price for the whole of the interests in the land. But does Mr. Brewer demur to this, or raise any question as to its being excessive or exorbitant? Not at all. He says he told Mr. Kissling he was asking too much, but for all that he accepts his very first offer, and this too without any local knowledge on his own part of the value of the land, as he himself admits—without any enquiry either, except such as he made from some intimate friend living in Conquest Place. He does not seek to ascertain what the value of the surrounding land is, and he does not seek to get the land at a less price for the Government, but at once accepts the amount of £6000 proposed by Mr. Kissling as the price to be paid. And now we find that actually even his counsel, Mr. Mahony—who, although he appears for Mr. Kissling, has devoted a considerable portion of his speech to justifying and almost eulogising Mr. Brewer's conduct—admits

the valuation of £6000 to be a very high one, and one which to some extend must be taken as a prospective value. And he suggests that £6000 was not in fact, as the whole of the evidence states it was, the then present value of the land but the prospective value, because the price was unduly high. So that Mr. Brewer is in this position: He accepts as the price to be paid for the land as amount that is manifestly excessive according even to the; evidence as to values prevailing at the time, and he accepts that amount without question and without demur, and then effectuates this arrangement with Mr. Kissling whereby Mr. Kissling not only gets the freehold interest of the land but also; a large amount of money. It is true that for the portion of land transferred to Mrs. Kissling the Government obtained a proportionate return in the money payment, but that does not alter the fact that the money in fact was greater than should have been paid although the Government only took three-quarters of an acre. On this point Mr. Brewer's admissions are somewhat surprising He says that he was entirely unaware of the provisions of the Public Works Act Amendment Act of 1885 and especially with regard to sec. 6, which provides the manner in which compensation for land taken is to be determined. Now, of course, there may be some difference of opinion as to what is the true meaning of that section, what the Legislature intended it to mean, but it seems to me that it cannot be narrowed down to the insignificant proportions to which Mr. Kissling's counsel would narrow it down Its words are very comprehensive, "Compensation for the land taken or required to be kept free from obstruction shall be settled by a Compensation Court in the manner provided by Part III of the said Act; but no person shall have any claim to compensation by reason of the firing of artillery from any fortification or the use or working thereof or otherwise under this Act, except for land actually taken or required to be kept free from obstruction under the powers of this Act; but nothing in this Section shall be deemed to prevent any person suffering any damage to the materials of any house or building from pursuing any other remedy he may have at law." I submit that the obvious interpretation of that. Section is that a person would not have compensation at all by reason of the proximity of a fortification on land adjacent to his own but that he should only get compensation for the land actually taken and the additional land which must be kept free from obstruction in order to enable the fortification to be properly worked and the guns to be fired. It seems to me that that is the plain meaning of the section. And what is more, Mr. Brewer himself, on the premise that he was entirely unacquainted with that section—that he had not seen that section until he came into this room, admits that if he had seen it, the value of the land actually taken—that is for the combined freeholders' and leaseholder's interests would have been about half the amount at which it was assessed. Therefore, even if we look at the transaction from a money point of view, the Government sustained a loss by Mr. Brewer's ignorance of the provisions of an Act which was specially passed to enable him to obtain this land for public purposes. Why, however, did Mr. Brewer accept this large assessment, and that too without any question, and without seeking to obtain any outside opinions as to what would be a reasonable sum to pay. I do not attempt to submit any reasons to the Commission. It will suffice for me to say that if we are to entirely acquit Mr. Brewer of bad faith then we are driven to the conclusion that he displayed an amount of ignorance from the beginning; to the end of this transaction, which shews that he was not a competent officer to entrust with duties of this kind and an amount of ignorance to which cannot be excused for one moment. It has been said that Mr. Brewer is not the person to blame, but that it is the Government and the Department who are to blame. That is always the refuge and the cry of every officer in the public service who is discovered to have done something that he ought not to have done. In such cases he immediately blames the Department—a mere impersonal thing, and so he seeks to escape the consequences of his wrongdoing. A subterfuge of that kind however will not avail. Mr. Brewer was paid to act in the best interests of the Government and to carry out according to law the commission entrusted to him, and if a wrong has been done, then it is Mr. Brewer who is to blame and not the Government, for if they approved or adopted all his acts they did so in ignorance of the true facts. Of course it is always an unpleasant duty to have to censure persons who have carried out arrangements of this kind, even if a wrong has been discovered. You will remember that in England some time ago a Select Committee was appointed to investigate the conduct of certain officers connected with Her Majesty's service who had accepted from the contractors supplies of rotten bayonets, and that when called upon for an explanation the whole of these officers endeavoured to show that it was the Department that was to blame in allowing the bayonets to pass. They accepted none of the responsibility for themselves, but sought to cast the whole of it upon the Department and the system. They had allowed the orders for the worthless weapons to go on, and the Government was kept in ignorance because of an absurd departmental system. But, of course, no such excuse as that preferred by these officers would avail with any tribunal that desired to do its duty, and as a matter of fact it did not avail in that case, and will not, I hope, in this case either. While the Commission ought to point out that whatever were the reasons which actuated the authorities in causing this special Act to be passed it was entirely outside the law—that is to say, the arrangement effectuated by the Special Powers and Contracts Act of 1886—yet, the primary duty of the Commission is not to censure j Mr. Brewer, but to consider whether a wrong has not been done—whether or not this transaction which from its inception to its completion has been tainted with falsehood and illegality ought to be upheld—whether the

Legislature should not be approached and asked to undo the wrong which has been done, for things of this kind set a bad example, and from their inherent injustice ought not under any circumstances to be allowed to stand. Therefore ask the Commission, in view of the manifest illegality of the whole proceedings, to recommend that they shall be annulled and that the parties shall revert to the positions they respectively held before the transaction was entered into. I submit that if! transactions of the nature of this one, which is absolutely illegal throughout, and as I say, founded on falsehood, are upheld, then none of our laws can be properly respected. There would be no safety in the law and no certainty that an Act passed by the Legislature avowedly for a certain purpose might not be wrested from that purpose for the compassing of illegal schemes and private ends. If it has been possible to deceive the Governor the Public Works Department, the Government, and the Legislature in this instance, to get proclamations issued on a presume! set of facts, which turned out not to exist, and to cause certain action to be taken on the strength of those representations, then I say it is the duty of this Commission to say that such a transaction ought to be nullified and undone. If it is allowed to stand, then I submit that no man's property in New Zealand is safe, but that he may be deprived of it at any time provided he gets its present value. He may be absolutely deprived of the great prospective value of his land and all the other advantages which the possession of land bestows upon the possessor, not for public reasons, but merely to enrich a favoured friend of the Government and that too, without any redress.

Therefore, I submit that the whole of these proceedings ought to be annulled on account of their illegality, and the parties placed in the position they occupied before the arrangement between Mr. Brewer and Mr. Kissling was entered into. I urge this on all the grounds I have mentioned, and especially on the: ground that no opportunity was afforded the parties for whom I primarily appear to place the Legislature in possession of the facts, or to make objections to the Bill which was brought before the House in 1886 to effectuate this transaction. And I will add that if that opportunity had been given, the Board of Trustees would not only have objected, but would have strenuously resisted the very great wrong which has been accomplished by this arrangement, a wrong happily unprecedented in the past history of this colony, and to which I trust future years will afford no parallel.

decorative feature

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1888. Proposals of Mr. Sydney David Taiwhanga, M.H.R., for the Colonization and Settlement of Maori Lands.

Wellington:
EDWARDS & Co., GENERAL PRINTERS, BRANDON STREET. 1888.

Kia.....meou tangata whaiwhakaaro nunui katoa

E.....

Tena rara ko koutou katoa kote iwi nui tonu. He whakamarama atu tenei i nga ra me nga Takiwa e tu ai ngnga hui mote Tiriti o Waitangi i panuitia atu ra i Poneke inga ra o hurae, 1888. Ara.

KOTE HUI TUATAHI—Katatu kite whare runanga ite Tiriti o Waitangi, Pewhairangi ate Wenerei ite, 13 onga ra o Maeaehe, 1889.

KOTE HUI TUARUA—Katutu kite Tiriti o Kohimarama i Okahu, Akarana, ate Mane ite 25 onga ra o Maehe, 1889.

Konga Putake mo Enenei Hui mo Nga Mate Nunui e Rua i Raro ite Tiriti o Waitangi.

1. TUATAHI—Monga manate katoa kua pahure ake nei, i mahia Rereke noa atu ite Tiriti o Waitangi mete 71 onga Telekona ote Ture nui o Nui Tireni, 1852. Ko enei Kaata mahia marietia kite Ture.

2. TUARUA—Mo nga TuTure katoa e paana kinga Iwi Maori e mahia and rereke rawaatu ite Tiriti o Waitangi mete 7 71 Tekiona ote Ture nui o Niu Tireni, 1852. Ko enei me tino whakakore katoa atu me [*unclear:* ririru] mai mate iwi Maori ake ano e whakahaere and Whenua me ana Taonga katoa, mareira e e whiwhi tahi ai enei iwi erua kite haringa, mete kakenganui. Na enei take maarama e rua ka Powhiritia atu nei o koutu tangata tino whaiwhakaaro nui, kia tae tinana mai tatou katoa ki enei Hui erua kua panuitia atu nei kite Tiriti o Waitangi, Pewlhairangi, mete Tiriti o Kohimarama, Okahu, Akarana, kite ata whiriwhiri marie i enei tiknga marama e rua, i runga ite Kotahitanga onga Rangatira Maori mekore e riro mai he Orra mote Iwi Maori, pakeha hoki.

Hoi ano na matou,
Na o koutou hoa,
NA PAORA TUAHERE,
HEMARA TAUMATINI,
HETA PAIKEA,
HIRINI PAWIRI TAIWHANGA, M.H.R.

To

Sir, Salutation to you.

A meeting of all the Maori tribes will assemble—

First—At the Treaty of Waitangi Hall, Bay of Islands, on the 13th of March, 1889.

Second—At Okahu, near Auckland, on the 25th of March, 1889. For the consideration of two important questions concerning the Treaty of Waitangi.

1. To consider all disputes that have arisen contrary to the Provisions of both the Treaty of Waitangi and the 71st Section of the New Zealand Constitution Act, 1852. These greivances will have to be dealt with by a Court of Law.

2. To consider all Statutes affecting the Maoris and their lands, and to abolish the same as they were made contrary to the Provision of both the Treaty of Waitangi and the 71 Section of the New Zealand Constitution Act, 1852, and to let the Maoris have the whole management for colonization of their own State by themselves, and such other matters as may pertain to the mutual benefit, happiness and prosperity, of both races. Therefore we invite you to be present on the occasion, and our hearty welcome will be extended to you.

From your Friends,
Paul Tuhaere,
Hemara Taumatini,
Heta Paikea,
S. D. Taiwhanga, M.H.R.

Hipine & Paraone, Perehi, Akarana.

Preface.

The chief objects I have in view are:—

To secure to the Maoris the management and market value of their own estate.

To divide the estate equitably amongst them and to protect their estate from waste.

To assimilate the Land, Mining and other Laws of the Colony to Maori Lands.

To give facilities for the construction of Public Works and the settlement of people upon the lands.

To abolish the Native Land Court and Native Department and thus save the large and wasteful expenditure that has been going on for years past.

That the whole Colony may derive great benefit by the throwing open for settlement, upon the same terms as Crown lands, fourteen million acres, containing some of the best lands in New Zealand.

S. D. Taiwhanga, M.H.B.

WELLINGTON. N.Z.

OCTOBER, 1888.

Proposals OF Mr. Sydney David Taiwhanga, M.H.R., FOR THE Colonization and Settlement OF Maori Lands.

Inalienable Lands.

1 There shall be set apart an area of land equivalent to

Inalienable Lands.

—acres for each man, woman, and child of the Maori race including halfcastes, except Hori Kerei Taiaroa, who is otherwise prided for.

- Such area shall be selected in such parts of North and South Islands as the Maoris may decide upon, and every allotment granted under this provision shall be inalienable.
- The allotments shall be selected by Chiefs and people according to priority in rank.

- A suitable portion of such area shall be set apart for a town.
- Such town shall be vested in the Council as common property of all Maoris (except as aforesaid i, and shall be governed by a Council or Board similar to Municipal Councils in other parts of the Colony.
- Rules and Regulations shall be made for the management of the town, the health, and recreation of the inhabitants, the education of the children and generally for the peace, order, and good government of the people, and in pursuance of the 71st section of the "New Zealand Constitution Act 1852."

Maori Lands.

Lands for Sale and Settlement.

2. All other lands belonging to Maoris, or to which they may be entitled, including reserves, and whether Crown Granted or not, shall be deemed to be Maori lands, absolutely freed from all tribal and other rites and restrictions whatsoever.

Maori Estate.

3. Such lands shall form the Maori estate, and shall be dealt with as hereinafter mentioned.

Land and Mining. Laws to apply.

4. The land laws and mining laws of the Colony in from for the time being for the sale, leasing, mining, or other disposition of Crown lands shall apply to Maori lands, and such lands shall be dealt with accordingly.

All Maori Lands to be open for application.

5. Subject to existing leases or other tenancies the whole of the Maori lands shall be open for application and settlement

Counties Act to apply.

6. The "Counties Act 1886" shall apply to Maori land

Lands fur roads to vest in the Crown

7. All lands required and appropriated for roads shall was in the Crown.

Lands for public works

8. All lands required for roads, railways and other public works may be granted without payment to the Crown, or to say public body or company making such railway or public work and grants of land in aid may be made.

Reserve.

9. Reserves may be set apart for public purposes similar to reserves in other parts of the Colony.

Management of Maori Estate.

Management of estate by Council.

10. The Maori estate shall be managed by a Council or Board, consisting of Maoris.

- The Council shall be elected in a similar manner as Maori Members of the House of Representatives by now elected, such election to take place triennially, and for the first election the Colony may be divided into four districts each district returning Member.
- The Council so elected shall appoint a President who may be an European and shall hold office during behaviour or until removed by the unanimous deciding of the committee.
- The Council shall be a corporation and have a [*unclear:* cor] seal, and may sue and be sued, and its principal office shall be convenient to the seat of Government.
- The functions of the Council when dealing with Maori lands shall be analogous to the functions of the Lands Boards of the Colony.
- Regulations shall be framed by the Council for the proper conduct and management of business, and all proceedings shall be open to the public, and all plans and other records shall be public records.
- The President and Council shall receive such remuneration for their services as may be decided upon.
- The Council may at any lime state a case for the opinion of the Supreme Court and subject thereto all decisions of the Council shall be final and conclusive.

General.

11. The Native Land Court shall be abolished, and all

Native Land Court abolished.

incompleted business shall be dealt with by the Council or by a special commission.

12. All statutes affecting Maori lands as above defined,

Repeal of statute, &c.

shall be repealed, and all Crown Grants or memorials of ownership affecting lands belonging to Maoris

shall be null and void, but without prejudice to any existing contracts affecting the same and save and except "The Taiaroa Land Act 1888," unless Hori Kerei Taiaroa shall consent to conform to these proposals.

13. Crown Grants for Maori lands shall be countersealed

Crown Grants to be scaled with the seal of the council.

with the seal of the Council, but all Leases, Licenses, &c., shall be sealed with the seal of the Council only.

Finance.

14. The Council may obtain advances for the general

Advances.

management and cost of survey of the Maori estate, and a lien shall attach to Maori lands for such advances.

15. The proceeds of all sales and of all rents and income

The Maori Fund.

derivable from the sale letting and disposition of Maori Lands shall be paid into a bank to the credit of the "Maori Estate Account," and all compensation and other monies to which they may be or may become entitled shall form part of the same fund.

16. All salaries, office and other expenses of the Council,

Application of Fund.

including expenditure on the common property, shall be paid out of the fond.

Distribution of Fund.

17. Subject to such expenditure and the repayment of such advances, the fund from time to time available shall be distributed half yearly between and amongst the Maoris in the shares and proportions to which the Chiefs and Maori people are respectively entitled to the same.

Application of part of Fund to common purposes.

18. Before making such distribution it shall be competent for the Council to expend such portions of the fund as may be considered necessary in making the common property available for settlement and occupation.

Accounts to be audited.

19. The accounts of the Council shall be audited by Public Auditors and published in the Maori and English languages.

Census.

Maori census to be taken.

20. As soon as conveniently may be a complete Maori Census shall be taken, distinguishing the Chiefs from the common people.

(*a*.) The Chiefs may be divided into classes, according to rank and distinction as they may determine, and the shares of each class shall be greater than the shares of the common people in such proportion as they may also determine.

Certificates of shares to be issued.

21. Certificates in accordance with the Census shall be issued to every Maori, representing the share to which he or she is entitled to participate in the Maori Estate Fund, and every distribution thereof, such Certificate shall not be transferable or assignable or be available in bankruptcy.

Register of shares to be kept.

22. A Register of such Certificates shall be kept, and upon the death of any holder such Certificate may be transferred or a new Certificate issued to his legal personal representatives.

Infant's shares to be applied to their maintenance and education.

23. The shares of infants shall be payable to their parent or guardians for their maintenance and education.

S. D. Taiwhanga, M.H.R

Wellington,

October, 1888.

The Treaty of Waitangi

As finally adopted and signed by upwards of five hundred of the principal Chiefs (512), on February 6,

1840. The Treaty of Waitangi appeared in the following form, which we here insert for the sake of easy reference, as the English document only appears once in these pages: —

English Version.

Her Majesty Victoria, Queen of the United Kingdom of Great Britain and Ireland, regarding with Her Royal Favor the Native Chiefs and Tribes of New Zealand, and anxious to protect their just Rights and Property, and to secure to them the enjoyment of Peace and Good Order, has deemed it Necessary, in consequence of the great number of Her Majesty's subjects who have already settled in New Zealand, and the rapid extension of Emigration both from Europe and Australia which is still in progress, to constitute and appoint a functionary properly authorized to treat with the Aborigines of New Zealand for the recognition of Her Majesty's Sovereign authority over the whole or any part of those islands. Her Majesty, therefore, being desirous to establish a settled form of Civil Government, with a view to avert the evil consequences which must result from the absence of the necessary Laws and Institutions alike to the Native population and to her Majesty's subjects, has been graciously pleased to empower and authorize me, William Hobson, a Captain in Her Majesty's Royal Navy, Consul, and Lieutenant-Governor of such parts of New Zealand as may be, or hereafter shall be, ceded to Her Majesty, to invite the confederated and independent Chiefs of New Zealand to concur in the following Articles and Conditions:—

ARTICLE THE FIRST.

The Chiefs of the Confederation of the United Tribes of Sew Zealand, and the separate and independent Chiefs who have not become members of the Confederation, cede to Here Majesty the Queen of England, absolutely and without Enervation, all the said Confederation or Individual Chiefs respectively exercise or to possess, or may be supposed to exercise or to possess, over their respective Territories as the sole Sovereigns thereof.

ARTICLE THE SECOND.

Her Majesty the Queen of England confirms and guarantees to the Chiefs and Tribes of New Zealand, and to the respective families and individuals thereof, the full, exclusive, and undis- turbed possession of their Lands and Estates, Forests, Fisheries, and other properties which they may collectively or individually possess, so long as it is their will and desire to retain the same in their possession; but the Chiefs of the United Tribes and the Individual Chiefs yield to Her Majesty the exclusive right of Pre-emption over such lands as the proprietors thereof may be disposed to alienate, at such prices as may be agreed upon between the respective proprietors and the persons appointed by Her Majesty to treat with them in that behalf.

ARTICLE THE THIRD.

In consideration thereof, Her Majesty the Queen of England extends to the Natives of New Zealand Her Royal protection, and imparts to them all the Rights and Privileges of British subjects.
W. HOBSON, Lieutenant-Governor.

Now, therefore, we, the Chiefs of Confederation of the United Tribes of New Zealand, being assembled in Congress at Victoria, in Waitangi, and we, the Separate and Independent Chiefs of New Zealand, claiming authority over Tribes and Territories which are specified after our respective named having been made fully to understand the Provisions of the foregoing Treaty, accept and enter into the same in the full spirit and meaning thereof; in witness of which we have attached our signatures or marks at the places and the dates respectively specified.

Done at Waitangi, this sixth day of February, in the year of our Lord one thousand eight hundred and forty.

The first meeting at which this Treaty was presented to the Northern Chiefs for their approval and adoption was held at Mr. Busby's station, at Waitangi, on the 5th and 6th February, 1840; and which was fully reported by the Lientenant-Governor to His Excellency Sir George Gipps, in the following despatch:

Her Majesty's Ship "Herald,"
Bay of Islands, 5th February, 1840.

SIR,—I have the honor to acquaint Your Excellency that immediately on my arrival here I circulated notices, printed in the Native languages, that on this day I would hold a meeting of the Chiefs of the Confederation, and of the high Chiefs who had not yet signed the Declaration of Independence, for the purpose of explaining to them the commands I had receive from Her Majesty the Queen, and of laying before them the copy of a Treaty which I had to propose for their consideration.

Accordingly, a vast number of Chiefs, with a multitude of followers, crowded in from every quarter, and at 12 this day they assembled under the spacious tents, decorated with flags, which had been previously erected at Waitangi by the direction of Captain Niaz, of this ship.

And so on with several other despatches of Lieutenant-Governor Hobson to His Excellency Sir George Gipps, and also to the Secretary of State for the Colonies.

With the foregoing remarks and extracts from Parliamentary documents, we leave these sheets to the scrutiny of all interested inquirers. However curious they may appear now, they will become much more so as time rolls on; and whatever may be the opinions of the present or future generations as to the policy adopted in 1840, it is certain that, without some such Agreement between the two races as was determined by "The Treaty of Waitangi," the Queen's authority and government would never have been so peaceably admitted and established in this country.

H. HANSON TURTON.

Wellington,

10th April, 1887.

The New Zealand Constitution Act.

English Version.

"THE NEW ZEALAND CONSTITUTION ACT, 1852."—
15 and 16 VICTORIA, CAP. 72, SEC. 71.

Her Majesty may cause Laws of Aboriginal Native Inhabitants to be maintained.
Passed 30th of June, 1852.

SECTION 71.—And Whereas it may be expedient that the Laws, Customs, and Usages of the Aboriginal or Native Inhabitants of New Zealand, so far as they are not repugnant to the general principles of Humanity, should for the present be maintained for the Government of themselves, in all their relations band dealings with each other, and that particular districts should be set apart within which Laws, Customs, or Usages should be so observed. It should be lawful for Her Majesty, by any Letters Patent to be issued under the Great Seal of the United Kingdom from time to time to make Provisions for the purposes aforesaid, any repugnancy of any such Native's Laws, Customs, or Usages, to the Law of England or to in any part thereof, in any wise notwithstanding.

1888. Nga Tikanga a Hirini Rawiri Taiwhanga, M.H.R., mote Whaka Kainga Whakanoho Tangata ki Runga inga Whenua Maori. Nga Tikanga.
Wellington N.Z.:
EDWARDS & CO., PRINTERS, BRANDON STREET. 1888.

Whakaaturanga.

KO AKU TINO WHAKAARO KOIA ENEI :—

1. Ara, kia riro tuturu mai mate Maori ake ano ana whenua katoa e whakahaere e hoko hoki kite utu tika ote makete.

2. Kia riro mai mate Maori ake ano ana whenua katoa, e ata wehewehe kia ratou ake ano e ata pupuru hoki nga toenga kei maumauria e nga kai Tahae Taniwha horo whenua nei.

3. Whai lioki kia riro mate Maori ake ano ana whenua e ata whakarite kinga ture keriwaro aha noa atu ranei ote Koroni.

4. Wbaihoki e pai ana me tau toko atu nga Maori i nga mahi Nunui mote whaka noho noho tangata ki runga inga whenua.

5. Konga Kooti Whakawa Whenua Maori Katoa me te Tari Maori hoki, me tino Whakakore Katoa atu ma reira e toe ai kite Koroni te moni nui e maumauria nei e aua Tari e rua i enei tau maha kua pahure ake nei.

6. A tera e whiwhi tenei Koroni kite tahi painga nui ate whakatu—. wheratanga e matou e nga Iwi Maori e

nei whenua hei whaka I noho a nga tangata pena tonu te whakahaere menga whenua ate Karauna, titiro hoki kei a matou keinga Iwi Maori tekau mawha miriona eka onga whenua pai rawa atu i Niu Tireni e toe nei kia matou. S. D. Taiwhanga, M.H.R.

Werengitana,
Nin Tireni,
Oketopa,

1888.

Ko Nga Tikanga a Hirini Rawiri Taiwhanga, M.H.R., MOTE Whaka Kainga Whakanoho Tangata ki runga inga Whenua Maori.

Nga Tikanga.

Nga Whenua e Kore e Taea Te Hoko.

1. Meata wehewehe e tahi piibi Whenua Kia-nga eka, moia tangata moia wahine moia

Nga Whenua ekore etaea te hoko.

tamaiti hoki (ahako ano ite Kopu ote, Whaea mehemea ia kite whanau ora mai) ote Iwi Maori hui atu ki nga hawhekaihe (Haunga ia a Hori Kerei Taiaroa kua tae te kia ia).

- Ko enei piihi Whenua katoa me whakarite ki etahi Takiwa o enei motu e rua ote Waipounamu, o Aotearoa mate Iwi maori nui tonu e ata Whakarite aua piihi a ko aua Rakamete i na riro mai ite tangata ekore rawa e taea kia hokoa.
- Manga Rangatira ratou ko te iwi nui tonu e ata wehewehe aua Rakamete, Tekihona ranei i runga i to ratou ahua; rangatiratanga i roto i te Iwi me o ratou hapu hoki.
- Whaihoki me ata wehe te tahi wahi Takiwa e rite ana kei Tunga Taone mote Iwi Maori ake.
- Ko taua Taone me Whakatapu etc Kaunihera Maori hei; Taonga mate Iwi Maori (Haunga ano tenei kua Whaka huatia i runga ake nei) a mataua-Kaunihera Poari ranei e Whakahaere nga Tikanga, kia rite pera tahi me ta nga Kaunihera Pakeha e Whakahaere nei mote Koroni katoa.
- Me hanga nga Ture, me nga Tikanga mote Taone mo nga ora mo nga ngahau, o nga Kainoho, mo nga kura ako ako i nga Tamariki, mote noho pai o nga tangata mete Whakahaere mote Iwi nui tonu, I runga ano ite mana ote 71 o nga Tekiona ote Ture nui o Niu Tireni, 1852.

Nga Whenua Maori.

Nga Whenua mote noho nga Whenua mote hoko.

2. Koera atu Whenua katoa a nga Maori me era atu Wherae e fcika ana kia riro mai ia ratou a muri ake nei Huiatu kil nga Whenua Porohita katoa, ahakoa kua oti te Karauna Karati Kahore ranei, me ata whakahua kia tino marama ai note Maori Tuturu ake enei whenua, kahore he Raruraru mo enei Whenue runga i nga ritenga ate Iwi me era atu tikanga, Here ranei, noa atu ranei ate Kawanatanga.

Taonga Maori.

3. Ko enei Whenua katoa hei Taonga Tuturu ake ma nga liv maori, a, kote Whakahaerenga mo aua whenua koia ka ata Whakamaramatia i raro iho nei.

Nga Whenua Mahi Koura ahanoa atu Te paanga onga Ture ote Koroni.

4. Konga Ture Whenua me nga Ture keri koura, aha nos ate ote Koroni, e tika ana mo taua Takiwa, mote hoko, mote riihi mahi keri, aha noa atu ranei, mo nga whenua ate Karauna, whia hoki me paa ano aua Ture ki nga Whenua Maori, i raro o enei ritenga katoa rite tahi raua.

Konga Whenua Maori Katoa me puare mote Tono.

5. Ko nga whenua maori katoa, me whakatuwhera mote toue whaka kainga whakanoho tangata ki runga, otira, me mag tonu te mana onga Riihi tika mehemea kei te noho Riihi ano whenua.

Nga Ture-onga Kaunihera me paa ono.

6. Ko te Ture Kaute Kaunihera 1886, mo nga Takiwa me pa ano hoki enei Ture ki nga whenua maori.

Kite Kara-una nga Whenua monga Rori.

7. Ko nga Piipi Whenua katoa e ata Whakaaetia ana etc Kaunihera Maori hei Rori me waiho katoa i raro i te mana ote Karauna.

Nga Whenua mahi ote Koroni.

8. Hemea tika me tuku utu kore atu i runga i te whakaae ate Kaunihera Maori, nga Whenua e riro ana hei Rori, hei Rerewe me era atu mahi ote Koroni, kite tahi Kamupane ranei i na Tu kitte hanga Rere we, mahi ranei mote Koroni, he mea tika kia tukua ata etahi o enei Piini Whenua mo runga i enei mahi nunui hei painga mote kotoa.

Porohita.

9. Hemea tika me waiho e tahi Porohita Whenua mo ngs tangata katoa (Maori Pakeha ranei) Penei ano me nga Porohita ate Pakeha i nga Takiwa katoa atu ote Koroni.

Whakahaerenga Monga Whenua Taonga Maori

Whakahae renea monga Whenua Maori monga Kaunihera.

10. Ko nga Whenua Maori katoa, mate tahi Kanuibers Maori, Poari ranei e Whakahaere Kia-nga Maori mo tese Kaunihera Poari ranei.

- Ko taua Kaunihera me Pooti aua mema, kia rite kite Pootitanga mo nga mema mote Paremete, me poote nga tau e torn katoa, a ite Pootitanga tuataki, hames tika kia wha nga Tirikiti mote motu katoa, Kia-ngas mema mote Tirikiti Rotahi.
- Ano i te mutunga o te Pooti o te Kaunihera, ma taua Kaunihera ano e Whakatu he Tumuaki mo ratou hei Maori hei Pakeha ranei hei ta ratou e pai ai, a, me Tuturu ia hei Tumuaki i te wa e Tika ana, otiia, mate Tokomahatanga ote Kaunihera ia e Whakakoreatu a te wa e kitea ai tona he.
- Kote nei Kaunihera he Kaunihera Taone, a, me whai Hiiri ratou, me mana ratou kite Hamene, mete tuku Hamene hoki, kote Tari ote Kaunihera me tata kite Nohoanga ote Kawanatanga.
- Konga mahi mate Kaunihera ia ratou e mahi ana i nga Whenua Maori, me whakarite tonu ki nga malii o nga Whenua Poari ote Koroni.
- Me hanga ete Kaunihera nga Ture mote whakahaere tika, monga malii katoa, a, koa ratou mahinga me mahi a nga nui tonu, me uru, mai nga tangata me ka hiahia kite whakarongo, me puare nga pukapuka katoa hei tirotiro ma te katoa ote tangata, me hemea kite hiahia ratou kia kite.
- Kote utu mote Tumuaki, mete Kaunihera me utu i runga inga moni e kitea ana mo te pera.
- He mea tika me kawe atu e te Kaunihera te tahi Keehi kite Hupiriimi Kooti patai ai kite tikanga, a, i runga inga whakautu mai ate Hupiriini Kooti hei reira tino Whakatuturu ai aua whakataunga ate Kaunihera maori.

E Tahi Atu Mea.

11. Kote Kooti Whakawa Whenua Maori me tino

Whakakorenga ite Kooti Whakawa Whenua Maori.

Whakakore rawa atu, Erangi, konga mahi kihai i oti i aua Kooti mate anuihera Maori e Whakaotioti ma te tahi Komihana ranei.

12. Ko nga Ture katoa e pa ana ki nga Whenua Maori me

Whakakorenga onga Ture.

lakanoa katoa, menga Karauna Karati aha noa atu ranei epa ana Ki aua Whenua Maori Kua oti nei te Whakahua, me Whakanoa Katoa, otiia, ko nga Kirimina o mua, me mana tonu, me hemea ia e takoto peera ana aua Whenua, haunga ia te Ture Whernia o Taiaroa 1883. Kite kore a Hori Kerei Taiaroa e Whakaae ki enei tikanga katoa.

13. Ko nga Karanua Karati mo nga Whenua Maori katoa

Me Hiiri nga Karanau Karati Kite Hiiri ate Kanuihera.

me Tatakirua Hiiri kite Hiiri o te Kaunihere, e rangi nga Riihi, Rahana, ahanoa atu me Hiiri kite Hiiri o te Kaunihera sinake.

Nga Moni.

14. Hemea tika kia Tono moni te Kaunihera mo nga, Whakeienga

Whaka haerenga onga Moni.

o nga Mahi Ruri Whenua Maori, a, me iri aua moni ki ruga i nga Whenua Maori katoa i na riro mai ite Kauinhera.

Nga Moni Maori.

15. Ko nga moni katoa e puta mai ana mo nga Hokohoko, mo nga Reti, me nga moni katoa e riro mai aua i runga ite Hokonga, mete Retinga o aua Whenua Maori, me Whakatopa katoa kite tahi Peeke, me Whaka ingoa kote Kaute o te Whenus Taonga Maori. Me nga moni katoa e puta mai ana i runga i e tahi atu Whakaritenga e riro mai ana i te Maori, me ki he wahi toon aua moni no e ra kua otira te Whakatapu kite Peeke.

Tono monga Moni.

16. Nga utu mo nga Tari, mo nga tangata, abanoa atu ranei ate Kaunihera, me nga moni e pau ana mote mahi nui tonu a te katoa me utu katoa ki taua moni Topu.

Tuwhanga o nga Moni

17. Konga moni i Toe i na oti te utu utu ki aua mahi katos me nga moni Whakea atu i nga moni i riro mai i te Kaunihers Hemea tika kia Tuwhaina aua moni Toenga, kia rua Tuwhanga ite Tau, kite Iwi Maori nui tonu i runga ite ritenga o raton Hea

Moni Whakapai Whenua.

18. I mua mai o te Wawahanga o te nei moni, Hemea Tika mate Kaunihera e whakarite te tahi wahi o tenei moni hei whakapai i te Whenua ote Iwi nui tonu mote Whakanohonoho tangata ki runga i aua Whenua.

Tirohanga inga Kaute.

19. Ko nga pukapuka Kaute ate Kanuihera, me ata tirotiro e nga kai kimi kimi he ate Kawanatanga, a, me perehi rawa aua Kaute moni ki nga nupepa i runga ite reo Pakeha, ite reo Maori hoki.

Tatauranga ite Iwi nui tonu.

20. Me Whakahohoro tonu tetahi Tatauranga nui, mo nga Rangatira Kaumatua menga Rangatira Taitamariki me te Iwi nui tonu, kia matauria ai nga Hea ma nga tangata katoa Irungs ano ite ata Whakaae Tuturu mau tonu ate Iwi nui tonu.

Tiwhikete monga Hea.

21. Me puta he Tiwhiteke mo enei Hea, ki nga tangats Maori katoa, whakaatu i te nui, i te iti o te Hea o te tangata i roto i aua Whenua Maori, otira, ko aua Tiwhikete e kore e ahei te tuku atu mate tahi tangata, a, whaihoki e kore e tika kia riro atu i nga Pakeha e Pekarapa ana taua Maori.

Rehihitanga o nga Hea.

22. Me Rehihita katoa aua Tiwhikete, a, kite mate te tahi tangata, ko tana Tiwhikete me taka mai ki tona Whanaungs tata, kite kahore ranei me Whakahou ano taua Tiwhikete kite tangata tika i muri mai ia ia.

Tononga onga Hea ruonga Tamariki.

23. Ko nga Hea onga Tamariki me utu atu ki o raton matas tuturu matua whangai ranei, hei ora mo aua Tamariki hei utu hoki mo to ratou Kuranga.

S. D. Taivvhanga, M.H.R.

Wellington,

October 24, 1888,.

Ko Te Tiriti o Waitangi.

Te Reo-Maori.

Ko Wikitoria, te Kuini o Ingarangi, i tana mahara atawhai ki nga Rangatira me nga Hapu o Nui Tireni, i tana hiahia hoki kia tohungia kia ratou o ratou Rangatiratanga, me o ratou whenua a kia mau tonu hoki kia ratou, Kua whakaaro ia he mea tika kia tukua mai tetahi o nga Rangatira hei kaiwhakarite ki nga tangata Maori o Niu Tireni. Kia Whakaaetia e nga Rangatira Maori Te Kawanatanga o te Kuini, ki nga wahi katoa o te whenua nei me nga motu. Na te mea hoki he tokomaha ke nga tangata o tona Iwi kua noho ki tenei whenua, a e haere mai nei. Na ko te Kuini e hiahia ana kia whakaritea te Kawanatanga, kia kaua ai nga kino e puta mai ki nga tangata-Maori ki nge Pakeha e noho ture kore nei.

Na kua pai te Kuini kia tukua ahau, a Wiremu Hopihona, he Kapitana i te Roiara Nawa, hei Kawana mo nga wahi katoa o Nui Tireni, e tukua aianei a mua atu ki te Kuini; E mea atu ana ia ki nga Hapu o Nui Tireni, me nga Rangatira mo enei ture ka korerotia nei.

TUATAHI.

Ko nga Rangatira o te Whakaminenga me nga Rangatira katoa hoki, kihai i uru ki taua Whakaminenga, ka tuku rawa atu ki te Kuini o Ingarangi ake tonu atu Te Kawanatanga katoa o o ratou whenua.

TUAKUA.

Ko te Kuini o Ingarangi ka whakarite ka whakaae ki nga Rangatira, ki nga Hapu, ki nga tangata katoa o Niu Tireni, te tino rangatiratanga o o ratou whenua, o ratou kaainga, me o ratou taonga katoa. Otira, ko nga Rangatira katoa atu, ka tuku kia te Kuini te hoko o era wahi whenua ki te pai te tangata nona te whenua, ki te ritenga o te utu e whakaritea ai e ratou ko te kai hoko e meatia nei e te Kuini hei kai hoko mona.

TUATORU.

Hei whakarite mai hoki tenei mo te whakaaetanga ki te Kawanatanga o te Kuini. Ka tiakina e te Kuini o Ingarangi nga tangata-Maori katoa o Nui Tireni. Ka tukua kia ratou nga tikanga katoa rite tahi kia ana mea ki nga tangata o Ingarangi.

(Signed)
WILLIAM HOBSON,
Consul and Lieutenant-Governor,

Na, Ko matou ko nga Rangatira o te Whakaminenga o nga Hapu o Niu Tireni ka huihui nei ki Waitangi. Ko matou hoki ko nga Rangatira o Nui Tireni, ka kite nei i te ritenga o enei kupu, ka tangohia, ka whakaaetia katoatia e matou. Koia ka tohungia nei o matou ingoa o matou tobu.

Ka meatia tenei ki Waitangi i te ono o nga ra o Pepuere i te tau kotahi mano, e waru rau, e wha tekau, o to tatou Ariki.

Ko Te Ture 71, o Nui Tireni.

Te Reo-Maori.

"TE TURE NUI O NUI TIRENI, 1852."—15 ME 16 WIKITORIA, UPOKO 72, RARANGI 71.

E taea ana e te Kuini te mea kia hanga me te tiaki hoki i nga Ture mo nga Iwi Maori.

No te 30 o Hune, 1852, i puta ai.

TEKIONA 71.—Na reira e Tika ana kia hanga he Ture i runga i nga ritenga me nga mahi katoa mo nga Iwi Maori o Nui Tireni no o ratou tupuna iho ano, tuku iho tuku iho, ko nga tikanga rereke kai tangata nei me kape atu, me tino hohoro te whakaae i tenei taima tonu, he Kawanatanga mo ratou ake auo, mo a ratou mahi, me a ratou meatanga katoatanga, a etahi Iwi ki etahi Iwi ano o ratou, ara, me ata whakaaro. Ka wehe rawa atu ai he takiwa, hei taunga iho, mo aua Ture Maori katoa no ons tupuna tuku iho tuku iho. Na, he mea tino tika rawa ia ma te Kuini i runga i te Reta Tapu (Peitana) e whakaputa atu i raro o te Hiiri Nui o te Rangatiratanga o Ingarangi ki te hanga Ture hoki i ia wa i ia wa, hei whakamana, koia kua korerotia i runga ake nei. Ko aua Ture katoa a te Maori, me aua ritenga me ana mahi katoa hoki o mua tuku iho tuku iho, me mahi katoa ano kaua ia e rereke rawa atu i nga Ture o Ingarangi, me ona wahi katoa hoki e mohiotia iho nei koia ano ia.

Edwards & Co., Printers, Brandon Street, Wellington.

Front Cover

The Reign of Grace. A Discussion of the Question of the Possibility of Salvation for all men in this Life. Or if in the Life to Come.

By William Salmond, D. D.,
Professor of Mental and Moral Philosophy, University of Otago, New Zealand.

"O GIVE THANKS UNTO THE LORD; FOR HE IS GOOD; FOR HE MERCY ENDURETH FOR EVER."—Psalm cxxxvi., 1.

JAMES HORBURGH PUBLISHER *Dunedin* 73, George Street MDCCCLXXXVIII Caxton Printing Company *Dunedin* Manse Street, Near Frinoes Street, Dunedin.

Preface.

The origin of this humble contribution in favour of "the larger hope" seems to require some explanation. When I surrendered the teaching of Theology in favour of Philosophy, I did not cease to feel the liveliest interest in the former; nor was it even in my power to desist from active prosecution of its problems. Theology concerns man as man, therefore all men: and if one say lie takes no interest in its questions, he simply writes a heavy indictment against his own humanity, and proclaims that, however cultured his logical understanding may be, his deepest nature is perishing from moral atrophy. For reasons which I can hardly state—who can account for the current of his thought and feeling?—the question discussed in these pages latterly possessed my mind with enthralling power. I bad no rest in my spirit till I sat down at my desk and poured out my soul's contents on paper; and I have ever found the pen a magic weapon for making the thoughts clear, and discharging an overburdened mind and heart. The views here expressed were familiar to my mind thirty years ago, even when as yet a student; cherished when as yet I scarcely knew one who sympathised with them; sometimes possessing me with luminous clearness, and anon falling under a cloud of doubt and embarrassment; occasionally preached and openly declared, then for years put out of sight under the pressure of the active duties which are a minister's best shield from harassing thoughts, yet ever anew in hours of meditation, or by force of circumstances, coming back an armed host and reasserting their hold; and now, at length, after many ups and downs and revisions, have obtained from my mind that sort of inward affirmation which brings to one the security that he will not chain nor falter again, and that if ever he is to .speak he may speak now.

In writing I had no distinct purpose of publishing, and it has cost me some effort to come to this decision. For many reasons I should have preferred silence. I feared to create embarrassment, vexation, controversy, and dispeace within the Church; or to be regarded as an enemy of the Church whose highest good I seek. I feared my utterance might be premature, and questioned whether it were not better to let the new leaven of modern thought work on in silence, rather than mar its effects by rash disclosure of its potency; and this blind prudence is a subtle arguer. I feared the storm and bitter fury of theological animosity to me always an appalling spectacle, causing me to shudder with a great amazement. I feared, more than all, the reproach of having been a moral coward, and to he taunted with the barbed question, Why had I been so long silent? Why had I become enamoured of such sentiments only since breathing the air of a secular profession? Why had I not become firm and clear till it was convenient to myself to be so? Such questions, which naturally enough suggest themselves to malevolent wit and also to the annoyed feeling of good will, could only be answered by a fuller detail of autobiographical self-revela- tion than I can suppose myself called upon or entitled to give; and, besides, every one will answer them for himself through the medium of an already-formed judgment, which nothing I could say would much modify. But such explanation withheld, have I not reason to fear that my utterance of opinion is bereft of half its moral weight?

Notwithstanding all these grounds for hesitation, I have resolved to publish, and meet whatever joy or sorrow, love or hate, blessing or reviling may betide. I can no longer help myself. One cannot walk the world with a solemn belief hidden as a secret in his heart; else the thoughts meant for the nourishment of his spirit will become a fire consuming his life. No one has any call of duty to speak so long as a single doubt, misgiving, or obscurity lingers in his mind: but there is a point of luminous conviction which brings with it a summons to open confession. Besides, my fears are surely exaggerated. Persuaded that the whole Church is travelling in the direction of my views and with quick steps too, who has a greater call to speak in advance, than one so intimately connected with the Church, but in whose case there exists no occasion for putting in movement the elaborate and noisy machinery of Church Courts, whose words officially commit no one but himself who speaks them, and who can be left alone without Church hastening to any kind of formal decision which might only lay up stores for future repentance Further, it is clear that a great and blessed change has come over the theological temper of the Church. But few years ago, every new and divergent doctrinal view was greeted with a low, wild howl of indignation, reproducing in living form the very spirit of the Jewish Sanhedrim and there prevailed an intellectual terrorism that strangled future as is the discipline of a child's formative years; and it behoves everyone to withhold no contribution, howsoever small, to help the intellectual, moral, and religious life of the people.

For aught I can tell, this little publication may fall stillborn, and be deemed unworthy of the smallest notice; but should anyone deem it deserving of a reply, I pray that I may be answered by such as love Truth with candid minds, and have faith in no weapons but those of Reason, and of the Word and Spirit of God; by such as bear in their souls the scars of the inward conflict by which they have reached their conclusions, and who have learned, in the fight, the gentleness of intellectual pity, and sympathy with all searchers for Truth and God.

William Salmond.

Duncdin

6*th April*, 1888.

Synopsis of Contents.

Part I.

- The idea of everlasting perdition a necessary hypothesis—The nature of the doom of the wicked—The question complicated by that of the limitation of the Day of Grace to this life—The appalling view of existence involved—Especially as connected with strict Calvinism—Question stated.
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CONCLUSION.
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The *Reign of Grace*.

A discussion of the question of the Possibility of Salvation for all Men in this Life, or in the Life to come.

Part I.

§ 1. We cannot dogmatically affirm that all men will be restored to God. Unless the ideas of sin and guilt are erroneous, and the belief in moral freedom an illusion, it must be possible to harden our hearts persistently against the love of God, and frustrate the counsel of His mercy. The Calvinistic doctrine of omnipotent and irresistible grace would seem, indeed, to lend support to the hope that God will yet be victorious over all the perversity of the creature: else, were evil a divine choice. However, hard as the reconciliation may be, the doctrine of irresistible grace does not seem to be held in any such sense as hinders our affirming that the sinner may quench the Spirit of God; nor does it mean that grace acts on the spirit of man mechanically: and even Calvinistic divines are content to leave, as an inaccessible region of mystery, that innermost recess in which the Spirit of God and the spirit of man touch and are fused. The idea of hell is necessary at least hypothetically; that is, so must it be, *if* there be persistent impenitence and rejection of Christ. The warnings and threats of Scripture are just and right, and could not fail from the practical point of view which we occupy in the flux of time; nor can any earnest preacher avoid using them, even although he may cherish the secret hope that the necessary hypothesis may not be realised as ultimate fact.

Of the nature of that doom which may overtake us, various opinions are held at the present day. The traditional and popular way of conceiving it seems to be abandoned. It is a thing incredible that God should inflict, during infinite ages of time, anguish and tortures compared with which the horrors of a Spanish Inquisition are a trifle; and that He should maintain the wretched victims of infinite vengeance in existence for no reason except to heap misery upon their heads. The feeling of the modern world is definite, that this can on no account be credited; and many feel no scruple in saying aloud or in their hearts, that if the Bible teaches men so it is a proof that the Bible is not true. Most men are contented to leave the question in the general form—the greatest of all possible calamities will befall the wicked and the greatest is simply to be shut out from God: for that is surely "the outer darkness." When sensuous natures are told that hell cannot mean endless torture by fire, they breathe more freely, and perhaps say in their hearts that now they have nothing very dreadful to fear, although they sin. Nevertheless, from the point of view of all holy beings, they are within the grasp of an evil—even loss of holiness and severance from God—so great that no tears could express it: and it remains true, that we are not in harmony with the mind of God, till the mere fact of being a sinner and without God seems to us so great an evil as to awaken in our hearts an unutterable self-commiseration, and a great cry of distress over all who are in such a situation. This general statement, mean while, suffices me. I can form no conception of what may be involved in final severance from God; and I ever form no conception of a state of existence not condition by time.

The doctrine concerning the doom of the wicked has been complicated by being held in close fusion with the doctrine of the absolute and universal limitation of the day of grace to this present life; and, although no two doctrines can be more distinct, this fusion has been so close that the denial of the latter is still popularly held to be a denial of everlasting punishment. Ten thousand times have congregations been taught that life is the season God has given to flee from hell and rise to heaven, and that whosoever of all the myriads of men has been found un-regenerate at the hour of his death has gone down to hopeless perdition, and found himself debarred from all access to mercy. Theologians have not generally been so severe as to hold that this doom befalls all who have not lived in the light of divine revelation, or known and believed in the historical Christ; for Christ is still the everlasting Logos and the Light of Reason, and the Spirit of Christ may have secretly touched many earnest souls in heathendom, whereby they became as it were crypto-Christians. Still, regenerate all must be in life, who escape at death the doom of hell; for beyond the grave is no forgiveness for any man, and no further bestowal of the spirit of grace. The prevalence and potency of this teaching cannot be denied. The whole air is filled with the echoes of words like those of Jonathan Edwards: "Now, God stands ready to pity you: this is a day of mercy: yon may cry now with some hope of obtaining mercy. But when once the day of mercy is past, your most lamentable and dolorous cries and shrieks will be in vain: you will be wholly lost and thrown away of God, as to any regard to your welfare. God will have no other use to put you to but to suffer misery: you shall be continued in being to no other end." The shortness and uncertainty of life, the momentousness of it as

absolutely determining heaven or hell for ever, the finality of death as limiting the possibility of salvation, the *gorgonising* of the soul of man by the incident of physical death—this used to be the peroration of nearly every sermon; and, although in a much subdued form and with bated breath, may still be heard at intervals here and there. It cannot be doubted that this belief has given, and still gives, impetus to much activity in Church Extension, Evangelisation, and Missionary enterprise. It is a humbling thought that there are still innumerable minds that will earnestly ask, If this doctrine be not true, what use is there in preaching, or in ministers, or in all the zealous activity of the Churches? So selfish, sensuous, and narrow has our popular religion become, that men are not ashamed to say If there be hope of salvation after death, we may as well shut up our churches and recall our missionaries.

The most earnest advocates of the traditional belief will not deny that it implicates a view of human life beyond measure appalling. There must he already untold myriads in hell; not only a majority of all who have ever lived, but an overwhelmingly large majority. Even now the number of regenerate souls on earth is but an elect remnant; and of the millions now pursuing their course we may well anticipate that those who shall enter heaven are but a little rill, while human life, like some broad and swollen river, is coursing on towards the abyss. I have observed that men do not generally like to hear or read statements of this sort, and use all manner of disguises to veil the inevitable inference. "Who are you thus to dogmatise on the secret characters of men?" "It requires but a cry at the last moment, and divine forgiveness is at hand, and how do we know but that this cry has gone forth from the hearts of myriads whose lives were sinful?" "All infants are saved, so that after all a majority of the race may be in heaven." So they wrap it up; and thus they throw dust in their eyes. No! Of any given time or society, the word of Christ stands true, "Few there be!" Only a relatively small number are now or ever have been living Christians, whose hearts were the temple of God. If no one of all the rase can inwardly possess the redemption of Christ save in this little life, the myriad myriads of the human race have beyond all doubt, perished everlastingly. My brain reels and a horror of great darkness comes down on my heart as I try to realise what these centuries of human history signify. When I further couple this thought with the doctrine of strict Calvanism, I feel like one struck on the head with a club or pierced with a poisoned arrow. In the successive generations all such as God predetermined to save are saved. In the case of all such as are lost God never cherished any purpose to save them; for them Christ did not die and does not intercede. Now, as history is only fulfilling the purpose of God, it follows that all that has transpired has been with a view to gather out of the race a handful of elect souls, all the rest bring related to them as dung to fruit and flowers. O Father in Heaven! is not every man and woman on earth Thy lost child?

Yet I perceive that there is a danger in allowing one's mind to run on in this vein. Feeling and imagination must not be allowed to dethrone reason. The terrible thought is that this is a lost world of guilty sinners requiring to be redeemed by the death of the Son of God, that perdition is a possibility, and that we fire all within the grasp of appalling facts. The relative numbers of the saved and the lost is but a subordinate issue, and to reason. The moral difficulty were as great were all saved but a handful admitting that the difficulty would not so appal the imagination. Let us therefore put a restraint upon ourselves, and reason the matter calmly. Is it indeed true that death absolutely limits the possibility of salvation? Or, is this an error superinduced on the Gospel of Christ, at once spreading a pall upon the earth and darkening the face of the heavens? "We believe that it is even so, and that it is an error, to such an extent hiding the face of God and obscuring the Gospel of Christ, that to lift its harden, even from a single human soul, would be a recompense for much sorrow.

§ 2. The first great difficulty—equally great to thought and feeling—emerging out of the prevalent doctrine, is suggested by the death of infants. What, then, of the myriads, amounting, they say, to half of the human race, who die before attaining self-consciousness and proper moral responsibility? The theological doctrine is that we are all by nature children of wrath: and it is clearly inadmissible to seek an escape by denying or toning down the doctrine of original sin, or by affirming our original immaculate purity. Unless infants were regenerated before dying, they must accordingly be universally damned—born for an hour of life, to pass away and open their eyes in hell. This belief has been found incredible and in all ages has been indignantly repudiated, except by a few where deeper nature has been terrified into submission by theological logic. That infants perish even lastingly is a doctrine presenting to belief a view of existence and of the ways of God as repugnant to our moral reason as any grim idol of heathendom. It is as if were asked to tear the heart from our bosom and cast it down upon the altar of some savage deity. It violently contradicts a living faith in God's Fatherhood and universal love; for we cannot call God Father while believing he habitually does acts which we could only regard as fiendish. It summons us to believe that the deep, pure joy in our hearts when a son is born into our home, is no adumbration of the divine heart, but its very contradiction. The instinct of our moral reason, the passion of our human hearts, the thrill of the divine love we have felt, the light of the Christian consciousness, declare that the damnations of infants cannot be true—let theologians look to the adjustment of the matter as best they can. Accordingly it seems now universally held that all dying in infancy saved, that is, are regenerated by divine grace before they pass away.

But where shall we find valid grounds for such as assertion? The doctrine of baptismal regeneration may shelter some Christian homes from a dreadful horror but, just in the circles where the limitation of the day of grace to this life has been most firmly held, baptismal regeneration is viewed as a figment; and were it even true only a relatively small number have had the privilege of being sprinkled with holy dew from a priest's, fingers. The present belief is that all infants, in all space and Time., straightway become angels,—all who pass away antecedent to the clear emergence of reason, although at what point that happens can in no wise be determined. But the Belief seems to possess insufficient grounding. Parents who have lost beloved infants fondly cherish this faith concerning them; perhaps, when they see surviving sons and daughters growing up without any traces of grace, a misgiving thought seizes them that had the lost ones been spared, they would have been like the rest. If a careless heathen mother by neglect and cruelty cause the death of the majority of her children in their first year, and some of them by reason of special hardihood survive to manhood to live as the heathen do; shall we be told that the former were regenerated and the latter not? The probability is that such as died would have developed like all the rest, had they but lived. A form of teaching which puts a premium on infanticide, makes the massacre of babes the readiest way of peopling heaven, and tempts us to view the nurture of young lives to maturity as the most cruel of injuries, is beset with difficulties. The Brine of the universal salvation of infants will in no piece into the theological system; nor can it be presented in a rational and self-comsistent form. It seems every way a more probable supposition that they pass away info another form and condition of existence, there to awake to self conscious reason, and find themselves even there in a world irradiated by the love of God which is in Christ Jesus. Knowing as we do that Christ died for them all—persuaded as we are that our love to them is but a pale copy of the love which is in the heart of God-no parent, called to part with his infant children, can fail, in perfect peace, to surrender them into God's most gracious hands. But is it not a cruel thing to reduce parents even to an uncertainty? We can but ask in return, Is it a cruel thing to ask them to leave their in the hands of Christ? Where else shall we leave them? Can Christ not bring them to Himself there well here?

A difficulty akin to that with which we have been dealing is suggested by the case of idiots and such like; but it seems unnecessary further to enter upon it, as there can be no doubt, at least, as to the solution of it which is most simple and natural.

§ 3. The next great difficulty of the traditional doctrine is suggested by the consideration of the heathen world What of all the myriads of the heathen nations which flourished before Christ came into the world? Have they all, with the possible exception of a few gifted souls perished everlastingly? The Gospel of Christ has been in the world many centuries, and even yet has shone on only a narrow section of mankind; up to this the majority of men are heathen. It is a hard thought that the myriads of India and China are in hell, with Fijians, Maories, and Tasmanians. Not long since famine swept away 7.000,000 of Chinese in one year; it is hard to think that the pitiless famine swept them to a more pitiless and eternal hunger. There is no possible escape from such conclusions, if there is no possiblity salvation hereafter. We believe that God is the Father of the Spirits of all flesh—that every separate human soul is of an infinite value—that Christ loving all men and every man with an infinite love, offered Himself a sacrifice for the whole world; with this faith embedded in our hearts we bring before our minds a land in which generations millions have lived and died in ignorance, and misery, uncared for by God or man; and we find ourselves asking with a shivering horror, Can our faith be true if hell has devoured them all? Every mind feels difficulty; most seem content to leave it among the unsolved mysteries of God's providence; and nearly all would fair avoid answering with either yea or nay. The day was when theologians pointed to such a spectacle, and said "Behold a proof of our doctrine that God had never meant to save them, but had left them out of His purpose of mercy; otherwise He had sent them His message." There was a hard logic in the argument; but now it satisfies no one. But what a bright light breaks in upon the darkness, when we say, God's mercy is not limited to this life, and the divine purpose of grace follows all men into the realm beyond. That this idea solves a great difficulty is perhaps no positive or final proof that it is true: but at the same time let no one who rejects it, and is also unprepared to affirm the damnation of the heathen, imagine that he can get rid of the difficulty by calling it a mystery. It is more than a mystery. It weighs on the spirit like the nightmare of a contradiction of our belief in the infinite worth of souls and the Fatherhood of God and without that belief, shining in us lustrous and un-dimmed, we cannot live the Christian life, but stand, like shivering outcasts, at the portals of God's house.

§ 4. A question of a different kind from the previous now suggests itself. Death, we have been told, puts an end for ever to divine grace and its operations: death petrifies the spirit of man into an unchangeable state. I can discover no possible reason why death should have such an effect. There can be no reason in the nature of things why it should he so. Death is only severance of the spirit from material conditions, and introduction of the spirit into self-conscious life under new conditions. The will continue to think, feel, and will as heretofore, and will retain the continuity of its self-consciousness unbroken: and why should it not be still capable of repentance and amendment? So far from anticipating any such pertrifaction from the incident of death, we should rather anticipate that death would bring to many the very emancipation which they require, in order to

emerge into a higher kind of rational and moral consciousness. The material conditions of our present existence often clog, darken, and weight the spirit: animal wants and passions drug and stupefy the soul: the bitter, crushing struggle for food and raiment keep many down in animalism, and hinder the emergence of proper moral self-consciousness: many a man has an evil-conditioned body which is a life-lone curse to him, and keeps him living in fever and even a kind semi-lunacy: we seem therefore justified in the hope that death would act as a kind of deliverance, open to them a true door of hope, and start them for the first time on a true career of rational existence. Certainly we cannot share the idea that man is a sinner only because he has a body, that the root of moral evil lies in matter and in the body of flesh, and that emancipate from the body is *ipso facto* redemption. This conception is false and shallow. What we maintain is that, so far from there being anything in the nature of death explaining why it should act on the spirit like the head of the Medusa, there are strong reasons for the belief that it would bring to many the first true awakening of ream and introduce them into much more favourable conditions of moral life. Shall we then say, that for reasons not made known to us, or perhaps incommunicable, God has so *decreed* that every man's death shall limit the possibility of salvation and end the time of probation? This opens out into the question whether the traditional doctrine is taught of Christ and the Apostles; and is mean while postponed.

While we can find no rational grounds for the common view of the effect of the death of the body on the life of spirit, we are yet met by the fact that men (and far beyond the pale of Christendom) have somehow been led to the idea that death comes to every man like the knell of judgment, and that the future life is not only a continuance of the present, but related to it as a retributive judgment on the earthly life as a finished product. It is easy to understand how this comes to pass. Although most, if not all human lives make on our minds the impression of a fragment, yet it is also true that when a man is dead, his career is finally wound-up—nothing can be added—the chapter is closed—so far as human knowledge and vision reach: and we very naturally translate this into an absolute finality. The full rewards of righteousness and love the full visitations of iniquity, by no means come upon men during their career on earth: if there be a moral government at all, we instinctively imagine that the adjustment is accomplished beyond; and thus the idea of heaven and hell press themselves home upon us in immediate connection with a man's death. It comes naturally to us to view material things and the body as a screen between us and God, and so we come to speak as if death were the removal of a veil, a kind of ushering of souls into the immediate presence of God: but it is not the fact of having a body which hides God from us, nor would the mere fact of being disembodied give us any vision of God's face: and, in very deed, dead men (simply as such) are no nearer God than we are now. There is nothing which so arrests our imagination as death: it is of all incidents of human experience the most tragic; and it seems natural to us to attribute to it an effect on the destiny of the spirit proportioned to its effect on temporal relations, and the grasp it takes of the imagination and the emotions. Still, it is not necessary to deny all truth in the popular view of the effects of death. Critical changes in the body, in circumstances and relations, induce even now corresponding critical changes in the development of character; there come even now and here days of moral judgment, gathering up into one experience of joy or sorrow the results of long periods of moral life: and we may there-fore well believe that death is to an immortal soul a most critical event, most searching and unveiling and decisive, bringing matters to issues, and slumbering possibilities to quick self-revelation. Nay, the next world may well become to evil men "a place of torment"—even as this earth becomes such to a burdened conscience, when the man at last can no longer escape from his own eye. But, although after death comes judgment, why should it be final judgment? If it be so, in what sense do we speak of *the last* judgment? Our objection is directed only against the affirmation of the absolute finality of the judgment of character which follows death.

§ 5. The minds of thoughtful men have been always painfully arrested by the seeming contradiction between what man *is* and what man *seems* to be. A king walking in filthy rags and living in a hovel would present no contrast so glaring as meets us when we say, Every man on earth is an immortal son of God, of an infinite value,—and then turn to survey the facts of human life. As a beast is born into the world, so also is a man; and as the beast dieth, so also man. Whether any man shall exist or not exist is a matter of accident: our very existence is surrendered to the blind caprice of lust or mere animal necessity. Nature makes no more careful provision to regulate the number of men born into an existence out of which they can never pass, than it does to determine the brood of the serpent or the number of leaves which any summer shall grow upon an apple tree. Men seem simply products of the mechanism of the universe: their number their circumstances, the length of their days, their joy and sorrow, no otherwise determined. Yet we say, and we believe, that every man born into the world is of an infinite dignity and value,—summoned into being by as immediate a fiat of God's will as Jesus of Nazareth—a son of the Eternal! It is only by a very considerable effort that we disentangle ourselves from the effect produced on our mind by the superficial aspect of things; and, indeed, when once we have been entrapped into the mechanical view of existence, we escape only as the reward of the deepest philosophy. We sec but the surface of things, hear but the roar of the mechanism of nature; but things are not what they seem: this whole visible world has its other and transcendental side, Reason knows itself as the light which lightens all

the universe: in the full blaze of Self-consciousness, a man knows himself as greater than the heavens and the earth; and, as the light within him slowly kindles up out of the dark material soil, he recognises himself as a child of eternity and son of God, for whom all things are.

But why do we say these things here? We have mantioned the discrepency between the appearance and the higher truth concerning man with which thought has to contend: but what is this compared with the contradiction between the real value and significance of this life and the actual circumstances of it, with which theological thought has to contend—if, indeed, eternal destiny is absolutely determined for every man in the years lying between his birth and death. The former can be mastered by thought: the more we contemplate the latter the more it masters us. God, the Father of our spirits, cannot possibly treat his children with a more cruel neglect than the most depraved and unnatural parents; cannot have meant this life to supply the conditions of human probation for eternal life and death, and yet so arrange those conditions that they shall be for countless thousands the worst conceivable, and make their perdition almost inevitable. That child of depravity there, wrapping up within its nature the accumulated results of generations of moral degradation, with disease in its bones and nerves, with madness in its blood, with the drunkard's taint in its breath, born into a home of squalor and ignorance, trained to vice and impiety—a few years of dreariest existence here—then hell for ever! Yet God is its Father! And there are myriads of such, in ail degrees and varieties. What a mockery is the Gospel we preach! If such have no Father, the world has no Father; and as we ponder over the dark side of human existence, from the point of view of the common belief, we feel the horror of a great darkness come over us; our faith in God sinks beyond the horizon, and night wraps our heart within its folds. But courage! A light breaks in upon the gloom when I reflect that this little life is but a passing incident—but a day's weary march on the way home.

There are two points of view from which every individual man may be regarded, nay, must be regarded. He at once a product of the race, gathering up in himself the results of antecedent life and experience, and he is a unit complete in himself, himself alone responsible for all he is and does—a self-enclosed, separate being. The claims of solidarity and individuality will no doubt be adjusted, although no visible adjustment is effected in this life; for we find that both are facts, and we can ignore neither without falling into errors. In the case of the degraded specimens of the race, who inherit only evil and whose circumstances are all noxious, individuality and personality seem hardly to emerge; they seem simply unhappy victims, products, scapegoats of humanity; and the severest censor can scarcely conjure up in his heart any feeling towards them but pity. But their hour is coming; and we can well believe that in God's all wise providence the very bitterness and wretchedness of their lot may subserve their evolution into proper moral personality; for even now we know that many come to themselves under the crushing weight of sin and misery and at the swine's trough are first visited by true thoughts of God and of themselves. We need not try, however, to unravel the long, slow, intricate ways in which God leads human souls. Enough for us that we can plainly see that for innumerable of our fellow creatures this little life is no proper sphere of final and complete probation; that it is, and can be as it is, nothing but a dream, a stupor and a delirium; not only totally inadequate to decide eternal destiny, but inadequate even for the development of reason and self-consciousness, or bringing to pass that inversion of the spirit of a man upon itself which is the indispensable condition both of morality and religion. If God them truly loves every man with an infinite love, and attaches to every human soul a priceless value, and His spirit broods over every spirit, however dark and chaotic, with an, ineffable yearning hope and patient pity, there must be light and love for all beyond! With what peace and tranquillity of heart we can survey this dark abyss of human life when we view it all in the light of God's eternal mercy, and consider that this little life on earth is related to every man's eternal being as the dream of infancy to our whole career, or as a dark day of winter to the revolution of the seasons of the year.

§ 6. In the above paragraph we have indicated that the emergence of Christian piety in a human soul is dependent on certain natural conditions—that the latter failing, it is as vain to expect it as to expect the fruit of the vine in arctic regions. This statement, properly qualified and explained, conducts us to a new line of argument in support of our position; for, in many cases, these conditions are not supplied.

For some time back it has been a favourite theme to expand the Bible statement that Christ came in the fulness of the times—exhibiting how the previous history of the race had been a progressive preparation of the human mind and heart for the Gospel. Those who fondly dwell on this truth by no means deny that Christ came down from heaven, nor do they for a moment imagine that there is any contradiction in affirming the supernatural origin of the Gospel and its emergence as the ripe product of ages of development. Had Christ come a thousand years earlier he had come too soon, and his message would have vanished as too early blossoms do; and had he longer tarried the favourable opportunity of grasping the human reason had been lost. Had He come and selected India or China for the sphere of His manifestation, He had addressed himself to the blind and deaf, and had found no soil of apostolic souls in which His word could take root. It was necessary that He should appear in Judæa and die on Calvary; necessary that the Greek language and philosophy should have

prepared a mould for His doctrine, and attuned the human mind into affinity pith His message; necessary that the Roman arms should have civilized and unified the nations, and prepared a highway for apostolic feet; necessary that men's souls should have been wearied and made hungering and thirsting by long experience of the curse resting on all life. Only when the fulness of the times had come did God send forth His Son. But as it is with the race so it is with the individual. "The City of God lieth four-square, and the length is as large as the breadth." The laws which rule the whole of God's ways rule every part of them. Christ can come to no man except in the fulness of the time. Christ could not any sooner have come to Paul or Augustine, or Luther. There is ever a prepratory work of grace and of providence. There is a previous attuning of the soul, deepening of the soil of the part, ploughing up of the furrows of the mind, an inten- sifying of the moral consciousness, an elevation of the reason, an awakening and purification of the heart by sorrow and waiting; then Christ is formed in us, and the Son of God revealed.

There is a false supernaturalism which will know nothing of all this, and flouts the idea of the necessity of natural conditions and a historical development and evolution of religion, or to religion. Is not the Gospel to be preached to every creature under heaven, adapted to man as man, and therefore to every man just as he is, and whatsoever he is? Is not every man to whom the message comes even here and now bound to receive it? Do not facts witness that it finds entrance among all sorts and conditions of men in all stages of culture and civilisation Wheresoever the Gospel is received, do we not ascribe the result to grace alone? Must we indeed send the printing press or the plough first, and the missionary afterwards?

It is difficult to adjust matters here, because we cannot sharply distinguish between the natural and supernatural, nor have we any means of determining where one ceases and the other begins. God and Nature are to our vision fused and blended, and God's activity is not known by us otherwise than as the process of Nature. The action of the Spirit of God in us and on us is never known or traced by us otherwise than as an intensified activity within our mind and heart. We insist, therefore, on the plain fact that as Christ did come and could only come to the race in the fulness of a natural preparation and under favourable conditions, so is it even now with individual souls; and if we are to deny in the case of individuals the need of certain natural antecedents, we may as well affirm that Christ might equally well have come at any point of space or hour of time. It is not possible that the Gospel can be received by minds which are as undeveloped as those of babes even to comprehend its ideas, and whose language supplies no equivalents; or by such as have been for ages inured to habits of thought and ways of viewing all things, and forms of emotion which are as different from those of the Gospel as an ellipse from a circle. Nor need we hope to reverse all this and adjust their mental focus to ours, except by long and patient effort continued through generations, and by allying the schoolmaster with the missionary. It is notorious that where Christianity is seemingly received by unprepared peoples, it is instantly converted back into a transformed superstition, never fits their mind aright, and is ever in danger of being tossed away to leave them worse than they were. The Gospel has never yet found true lodgment in national or individual minds, unless it come in response to the cry of prepared hearts, "Come over and help us!"

We have been leading up to the assertion that in the case of many the favourable conditions for the emergence of Christian piety and the reception of Christ are not found, nor is the natural preparation ever completed in this life. Their hour has not come; and meanwhile the Gospel passes them by, finding no affinities in their moral and intellectual life. It is as rain upon the desert, or music to the deaf. "But is not this their sin and guilt; why regard it as calamity?" It is at once their sin and their calamity. The pre-Christian heathens were sinfully apostate from God, yea sinners exceedingly; and yet was their whole history a discipline of God's providence, preprint them for Christ, gathering up results through the centuries till the hour had come. So is it with individuals; and in dealing with them, as well as with nations, to God a thousand years are as one day. So many, through this whole life, scarcely open their eyes to the light of thought, or awake from the stupor and passivity of childhood; so many are immersed in wildest ignorance; so many grasped by error and superstition that time enough is not given them for self-emancipation; so many are made to hate the Gospel, and prevented even coming face to face with it, through the sins and errors of its representatives and the human incrustations hiding its true meaning, and thus become infidels by mistake; so many, even gifted minds, have to work their way by such intricate paths and painful circuits; so many have to take so long a journey into a far land, and sink so very low before they come unto themselves; so many sons of Ham and Japheth are there who have so great a way to wander before they can make the circuit back to the God of Shem: but is not the Father's eve upon them? Are their names not written in His book? They die and pass away from sight, when as yet the discipline of God's Providence and Spirit has achieved no definite result; but what are three-score years and fen in God's eternity? What a thousand years to God's patient mercy? Their passing by is no eternal passing by; it is simply God's wisdom and prudence, and the calmness of God who never hastens and never tarries: he knoweth that the fulness of the time will come.

A new conception here dawns on us of the true meaning of election and pretention. There is and must needs be in each generation an election of grace. There are those in every age who represent the ripest fruits of

generations of culture, who embody and express the culminating points to which humanity has attained in specific departments. They are the world's lights, leaders, kings, and priests; sources of life and inspiration, alluring men on wards and upwards, serving to all who know them as prophetic harbingers of day, revealers of the possibilities latent in every spirit. The election hidden in Israel and in heathendom who knew the Christ when he came, were simply the souls in which all the preparation culminated and in every nation and in every age the Gospel acts like a magnet, drawing the kindred spirits to its light. The regenerate are indeed privileged ones—a chosen generation—the elect of the earth; but elected, not to the eternal exclusion of all others, but in advance of all others, and serving to God as an offering of the first ripe fruits of redeemed humanity. There are in every age and nation those who are passed by, to whom the Spirit suffereth not to preach the word, but it is simply that their hour has not yet come. For every human spirit, here or hereafter the high hour of God's call comes: and there is not an hour in the course of time in which souls do not kindle up into a true existence, as God's voice pierces the recesses of their being. As the law which rules the movement of planets, determines also the shape and movement of the dewdrop, so the mighty purpose of grace which presides over humanity guides also every separate human spirit, and will not desert it through ten thousand waiting years.

§ 17. We proceed now to consider the ethical and religious effects of a real belief in the limitation of probation to this short life, along with its necessary implications and inferences; and it will serve us as an additional argument if we can succeed in showing that the traditional view bathes the spirit in a pestilential miasma. Fortunately it is not believed with a realizing faith, else it would convert the world into a madhouse and fill all places with weeping and wailing. It may well excite astonishment that so many good and true men who accept the traditional doctrine are well and hearty, marry and are given in marriage, laugh and drink their wine with a merry heart, and take a warm interest in politics, commerce, and art. They are not monsters of heartless depravity; but they do not realise what they say they believe, do not think of it except at wide intervals, have learned a trick of turning away from it as "a mystery" when it threatens to come in upon them too powerfully; and more than that, they have still in the depths of their hearts a faith in a divine love brooding overall existence, under which they shelter themselves, leaving the incompatible theory to look after itself and right itself some future day. But it behoves us with a very steady gaze to contemplate our creed, weigh its significance, and suffer its whole ethical effect to pass upon us; and if we do so, we shall hardly avoid the conclusion that a doctrine which wraps all life in deepest gloom and involves the wildest pessimism can be no part, either explicit or implicit, of the glad tidings of great joy which shall be to all people.

If it be true—and true it must be on the traditional view—that the overwhelming mass of all the myriads who have ever lived have gone down to hell forever, then the past history of humanity is the ghastliest of records.; We delight ourselves in the heroic story of ancient Greece and Rome, and our whole present existence is enriched by their achievements; but we are haunted as if by the spell of an evil conscience, thus sitting at a banquet and making ourselves glad with the tears and blood of souls. When we read the pages of Grote, Niebuhr, and Gibbon, and the old belief sends its hot breath over our face, we are startled as if we heard the tramp of armies of men marching on to eternal perdition. We have to turn away our eyes as if there were a lurid glare of hellfire on all the literature and works of art of the whole ancient world. I know that by means of all that ancient history God was preparing the way for Christ; but had those *individual* men and women no share in the blessing which they were used to prepare? Were they simply used as manure to prepare a harvest of blessing for us? The brain reels and staggers under the weight of an impossible belief.

But it is when we turn our eyes on the contemporary world, and realize the fact that, if grace is limited to this life, the overwhelming majority of the myriads now living will soon be in hell—it is then we realise the frightful character of the current creed. The mighty populations of India and China, and other lands, are simply pouring their torrents of souls into hell? We are surely then nothing but monsters of inhumanity. Beyond getting bread and raiment enough to keep death at arm's length every form of human interest and activity whatsoever, except evangelism, seems worse than vanity—even a kind of hideous wickedness. The man who earnestly busies himself with literature, art, or science, is infinitely worse than a Nero fiddling while the Christians burnt in their tar shirts. The extremest form of the ethical sentiment of what would be called ultra-evangelicalism is only irrational in not being sufficiently extreme. The only consistant Christians are the wildest fanatics; their shriekings are wisdom; they frown on all pleasure just and right; and those whose creed has made them tenants of lunation asylums, alone are tenderhearted and true. If it be even as men nave said, we must curse the day in which we were born, hate all existance, view human life and history as a huge error, and judge it to have been infinitely better that the world had never existed.

Let us bring the matter even a little closer to ourselves. Hell will soon have swallowed up the great mass of all who are alive! and of all with whom we are in daily contact! So has it been;. so will it be at least for this and many generations to come. It must then be an infinitely evil thing to have sons and daughters, and yet we do not (as same ancient people did) clothe ourselves in mourning when a child is born, no wild wail proceeds from us, although it is more than probable that a new victim of hell has been ushered into being. Why do we not shudder

with horror whenever we look upon a crowd? Why does not a sea of human faces send up a lamentable and exceeding bitter cry—not of sorrow, but of despair—from the depths of our hearts? Why is not every bride attired in sackeloth? Why does the bridegroom come forth from his chamber with a face shining like the morning light Were the secret effects of the common belief revealed, many a tragic tale would come to light—of mothers raining scalding tears over their sleeping babes, pitying them for the woeful earth into which they had come—of fathers standing over a sleeping infant son wondering in the bitter anguish of their spirit whether it were not good and a sublime act of self-sacrificing philanthrophy to quench the little life, and send his soul to heaven—aye, of frantic mothers and fathers who have done such deeds. A creed, logically involving such hideous suggestions, cannot possibly be true. No such pessimistic doctrine has ever been presented to mankind; and O! merciful Christ! as part of thy glad tidings! We cannot wonder that the joyful enthusiasm of the New Testament has passed away from the Churches, and that their atmosphere has become see of sombre and oppressive gloom.

We must be able to believe that God bestowed a great and precious gift on us in calling us into being, and be able to find the joy of our hearts justified when we rejoice over a new man born into the world; that is, we must be able to believe in an infinite and eternal love resting on the world, on all human life, and every separate individual life. We must be able to take a calm and rational joy in all the activities of men under the sun, as all co-operating to the slow but firm and sure evolution of the purpose of Divine love to all the sons of men; and must so believe as to be able to survey all things with the calmness and peace of God. We must be persuaded in our hearts that no doctrine can be a gospel which with inevitable logic and moral necessity wraps the heart in dismal gloom and dreariest horror of existence as accursed. But it does not seem possible to attain to this calm gladsome thought and feeling except on the supposition that the Divine mercy to men is not bounded by this little life, and the Divine purpose of grace does not exhaust itself within the fleeting years which hem our vision and form but a chapter of the eternal life of souls.

§ 8. We now adduce as a concluding argument that the extension of human probation into the future life is an inevitable inference from the universal Fatherhood of God as manifested in the universal death of Christ. There was confessedly a hard and stern logic in the strict Calvinism of the 17th century divines. They said that out of the whole mass of sinful and guilty human beings, all present before the divine mind, God had, for wise and holy but inscrutable reasons, selected a numerically definite number whom he purposed to save, and does infallibly save, gathering them out of the successive generations till the elected number is made up; the rest he passes by, and leaves to perish, having never had any purpose of grace towards them, Christ having made no oblation for them, as charged to execute the Father's purpose only, having no such intention. Nothing could surpass this doctrine for consummate logical finish, viewed, so to speak, as a theory of the moral universe. But shall we really pretend to believe that this is any longer the living faith of the Church? or pretend not to know that, while we slept and waked, it has passed away like an evil dream? Or, shall we say, It is indeed still held—only another series of propositions is written against it, which are also true, and which, although contradictory, only seem to us to be so; that these latter propositions are the more important; the former to be *held* but the latter to be *believed;* the former to be kept for theological purposes, the latter for all practical uses of life. Anyhow, men have decided to have their doctrines as loose unhewn stones rather than shelter them pelves under the savage and gloomy masonry of unsupplemented Calvinism. The doctrine of the present hour, so-called Calvinistic, is much diluted; and at risk of whatsoever logical incoherence, those who call themselves after Calvin claim right to affirm without qualification the universal Fatherhood of God and His equal love to all men, that Christ died for all men and every separate man, and that God unequivocally wills that all men should be saved. But Logic will master us, and the movements of thought and feeling will in no wise escape from its grasp. We must needs advance a stage further in our reconstruction. We cannot bring this new and better way of thinking into harmony will the ways of God in Providence and the facts of human life, if death puts an absolute limit to the possibility of salvation. Is God Universal Father—and summons myriads into a wretched existence of a few years without furnishing them either help or light, or once reaching a hand to shelter or bless them? Did God indeed love these generations of Patagonians and Tammanies even as Christ loved John? Did Christ indeed shed His blood for myriads who by no possibility could once hear his name all the days of their life on earth? Let us go back if we will to the stern attitude of those who pointed to these things as proof of God's eternal decree of præterition; but if not, let us not shrink from inevitable inference that here we see but a part of the ways of God with men, and that the message of mercy must needs resound in both worlds.

We find, then, the traditional doctrine arbitrary, fraught with difficulties of every kind, oppressive to reason, deadly to wholesome ethical feeling, destructive of religious joy and elevation of heart, beclouding faith, and wrapping all things in intolerable gloom. We reject it as a poisonous error and a parasitical growth; we abhor it is a falsehood against the love of God and the mercy of Christ; we tear it from our minds as the enwrapping of the mouldering garments of a superstition. We believe, in a Divine Love, which is from

everlasting to everlasting; in the Mercy of God, which endureth for ever; in a Divine Grace, bathing with sunlight the visible and in visible worlds; and that to the end of time the heart of God remains open as a refuge to every creature whom His hands have fashioned.

decorative feature

Part II.

§ 1. While the wide and rapid growth of the opinion which we advocate is notorious and visible to all men, and while we can see affinities with it and a secret movement towards it among many who may not give it formal acceptance, yet we cannot but admit that it has not a few abstructions to encounter before it finds a place among the accepted beliefs and operative convictions of the Churches. We therefore cannot regard our task as acconmplished without dealing with the difficulties and objections which are sure to arise in the minds of our readers, They are chiefly these:—

- 1st. That the doctrine of the limitation of the Day of Grace to this life has been the persistent belief of of Church, and held, not here and there, but *semper et ubique;* and that the probabilities are, therefore, all against a new-fangled notion which may belong to the sentimentalities of an enervated hour.
- 2nd. That the doctrine of salvation hereafter is not only without warrant in Scripture, but violently contradictory of the direct teaching of Christ, and of the whole trend and spirit of the warnings and exhortations of the New Testament.
- 3rd. That our whole contention is based on a relaxed view of the significance of the fact of the sin and guilt of men, and is vitiated, in its very blood and marrow, by proceeding from an erroneous idea of the relation between God and man.
- 4th. That we are simply endeavouring, under dictate of feeling and imagination, to get rid of difficulties by removing them to a greater distance from sight, while the real difficulty besetting the whole subject remains un- relieved; and are thus no better and no wiser than those who imagine a debt is discharged when a hill has been paid with borrowed money.
- 5th. That we teach a doctrine which is morally relaxing, and which, if ever it becomes generally accepted, will deal a deadly blow to religion, to earnest evangelism, and missionary enthusiasm.

No doubt ingenuity will devise other objections. Let them all be produced. No new idea can find secure lodgement until it has been sifted to the uttermost, and the creation ransacked for reasons for its rejection. It can not possibly be otherwise, nor, indeed, is it even desirable. At the same time it is not likely that any difficulties will be urged which are more serious than such as we have enumerated, nor any which have so great an inherent claim to consideration. While not all disposed to under rate the equipment of our opponents, we advance without any trepidation, well persuaded not only that we have a sufficient answer, but also that we can, in some cases, so answer as to convert an objection into an additional argument in our defence.

§ 2. Has not the Church in all ages held and proclaimed the doctrine that the opportunity of salvation is limited to this life? It would lead us beyond all due limits to enter upon a history of this doctrine; and, indeed, it is® necessary. We admit that the majority of testimonies are against us. We give due deference to the fact; accept it as a summons to wariness and a sevenfold renew of our position; and freely surrender whatever argumentative force it may possess. However, it is not the case that the doctrine has been either so rigorously or consentient held as is commonly supposed. The stern and rigorous formulating of it in the 16th and 17th century was a novelty; and the unanimity of two centuries of Protestantism has no parallel in all previous Church history Everyone surely knows by this time that a volume of quotations might be adduced from divines of highest repute in all the centuries in mitigation of the severe doctrine of the modern evangelical school, or in direct affirmation of that which we advocate. It admits even of fair question whether we are not putting an unduly severe contraction on the language of such documents as the Westminster Confession. Their words are to be interpreted in the light of the controversies of the time: and we sometimes better know the real meaning, not by asking, "What do the words affirm? but by asking, What controverted doctrine were they meant to exclude? It cannot be questioned that the compilers had in their Ends the Roman Catholic doctrine of Purgatory, and were not directly saying Nay to the belief that Divine Grace may follow into the invisible world such at least as here knew nothing of Christ, and who lived in such conditions as hindered even their emergence into the proper life of reason: and we might well claim such mild and genial interpretation here as is very freely accorded to other deliverances. However, let it be even as our opponents say. Let it be that we advocate a novelty. Is it therefore false? No one can have his eyes open to the signs of the times, can note the significant silence which has fallen on the pulpit and the feebleness and hesitation fit its inculcation of the old belief, or can have any acquaintance with modern theological works or popular religious literature, without perceiving that ideas such as we advocate are coming in upon the mind of the Churches through every pore. The belief has full possession of the Protestant Church of Germany, and has won the acceptance of nearly every German

divine of note—of all who are best known in this country, and whose works are on the shelves of every minister—of Neander, Tholuck, Müller, Nitzsch, Stier, Dorner, Schmid, Rothe, Martensen, Beck, Olsh ausen, and others too numerous to name. It is current over three-fourths or even a greater proportion of the Episcopalian and Nonconformist Churches in England It is with rapid strides possessing the Presbyterian and Congregational Churches of America. From the nature of the case,—from the fact that we have laid the dogmatic creed of the 17th century in our foundation stones and incorporated it with questions of property, from the rigorous interpretation of subscription which obtained till quite recently, from the very compactness of our discipline and organisation, from the traditional impatience of doctrinal dissonance and divergence which characterises us—new ideas will certainly find most difficult entrance into the Presbyterian Church, and there last of all find articulate utterance; and if the Presbyterian Church is thus shielded from some ills, it is also exposed to the deadly peril of becoming an anachronism and a petrifaction. Nevertheless, everyone Knows that the ideas to which we are giving utterance have a place in the Established Church of Scotland, whose ministers are blessed with a larger freedom and shielded by a broader tolerance than others; and have also a large unspoken acceptance in the other Presbyterian Churches of Scotland and in the Colonies. Let it be then that the doctrine which we maintain is novel, shall we therefore with impatient haste visit to with our poor anathema, and not fear lest we tab up arms against a larger truth which God is teaching us and do what in us lies to quench the Spirit of God? Without overmuch heed to tradition, let us weigh the matter on its own merits, and that with quietness and long-suffering patience, as those who much dread missing the truth or being blind to the day of their visitation While we know, if we but deal honestly, that the dogmatic structure which our fathers reared is becoming dilapidated and crumbling at the touch of our hands. It is vain to think that the dogmatic creed of Christendom is finished, and that God has nothing more to teach us.

§ 3. But, throughout the whole previous discussion have we not forgotten to take with us the Word of God? There the appeal must lie: and under its authority we must bow reason, imagination, and emotion. We are willing to accept this position: only, entering a not unnecessary *caveat*. we have found men, under this shelter endeavouring to impose a deception on their minds. If a man say, "Against such and such a doctrine my moral nature revolts, my conscience is outraged and stupefied by it, against it my reason loudly protests; nevertheless I find it in the Bible, and before this altar I east down my heart,' my conscience, and my intellect"; we may admire his heroism, but we must none the less declare that he Endeavouring to do what is a sheer impossibility, and entering on a course in which no man can persist without deadly peril to his soul. What he supposes himself thus to believe and accept, he does not believe and accept: it remains all external to his spirit, and weights it like a nightmare: and he might know that his fatuous efforts to attach it to his inner life is a perpetual drugging of himself with a lie, and a poisoning of the springs of his moral feeling. A man truly believes no doctrine except such as he loves, as his reason embraces with enthusiasm, and the conscience of his intellect assents to with a firm Amen. No man can possibly live divided against him—self saying Yea and Nay—affirming, under any external authority whatever, a doctrine against which all that is in him otherwise protests. However, to the Scripture let the appeal be made; and let it be allowed that any disharmony of the mind with it is to be ascribed to obliquity and perversity.

It is confessedly an arduous undertaking to establish doctrines by an inductive process of generalisation applied to texts: and the system-makers of former times were only half alive to the magnitude of this difficulty. There are outstanding texts which with great stubbornness resist harmonising with the central doctrines which divines have formulated. There are texts which, viewed apart, more naturally lend themselves to Arius than to Athanasius. Zealous defenders of the Protestant doctrine of Justification have allowed that there are passages which best conform to the Romanist view. It requires a stout Calvanist to crush into obedience the words, "Who gave himself a propitiation, not for our sins only, but also for the sains of the whole world." This is just what we might expect. The Bible is a collection of miscellaneous writings;. written by men of various mental habitudes and modes of Eight and speech; composed under practical exigencies to meet current situations; and the writers were thinking of serving any use rather than that of supplying a codex of proof passages. We believe in the real unity of the Bible, and that One Spirit dwells in it: but none the less is it an arduous task to reduce it to system and doctrinal unity. It were nothing astonishing could we hardly square every isolated passage to our view; and if this be found to be the case, can our opponents do any better? Can they, indeed, easily bring all Scripture into agreement with their view?

I have searched through all the Apostolic Epistles for a single passage which, either explicitly or implicitly, affirms that the eternal destiny of every man is decided at his death, and have been unsuccessful in the quest. There are many texts which without ambiguity affirm that there is no Saviour but Jesus Christ, and announce the inevitable ultimate judgment of God on the impenitent and unbelieving; but I find, at the same time, that the critical hour of decision is invariably associated, not with the death of the individual, but with the second coming of Christ. On the other hand there are passages which negative the traditional view, and teach the larger brighter hope; notably, two passages in the 1st Epistle of Peter. The text which speaks of Christ, who was put to

death *in the flesh, in the Spirit* preaching to the spirits in prison, is no doubt obscure, and has been variously understood; but it as naturally bears the meaning which its language immediately suggests as any other meaning and it may well be questioned whether it would ever have been found so hard of interpretation but for the dogmatic predetermination on no account to welcome a doctrine which leaves a door of hope beyond the grave. The second passage, however, (IV., 6) is altogether unambiguous, and will for ever resist all attempts at glossing. The reference is to the heathen who had spent their earthly life in sensual rioting, and who had died as they had lived. Even to the dead also, (says the Apostle) well as to the living heathen, has the Gospel been preached, that they might in their disembodied conditions be quickened to spiritual life in Christ. All the weapons of exegetical sophistry will not empty this Apostolic word of its explicit declaration; and, fortunately, the Revised Version has restored it to English readers, without a gloss.

It is when we turn to the words of the Lord Jesus Christ that our view encounters the greatest amount of difficulty. The Parable of Dives and Lazarus seems very naturally to lend itself to the common view; and it is also suggested by the tone of haste and urgency with which the Saviour summons men to flee from coming evil, to embrace a fleeting opportunity, and to enter by an open door while yet it is open. If our view once generally enters into the hearts of preachers, are there not many words of Christ which their tongues will no longer be able to frame themselves to utter? we have to bear in mind that the forms of speech which belong to the popular preacher, bent on an immediate result, fired with a sense of the urgent importance of rousing men to action, are necessarily very different from those of the closet, of speculation, and theology, and which as naturally come to us when we are bent on grasping objective truth in general form, and simply for purposes of thinking; and Christ habitually occupied the former position. There is one passage (Luke xiii, 23-4) in which the Saviour expresses a kind of impatience of the eager handling of such questions as we are now discussing, and turns inquisitive minds away from them to moral activity and religious life—an ever needed warning! For all such enquiries are simply mischievous when prompted by intellectual curiosity, and unless prosecuted with the earnest moral aim to retain intact, faith in God, love to man, and joy in existence. True it remains always that the more earnestly we realise the sin and guilt of men and the misery of their conation as lying under the wrath of God, the more vividly we are in sympathy with the earnestness of God's love, the more keenly we feel the urgency of the moment in which the Word of God is flashing its light upon their minds and the Spirit of God knocking at the door of their hearts, and bethink us that this, even this, may be the highest moment in their moral history—the more naturally shall we speak as Christ spoke; and, as in the case of Christ, all these thoughts and emotions burned with an intensity of flame beyond our conception, we can understand the tone of His popular preaching. But theological speculation also claims its hour. It is the very love of humanity which Christ enkindled in our hearts that raises into quenchless eagerness the speculative question concerning the eternal destinies of men; but it is one which Christ never set himself to answer as a mere question of theology, and for which we must seek an answer, not in isolated words falling from his lips in the urgency of practical zeal, but from the relations in which it stands to the fundamental significance of the Gospel, especially as it is given us in the Apostolic exhibition of the meaning of His finished life and work. It is no doubt a difficult task to retain in equilibrium the urgent fervour of the practical preacher and the calm of the religious philosopher who has lifted himself up out of moral fever. On the wings of large thoughts rising into the sweet peace and patience of the Eternal; but it is an ideal attainment towards which we must aspire.

On this, then, we must fundamentally base our position that the doctrine of the eternal decision of the destiny of all men at death will in no wise fit itself into the view of the moral universe taught us in the Gospel; nor agree with the great purposes of God towards humanity, with the significance of the mission of the Saviour, and facts of God's Providence. It violently clashes with the doctrine of the universal Fatherhood of God; with that of the infinite value of every separate soul, and the love which God bears to each spirit which he summoned into eternal being; with that of the death of Christ for all men, and the destination of the Gospel for all men in all space and time. It is discordant with the Biblical conception of the magnificence of God's gracious purpose, so large and so vast as fitly to summon the whole creation to jubilant gladness, and make our being an ever-during hymn of praise to Him who gave us the glorious gift of conscious life. That doctrine cannot be Gospel which has no glad tidings for wide humanity and for every son of Adam in all the wide bounds of the creation—which could only be a summons to perpetual tears and wringing of hands over existence as a woeful curse—which seems to enwrap all things in deepest gloom—which makes the very words "God is love" die upon our lips or choke us while we speak—and which turns into satire the words "God so loved the world," and "Who wills that all men should be saved." As in the confusion of nature and society we are wont to grasp large central principles, with patience waiting till all things group themselves around them and exceptions and anomalies adjust themselves; so must we do here; not struggling over words and letters and isolated texts, but taking our stand at the heart of the Gospel message and waiting till all things fall into order beneath its light. It will now be understood why we have declined all minute exegetical handling of separate texts; who does not know by this time how little such procedure ever effects?

§ 4. It will sometimes happen that a doctrine which, viewed apart, is comparatively innocent and entitled at last to respect and toleration, will be found serious as symptomatic of radical doctrinal divergences and necessarily implicating them: and so, when searched out, is found only a snare for the simple and ignorant. May it not be so here? May not this doctrine of future probation involve a radical change of view in regard to the nature of God, of sin, of justification, and atonement? And just as the skilled eye of the physician will discern in a twitch of a muscle, or a cast of the eye, or the colour of the nails, signs which reveal a serious malady of the system and presage deadly disease, so it may be that in this modern doctrine we may have to read signs of serious relaxation of moral health or of incipient Apostacy from living Christianity. Such a line of argument might be skillfully led; and like the insinuations of slander, not the less effective that it is equally difficult to establish refute.

Certainly it does not at once appear that our doctrine justifies such suspicions. We advocate nothing more than an extension of the time during which the mercy of God endures for repentant sinners. Did we maintain that all men are necessarily and certainly redeemed as by a mechanical process, or that anyone either in this world or the world to come is saved apart from Christ and without repentance and faith, it were indeed a complete subversion of the Gospel. But every single truth hitherto believed may remain intact: how can they be affected by the consideration that the Day of Grace endures for a longer period of time than it has been usual to suppose?

As matter of truth and fact, however, the modern doctrine does not stand in such isolation, but for the most part, although by no means universally, is found as a part of a method of theological thinking possessed of a new physiognomy: of which, the outstanding features are that it substitutes for the idea of God as King, that of God as Father as the all-determining conception of Deity, prefers the ethical to the juridical conception of the Atonement and inclines to the Romanist rather than the Protestant view of Justification.' Further, it is not to be denied that "the whole Unitarian, semi-Unitarian, and Humanitarian views of the Gospel exhibit instinctive affinities with our doctrine and move towards it with avidity; while infidelity simply wonders how any human being for a single moment ever could think otherwise. We are surely ample enough in our acknowledgments.

In the intricacies and complications of thought, and its stragglings and crossings we are often forced into forms of Syncretism which we would fain avoid. The effects of hostile criticism in course of time tell on the thought of the Church, and there emerges a crisis which the party of movement seem to make common cause with the enemy against the truth: nor will it ever be possible to avoid thus furnishing an argument for the disingenuous A gloomy error had spread itself over the fair face of the Gospel, which has had the effect of heaping up diffi- culties for earnest minds, obstructing the way to Christ, alienating sympathy, and nourishing the roots of unbelief; and it can scarcely be considered a strange thing if those within, who point the finger to the error and raise a protesting voice against it, find themselves in league with not a few who are without, or in sympathy with such as the rigour of an impossible orthodoxy had driven into the ways of heresy.

I am prepared to make a further admission, and allow whatever weight it may possess to fall into the opposite scale. Within the circles in which the doctrine of future probation is grasped with keenest avidity, and in their religious literature, I do not find evidences of a Christian piety which has the pathos, the depth of root, the holy fire and glow, the divine stamp, which meet me among the Puritans, among whom the repudiated doctrine was very firmly established; nay, not seldom, I find among the former a form of piety which hardly rises above such as may very well be nourished from the soil of Unitarianism, and might as well have been learned at the feet of Plato.—whose pages indeed are far more Christian than many modern sermons are; and I say within my heart, as I read or hear This is well and good, but it is not Christianity. The fact, of which I make this candid admission, is embarrassing, and yet it may be met. It is characteristic of our times that intensive religion is rare, while the leaven of Christian feeling is more widely diffused than at any previous period; and we seek almost in vain, in any quarter for that form of experimental religion which glows like a divine fire in the pages of an Owen—equally in vain among those who hold or reject the doctrine of final decision of destiny at death, if a contrast is to be drawn, it is between such as hold or refuse one and the same doctrine at the same time, and under the same conditions of life and thought. And will anyone indeed, maintain that an admirable form of Christian piety emerges in those churches which are nourished by those constant appeals to selfish and sensuous terror which the traditional doctrine logically makes im- perative? For the most part, there emerges the poorest and thinnest form of ethical and religious life, so miserable, that with sickened souls men turn from it to the types of manly virtue furnished by Greece and Rome. If it come to a decision on such considerations, it may be safely maintained that the ethical and religious spirit of Maurice and Robertson will bear comparison with that of Spurgeon; that Farrar and Plumptre represent a higher form of human reason than Talmage; and that Norman MacLeod, T. Erskine, and McLeod Campbell will not loss when contrasted with Moodie and Sankey. But all reasoning which turns on such considerations is more or less fallacious, and on such lines we can reach no results. Human nature is very intricate; the cross currents of influence determining the spirit and life of each generation defy calculation; and we must therefore be content to seek truth, and having found it,

suffer it to look after its own works. We must also remember that every new idea has a certain dislocating power, and is thus ever. Exposed to suspicion on moral or religious grounds.

We must, however, press a little closer before we leave this point. If it can be shown that the doctrine of future probation stands in organic relation with radically unsound theology, the objection would be a serious one. We are prepared to hear this alleged, and possibly in some such form as this, "It is clear to us that you have started from an erroneous point of view. We have to fix our minds on the truth that men as sinful and guilty are deserving of God's wrath and curse, whereas your mind is ruled by the view of men as unhappy victims of misfortune deserving only Heaven's pity. According to the Scriptures the world is condemned, and men are arraigned criminals, whereas to your mind the world has been visited with calamity, and men are unhappy. Pietism may be nourished from such a root, but piety nevermore nor any religion having the holy stern glow of the New Testament. It comes, therefore, natural to you, and we can trace it throughout your reasoning, to think of God, not as a holy and righteous judge, but as infinite good nature: to be averted from the conception of retributive and vindictive righteousness: to view salvation only as a process of moral education: and to consider Christ as a great moral force bettering men by a kind of attraction and assimilation. But we shall not be deceived. This is corruption of Christianity in its very marrow, and the Church which permits this leaven will find itself a *caput mortuum* in one generation." We admit that this would amount to a formidable impeachment, did it only recount what is true, and were there foundation for the assumed contradiction of viewing God as King, Judge, and Father, and man as at once a criminal and an object of pity; but why put these thoughts in mutual exclusion? We admit that there are forms of theological thought and argument against which the above were spoken with justice and force; but we fail to see how it bears against one who holds that the door of mercy lies open for a thousand wears or any number of years more than against one who holds that it lies open for three score years and ten. Is a principle altered simply by lapse of time?

We wish, however, to have no misunderstanding. Although the doctrine we maintain has its own proper footing, we believe at the same time that it does stand organically connected with a restoration of the conception of the Fatherhood of God to its rightful place, and is nourished from that root. Therein we glory. We are Suite prepared for the controversy resolving itself at last into one of Theology Proper—that is, the proper view of the Divine Nature and Attributes. Strange that it should still be a question whether we have been thinking rightly about God! It is clearly a probable issue that any change in the conception of God may carry with it a change through the whole theological seam. If any opponent finds comfort or arguments in our admissions, we do not grudge it; but surely no one thinks that the Christian doctrines have received their final formulating.

§ 5. It will next be said that we have permitted our-selves to become the victims of imagination and feeling, and have been seeking relief from dark and painful thoughts, on which we have dwelt so long as to produce morbidness and paralysis of the intellect: that finding a certain belief insupportable, we have made haste to put wool in our ears and close our eyes: that we are deluding ourselves, and have even yet to meet the dreadful truth in all its sternness. We expect to be addressed in words to this effect: "The overwhelming fact is,—dark and enigmatic we admit—that we all are arraigned criminals before the Righteous God, and justly exposed to the Divine wrath. This mere fact presents to human view the sharpest possible contradiction to the ideas of God as Love and as Father; for we say ire would never have permitted such a moral world to exist, or *we*, if armed with the resources of Godhead, would find a universal remedy. *The* great difficulty stands unrelieved on any and every theory alike. You object to the idea that the eternal destiny of men should be decided at death, and would postpone the decision into the remote future: but how know you but that even then the mass of men may reject the grace of God? aye, but that every single soul which lived and died in sin will do so? Your oppressive difficulty will meet you again after the lapse of any number of years you may fix, as stern and awful as now when you say it wraps the universe in gloom. Do not imagine that you have a specially pitiful heart, or that we do not feel as much if you the illapse of waves of darkness as we march through this awful world of moral evil: what can any of us do but bow his head, each man confessing for himself that God were just did he cast him from his presence, each man sheltering himself under the mercy of Christ, Content to leave the mystery of each man's destiny with God, who can do no wrong, and will yet vindicate all his ways, we know not how."

To such well-meant remonstrances we can but reply that they in no way meet the position. I have so addressed myself many times, earnestly beseeching my mind to rest and be at peace; but all to no purpose. The matter will not thus wrap up, and go to sleep. We admit, of course, that notwithstanding all theories we can frame, there remains the dark riddle of the existence of evil in the universe: the one great moral enigma into which all others at last may he resolved. We have also no kind of answer to the question which might be propounded if only one soul were lost, 'Why did God, who foreknew the issue, summon that soul into' existence?' We allow that when all has been said, our wisdom is "to trust in the Lord and not be afraid," and go forth to duty leaving the burden of the universe to Him whose it is: and there is indeed a look in the blue sky, a voice in the sighing of the summer wind, a beam from the Cross of Christ (above all translation into dogmatic

speech) that stills the stormy heart into peace sooner than all philosophy and theology and happy are they who are so framed as to be thus content! Some of the most excellent of the earth are to be found among them. But our protest has been all against the super-added difficulties: our effort, to banish the clouds, earth-made, which darken the regions which the Gospel Sun was meant to brighten: our contention, that notwithstanding the fact of evil, there is yet in very deed a Father, a Gospel, a Salvation for all men: and our aim, to hold this conviction fast, wrenching it from the grasp of a doctrine which is strangling it. The considerations which we have advanced in the previous part come back upon us with the rush of an armed host. It is sheer impossibility that the ways of God with all men are finished here, in this short miserable life which God in his providence makes so light of,—if, indeed, He is Universal Father, bearing an infinite love to every soul, and gave His Son a propitiation for the sins of every child of Adam. The soul can bear a moral mystery; but it is suffocated by moral and intellectual contradictions. It can bear the burden of its ignorance; but it is crushed to the dust by a positive faith which has to grapple with a glaring contradiction in facts of human existence—a faith which tells us that a divine love girds all human life as the light girds the earth, and facts which declare that God regards immortal souls as dross and off-scourings; and facts do declare this, if this pitiful life determines eternity for all men.

It behoves such as venture on the sort of remonstrance we are considering, to take heed lest they be not practising a deception on themselves. It is an enviable position so to immerse heart and mind in practical life as to leave no time for painful speculation, and ever and anon as dark questions cross the mind to waive them away, saying, "How unsearchable are His counsels!" But let not any one affect this attitude to whom thinking is a necessity of life, and in whom once the demand has been felt for reconciliation of his reason to the Gospel, as well as his emotion and his will. There are various ways of purchasing a delusive peace at the peril of our souls.

§ 6. We come now to consider an objection which although as mere argument of little moment, may yet really prove the most stubborn we have had to encounter. The importance of preaching the Gospel, of planting Churches, of supporting Missions, has been largely based on the doctrine that men are perishing in their sins, and that death being so near, our only opportunity of saving them will soon be gone. But if our doctrine be true, may we not cease from this hot haste and take things more easily? Ought we not, however, to be very suspicious of a doctrine which tends to make us less earnest and much more easy in regard to the conversion of sinners? And may we not surely predict that the modern doctrine will be used by tens of thousands as a spiritual narcotic?

We can well suppose that the doctrine for which we contend may be so handled as to be injurious. If a preacher were found taking pains habitually to inform his audience, that although they sent no missionaries, the heathen were in no danger, and although our friends died, in impenitence they would not be eternally lost, and we need entertain no such alarming thought, he would certainly work evil: and such blockheads will be found—mere theological speculators, wanting in direct and simple practical earnestness, so empty in head and heart that they can only propound negations. But it does not follow that there is not a wisdom which can use our doctrine for the nourishment of zeal, as well as for comfort and edification. We cannot for a moment hide from ourselves the fact that many will use the doctrine of future probation as a soporific and will so drug their own hearts and those of others with it that they will more lightly lead worldly lives. "Let us go on to sin, inasmuch as grace is so abundant and God's long-suffering so vast!" But this inference was long ago drawn from the mercy of God: and is proof only of the madness and perversity of the human heart. But for many reasons we must open up this matter at some length.

(1.) It is a dangerous thing to determine truth and error by hypothetical inferences as to what the doctrine propounded "will lead to," either in the way of belief or of conduct. This is the favourite logic of a timid conservatism, theoretically vicious, and a thousand times put to shame by results. There is a faith which is full of unbelief in truth and in the power of the truth. We may rest assured that if any doctrine is true, its effects can never be prejudicial; and that if any belief be false, it can work only evil, and that continually, although the temple of God may seem to have rested upon it God's universe is so constructed that the Good and the True are interwoven, as also misery and lies. "We have simply to concern ourselves to find what is true, to hold it and speak it: God will provide the rest: and we may be certain that every true thought is a tree of life. When we are dealing with an idea which (being not all false) has in the past nourished much good, and are bid part with it, it is natural to fear that the good will also perish. But we need not fear: we shall not lose by paring with the right hand or the right eye, at the bidding of Truth. Enthusiasm for truth, and unlimited faith in it will prove a safer guide than our blind and narrow utilities.

(2.) From the way in which some permit themselves to speak of the dangerous consequences of the modern doctrine, we may infer their conviction that the traditional doctrine has been extremely useful, has exercised a wholesome inspiring influence, and has powerfully aided in the spread of the Gospel. Now, we do not deny that the earnest belief in the shortness and uncertainty of the Day of Grace has exercised a solemnising effect and has quickened zealous activity. Were it not so, men well surely monsters of insincerity. Nor do we deny that its

repeated enunciation may have awakened alarm in some careless minds and aided in their conversion. At the same time, we think that the practical value and efficacy of the idea are much exaggerated. It cannot be the proper nerve of religious earnestness, but at best a subordinate support of it: nor can a mere cry of alarm do much in converting souls. A zeal for souls which withers away at the thought of future probation never really existed; and an anxiety to be saved which disappears at the suggestion of mercy beyond the grave, never really had any place in the mind. But have those who are so concerned about the effects of our doctrine seriously considered the effects which are being wrought on the minds of men by *their* doctrine? Are they aware of the extent to which it has stifled all faith in the God of Love and Mercy? Do they not know that it is creating utter weariness of the Gospel as most veritable bad tidings, and no better than a mockery of the sorrows of humanity? Let them go down among the wretched and elicit the thought of their hearts, and they will hear themselves thus addressed: "Here are we, by the millions, born into this harassed, miserable life, for saken of God and Man, left to live and die like beasts or worse and you come with a message which announces that God is the Father of an Infinite Mercy, and will after a few days of *such* existence gather men by the myriads into the lake of fire—and you call it Gospel!" Have we, indeed, no eyes to discern how many many sculs the old doctrine is making miserable, despairing, embittered, haters of life, and disbelievers in God and Man? Have we the audacity to speak of its efficacy when we know that it has practically ceased already from pulpits as effete and a mere stupefying of the minds and hearts of pen? What preacher uses it spontaneously, and not rather under a sense of external compulsion?

Let us bring the matter before us as vividly as possible in concrete form. Let us suppose a missionary landing in Madras, or Calcutta, or Canton. There he is, Bible in hand, in a population of half-a-million of souls wholly given to heathendom. Let us suppose the thought now to arise in his heart (and how can it not arise?): "These great crowds of men and women will in a few years be all swept into hell, although they could not have lived otherwise and no light ever reached them." Will that thought nerve his spirit? It ought to paralyse his spirit and wrap his soul in black despair. And let us suppose he announces himself to be the herald of the Father if Spirits and the God of Love, bringing the glad tidings of great joy which shall be to all people, and at the same moment let him give faithful orthodox answer to the inevitable question, "But what of all our ancestors who Save lived without ever hearing your message, and where are they, and had God no mercy for them?" Will he not feel like one caught red-handed in self-contradiction, and that he has himself made the acceptance of his message impossible? It is well when one can speak on a matter of this kind from some personal experience of human life, and not simply, as it were, out of books. Let us enter this garret. It is clean and tidy, although very poor and bare. An aged woman, whose make indicates that she was once powerful, sits cowering over a few embers in the grate, stretching out her bony fingers to catch the heat. There is a hard look on her face, partly also one of hopeless resignation, as of one who had shed all her tears. Talk with her and elicit her story—tragic, but such as life is made of. "Have you been long a widow?" "It is thirty years or more since my husband perished at sea?" "Was he a good man?" "Oh, yes—he was End enough to me—but like other sailors." "Were you left alone?" "No, I was left with three little boys." "And where are they?" "Perished, too, at sea, sir. Oh, sir! I toiled and toiled to bring them up. I washed, and scrubbed, and mangled, and wore my fingers hard and my back bent. They grew up like other wild lads about the place; nothing could keep them but they, too, must go to sea, and they are all drowned—drowned; and I shiver in the wild nights when the wind makes the window rattle!" and she stretched out the bony fingers to catch the heat from the grate, as if it were the last spark of gladness left on earth. "And do you think they were prepared to die?" "They were not bad lads, but just like the rest—brave sailor lads that feared nothing and never thought about dying." As she looked hard at me, felt a fierce choking in my throat, as the orthodox creed suffocated me and made me speechless. What possible consolation for such an aged stricken heart, unless I could tell her that the mercy of the Lord endureth for ever, and that God makes so little of this present life because it but an hour in the eternity of his love? The efficacy of the old belief! the danger of the new! Oh, men and brethren!. by the mercy of God, by the love of truth and by the sorrows of Christ, let us tell no more lies. Oh hard, relentless Orthodoxy! Have pity! have pity the tens of thousands of souls around you sickening into speechless Atheism, and yet longing for power to believe that the world has a holy, righteous, and merciful Father.

(3.) There is surely much error abroad concerning the true nature and proper source of enthusiasm for saving souls. Let it not be degraded into a morbid nervous anxiety to prevent men suffering pain in a future life. It is admitted by all that the Gospel of Christ in an astonishing manner kindles in hearts the enthusiasm of humanity; and it does it somewhat thus:—When a man has been led down into the world within himself, when in true self knowledge he has seen and felt that he is a lost son of God, and in a true repentance has poured out floods a tears over himself as if a great river of sadness were coursing through his heart.—this humility becomes only the reverse of a boundless exaltation of his consciousness and he becomes henceforth of sacred value in his own eyes, and walks forth among men as a son of the Eternal King. When, in the uttermost abyss of sin and misery, he discovers that he is yet the object of the infinite concern of God, and finds near him a

forgiving and healing mercy, with a strong pathos in it, and a wealth of pity and bestowal which astonish him as a revelation of a possibility in the universe above all that had entered into his heart to imagine,—then all human existence becomes sacred in his eyes. Such sort of experience is the birth of the Christian love of souls; and, indeed, it has no other. Are not all men sinners? Are they not all lost sons of God? Is not that Love also waiting for them? The love with which Christ loved the world and gave Himself for it is reproduced in our hearts; and we are prepared to go forth as the heralds of His message, as the channels of His grace, as labourers bringing to pass the eternal purpose of His heart towards men. As there is no source from which reason can derive moral laws but the conviction of the worth and dignity of Moral Personality as the pearl of the universe; and as there is no source of moral enthusiasm to revere these laws as sacred and do them except reverence for Humanity as an end-in-itself; so also is there no source of the Christian enthusiasm for the saving of souls but sympathy, learned in an experience, with the boundless love of Christ for men and His sacred devotion to rescue them and bring them home to God; nor will anything nerve men to endure sorrow and make sacrifices but the inspiration, thrilling through brain and heart, that comes from feeling ourselves servants executing an infinitely great purpose brooding over all the destinies of all men, and which is the expression of a love bright as the sun, high as the heavens, deep as the foundations of the earth, enduring and stable as the Eternity of God. Every other form of zeal is little else nervous excitement, wasting the spirit; flaming Eh it maybe in spurts of fire, but leaving behind a sense of exhaustion and desolation; in its blind eagerness, divorcing itself from reason and ignoring whole departments of human life; so much in haste, that the great message of God tends, in its hands, to become a cry of hysterical imbecility. The true zeal for souls doth not cry nor lift up its voice, but in holy quietness and the patience of hope, labours and prays and suffers: is calm rational, and perceptive, resting in the assurance of a divine purpose which we may all aid, but can never defeat.: in peace and the largeness of its thought, goes forth to form a league with whatsoever things are good and pure, and noble, and true, and beautiful, embracing all existence and all human life within its grasp. If it seems silent, slow, and over quiet, it is so even as God is so, whose silent but ever heedful, slow but never ceasing, quiet but everduring mercy broods over every life; it knows itself in league with Him who has eternal years wherein to work, and whom all creation serves.

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Conclusion.

This, then, is the sum of what we teach and believe: As a divine purpose of grace has, from the beginning, brooded over *humanity*, watchfully guiding its entire course, pressing into its service even the sins and frowardness of men,—never despairing, but with patient pity and holy love pursuing its way, neither hasting nor tarrying—through dreary periods scarcely giving any sign, yet ever anew in ripe hours revealing its watchful presence—now pushing men with the hand of righteousness and anon lifting them up in pity—ebbing and flowing, following paths whose orbit passes beyond our vision, yet ever pressing, forward towards the goal of the Kingdom of Heaven; even so also does a divine purpose brood over *every single human spirit*, pursuing precisely similar ways: for to God humanity is as one man and one man is as humanity—the evolution of human history but as the story of an individual life, and the guidance of each spirit in its entire moral history as great a concern as the story of the race. Thus will the end of the ways of God furnish solution of the theoretically insoluable problem of solidarity and individuality, and reconcile the contradiction that each man born into the world is a product of the race and also a self-enclosed spiritual being; and show to us how each man is a son of the Eternal while seeming to be a chance product of cosmic forces, tossed on the world's shores by the waves of time. The thought is very great, ravishes the heart with joy, and stills it into peace, and seems worthy to be spoken so loud that all the world should hear. A thousand spoken and unspoken objections against the Gospel of Christ vanish before it like night owls at the rising of the sun. A bright light seems at once to spread itself over all history all human life, and all the labour that man taketh under the sun, the most ignorant, depraved, and abandoned human beings seem now worthy of our love and care; the glory and pathos of Eternal Mercy shields them all from contempt and reprobation; and over every life, even although ushered into dreariest forlornness, we can be glad because a new man has been born into the world. Now, as we look up and forward, our eyes see "a rainbow round the throne of God,"—formed by the bright light of eternal Love shining through the tears rained over all the tragedy of this mortal life. "We know now that no prayers, no tears, no sorrows, no labours for humanity can ever be lost: that all the workers of all the ages have been co-operating to realise a purpose sublime beyond all thought of our hearts, and will rejoice together at the great harvest-homo of God. Now can we understand how it is written: "Proclaim among the nations that the Lord reigneth! Let the heavens rejoice and let the earth be glad: let the sea roar and the fulfill thereof: let the field be joyful and all that is therein!" Make a joyful noise unto the Lord, all ye lands. Serve the Lord with gladness, and come before his

presence with singing." "Break forth into joy, sing together, ye waste places of Jerusalem; for the Lord hath comforted His people, He hath redeemed Jerusalem. The Lord made bare His holy arm in the eyes of all the nations: and all the ends of the earth shall see the salvation our God." Now, with the assent of all that is in us, can we join in the angelic hymn, "Glory to God in the highest, on earth peace, and goodwill to men."

Oh Christ! Son of God! how great was the thought of Thy heart towards all men in all the bounds of space and time! Lift us up into its light: suffer us to feel its pulsations in our hearts: and let us comprehend its height, and depth, and length, and breadth!

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Front Cover

Report on the Eruption of Tarawera and Rotomahana, N.Z..

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Map of the district affected by the Tarawera eruption

NOTE.—Owing to a misunderstanding the plates for the report have been numbered in an order different from that in which it will be necessary to refer to them. All references will therefore be made according to the pages which the plates face.

Report on the Eruption of Tarawera and Rotomahana.

IT may he well to state briefly the cause of the delay in the publication of the present report.

At the request of the Hon. the Minister of Mines the writer visited the scene of the eruption shortly after its occurrence, and remained in the district for some three weeks. Owing to the wintry weather, and the difficulty of travelling over the wide area of ashes converted by rain into soft deep mud, the remoteness of the scene from European settlements, and the distance of the mountain from any practicable camping-ground, it was not found possible to ascend I the mountain or investigate in necessary detail the characters of the disturbance. Many points essential for the correct interpretation of the eruption had to be left undecided, and the report was therefore postponed till the summer, when explorations could be more readily carried on.

During the past summer six weeks were spent in the district, either camping at various points on Tarawera or in other parts of the area a affected by the eruption, including the agricultural districts along Be Bay of Plenty. The present report gives the results obtained, and will be arranged under the following beads:—

- The Taupo volcanic zone.
- Geology of Tarawera and Rotomahana.
- Premonitory indications of the eruption.
- The eruption.
- Nature and position of the vents formed.
- Nature and composition of the ejected matter.
- Distribution and effects of ash.
- Summary and conclusion.

I. TAUPO VOLCANIC ZONE.

The Tarawera Mountain, the scene of the eruption, which is the subject of the present report, lies in the tract of volcanic country which was named by Hochstetter the "Taupo zone." This zone stretches from the south-west of the great volcanic cones, Ruapehu and Tongariro, in a north-easterly direction to the Bay of Plenty. A line passing through Ruapchu and "White Island has a direction 38° east of north, and may be taken as the line of greatest activity at the present time, and as indicating the general direction of the Taupo zone.

Upon this line are situated the chief volcanic cones of the district, and fully half of the hot-springs, &c., for which it is celebrated.

It should be noticed further that the line is parallel to the general direction of the mountain-ranges stretching from the neighbourhood of Wellington towards the East Cape. The same line is continued in the South Island in the chain of the Southern Alps. It is worthy of note that in the opposite direction a submarine ridge runs from the East Cape and Bay of Plenty along the bottom of the Pacific Ocean, in a north-north-cast direction, through the Kermadec Islands, and far as the Tonga group. Both these groups of islands are of volcanic origin, and include vents which have been active within recent years.

The islands of New Zealand and the submarine bank to the north north-east may be taken to indicate the position of a band of corrugation of the earth's crust, and the line of activity of the Taupo zone as a line of dislocation or fissure parallel to the axis of this band,

The boundary of the Taupo zone is clearly defined to the east by the high ranges of the Kaimanawa and Whakatane Mountains lying on the right bank of the Rangitaiki River. Both ranges consist of Palæozoic slates and sandstones supposed to be of the Devonio carboniferous age.

To the west the district is bounded by the volcanic table-land which stretches from near Lake Taupo through the Patetere country, and is continued northwards as a mountain-range past Te Aroha and the Thames as far as Cape Colville. This table-land is composed of light-coloured tuffs and volcanic breccias with pumice, considered by Hochstetter to be trachytic. In the Puketapu Hills, to the vest of Lake Taupo, the Palrcozoic slates (Maitai) crop out below the voleanic tuffs, and may be traced at various points to the north.

The table-land gives the direction of a second axis of elevation in the North Island, having at first a northerly direction, though to the north it curves round somewhat to the west as in the Cape Colville Range and the Great Barrier Island, and the parallel ridge which forms the peninsula north of Auckland. The direction of this axis is continued by a submarine ridge which runs out along the bottom of the Pacific towards Norfolk Island and New Guinea.

It will be noticed that the chief outbursts of the Taupo zone have occurred in the angle between this axis and the north-east axis already Preferred to. In all parts of the world the Tertiary eruptions have frequently appeared at angles of powerful flexures or dislocations of earlier rock-masses,

See King: Survey of 40th Parallel, I., p. 606.

as appears to be the case in the present instance.

The western boundary of the Taupo zone is not clearly marked along its whole extent, but almost all the volcanic cones, hot-springs, &c., of the region are confined to a belt of country having the direction of the line joining Ruapehu and White Island, and some twenty-five miles in breadth. (See Index-map, Map I.)

Ruapehu-White Island Line.—In describing the Taupo zone we will take first the various centres arranged along or near the main line stretching from the great cones in the south to the active solfatara of White Island in the Bay of Plenty.

To the south of Lake Taupo we find the lofty volcanic cones of Ruapehu, Ngauruhoe, and the Tongariro group. These lie in a line sixteen miles in length, which differs little in direction from the line joining Ruapehu with White Island. Ruapehu, which lies most to the south, has a cone of great beauty, rising to the height of 8,878ft. above the sea, so that its upper part is covered with perpetual snow. It was supposed to be quite extinct, but has recently shown some slight degree of activity. To the north-east lie Ngauruhoe and Tongariro. Ngauruhoe is the higher (7,481ft.), and has an active crater on its summit. From the floor of the crater steam is constantly rising, whilst ashes, stones, &c., have been repeatedly ejected. In 1869 there was a more severe eruption, and the inhabitants of the district state that lava issued from the crater and flowed down the tone. Mr. Cussen has submitted specimens of the lava of this eruption to me for examination. It is a heavy black scoriaceous lava, of somewhat vitreous lustre; examination with the microscope shows it to be an augite-andesite.

Tongariro is only a few miles to the north of Ngauruhoe; it reaches the height of 5,500ft., and is said to possess several craters, two of which contain small lakes.

See note, *infra*, p. 21.

On the northern slope, at the elevation of about 4,000ft., is a hollow named Ketetahi, from which clouds of steam constantly ascend, and there are numerous sulphurous springs within the hollow which give rise to a stream of sulphurous water.

To the north of Tongariro, and not far from the southern shores of Lake Taupo, is a group of conical hills known as Pihanga, Kakaramea, and Kuharua. These are probably old volcanic cones; indeed Pihanga has a small crater plainly visible from the north-east, whilst Kakaramea has a group of hot-springs upon it.

How many other volcanic cones exist in the Taupo zone is uncertain. The most conspicuous and best known are Tauhara at the north-east end of Lake Taupo, Tarawera, Mount Edgecombe, and White Island in the Bay of Plenty, all situated on or close to the Ruapehu—White Island line. There are, however, many more or

less isolated hills in the district, composed of rhyolitic lava, and a more detailed examination may show some of these to be the remains of extinct cones. Haroharo, for instance, to the south of Rotoiti, is a conical mountain, 2,528ft. high, and the fragmentary rhyolitic rocks on its sides contain numerous obsidian bombs, sometimes of extremely perfect egg-like form, which must have been thrown out from a vent at no great distance, and probably on the mountain itself.

It is not, however, for its active volcanoes that the Taupo zone is famed throughout the world, but rather for its vast numbers of hot-springs, geysers, mud-volcanoes, fumaroles, solfataras, and other manifestations of the minor phases of volcanic activity which are included under the term "hydrothcrmal phenomena." The greater number of these occur on or near the Ruapehu—White Island line, whilst the others may be grouped along two parallel lines to the west of this main line, and will be described further on.

We may suppose that in the Taupo zone masses of heated rock exist at no great depth below the surface. The abundant rain-supply of the district, sinking into the porous ground, penetrates towards the heated masses. The heated water then, following the ordinary laws of, the circulation of underground water, rises along the fissures, or, ill may be, is sometimes forced up by the expansive force due to the high temperature of its vapour. But in most cases it will be noticed that the springs break out at the lower levels, and frequently occur in groups widely distributed over the low country at the feet of til volcanic cones, as, for instance, at Tauhara, at Rotomahana near the foot of Tarawera, and at the Onepu near Mount Edgecombe. In these cases it appears most natural to look upon the reservoirs of heated rock which presumably lie beneath the volcanic cones as the source of the heat of the thermal springs.

Lake Taupo.—Lake Taupo covers an area of nearly 242 square miles; it is 24 7/8 miles in length by 16½ miles in extreme width. Mr. L. Cussen states that the lake has an almost level bed, the average depth being 390ft.; the greatest depth near the centre is 534ft. In many places the lake is bounded by steep cliffs of rhyolitic lavas and associated tuffs. On the western and northern shores these cliffs range in height from 100ft. to 800ft. Deep water is often found immediately under the cliffs, as, for example, at Karangahape Point. The land rises steeply to the height of 1,100ft. above the lake, whilst at a boat's length from the cliff the sounding of 400ft. was obtained, showing that the rock extends down vertically below the water.

Hochstetter referred the formation of Lake Taupo to the subsidence of its area, and the nature of the cliffs around the lake appears to confirm this view.

The lake had once a wider extent, and a terrace is found above the present shores at the height of 100ft. The Maoris told Hochstetter that the lake used once to stand at the level of the terrace. The fctement, however, does not seem to have been founded on any tradition that their fathers ever saw the lake at the higher level, but merely an inference based on the conspicuous character of the terrace. A second less perfect terrace may be traced at the height of 300ft. or 400ft. above the lake; and at a still higher level the lake is surrounded by the pumice-covered plateau from which the volcanic cones rise. The lowering of the lake is doubtless due to the gradual excavation of the channel of the Waikato River.

Towards the north-east the plateau is continued as a barren expanse, known as the Kaingaroa Plains, covered with pumice, and supporting only a scanty vegetation of lichens, dismal scrub, and tussock-grass, on which troops of wild horses feed. These plains Wretch on the west of the Rangitaiki River, falling gradually towards the Bay of Plenty. They are intersected by terraced watercourses and gullies, sometimes of great depth and with almost vertical sides,

At the south end of Lake Taupo a group of hot-springs and an active geyser are found at Tokaanu, whilst only a short distance away are the hot-springs of Waihi and the group situated on the Kakaramea Mountain.

At the north-east end of Lake Taupo we come to Tauhara, a cone rising to the height of 3,603ft., with sides deeply denuded into gullies, The country at its base to the north and west is remarkable for the hot-springs and other signs of hydrothermal action; but the mountain itself has the appearance of having been long extinct. The River Waikato leaves Lake Taupo at this point, and the hot-springs, &c., we situated on a band of country a few miles in width, occupying both sides of the river for a distance of six or seven miles. The country immediately at the foot of Tauhara shows signs of vigorous hydrothermal action: the pumice and rhyolitic fragments over a wide area have been rotted into a red or white mud, whilst the surface of the treacherous ground shows small holes due to sinking-in of the decayed rocks, and steam rises in small curling wreaths. There are, however, no springs here, but nearer the Waikato and at a lower level we have the hot creeks and sulphur springs of Loffley's Glen, the Crow's Nest Geyser, one of the most powerful in the Taupo zone, and the other neighbouring springs on the banks of the Waikato, the warm lake and stream at Waipahihi, and the sulphur lake and solfatara of Rotokawa. On the left bank of the river we have the warm creek, Waipuwerawera; the steam-blast of Karapiti, visible for a great distance over the surrounding country; the warm springs at the Huka Falls, on the Waikato; the numerous fine geysers of the Wairakei Valley; and the explosion-crater of the Blue Lake, with its warm springs.

The Waikato River, after leaving Lake Taupo, flows to the northeast in a gorge through the Kaingaroa

Plains for some twenty miles, it then turns to the west and cuts through the trachytic range in a deep terraced valley, and leaves the Taupo zone altogether.

The part of the Taupo zone lying to the west of the Kaingaroa Plains has a very rugged character. The older rocks appear to have been dislocated and portions to have dropped down, leaving hollows, some of which were occupied by lakes, whilst rhyolite lavas welled up some of the fissures formed.

If we continue along the main line of activity stretching from Ruapehu to White Island, we find the Ohaki Hot-springs (see map), on the Waikato, near the point where the river turns its course to the west. The line then passes up the Waiotapu Valley to the east of the Paeroa Range, past Kakaramea, and so on to Rotomahana and Tarawera.

The Paeroa Range is a long ridge of mountains parallel to the White Island—Ruapehu line, and rising to the height of 3,244ft,: Hochstetter referred its origin to a dislocation in the district. The western face of the Paeroa Range is very steep; and opposite to it, on the other side of a broad valley, is the remarkable table-topped mountain Horohoro. The summit is quite flat, and the mountain shows to the east a vertical wall-like face of coarsely. Jointed volcanic tuff. The country between this and the steep face a of the Paeroa Range has dropped down, and the steep opposing faces of the two ranges will therefore be the faces of faults. The secondary lines of hot-springs in the district were attributed by Hoch- stetter to the fissures due to the faults which, extending downwards to the heated rocks below, rendered possible the ascent of heated water. To the north-cast again is situated the part of the Taupo zone which has received the name of the Hot Lakes District. We have here an extraordinary number of lakes within a comparatively small area (see map). These lakes must owe their origin to the volcanic activity of the district, and Hochstetter attributed all the lakes to the subsidence of certain areas. Seeing, however, that many of the lakes—as, for instance, Tarawcra—are surrounded by streams of rhyolitic lava, it appears probable that they owe their formation in some cases to the blocking-up of drainage-channels by the extension of streams or masses of lava.

The Waiotapu Valley and Kakaramea.—The Waiotapu Valley has a nearly north-east direction, and lies between the Paeroa Range and the Kaingaroa Plains; the Waiotapu Stream flowing to the southwest, and discharging into the Waikato. The valley begins between Maungaongaonga and Kakaramea, two mountains composed of volcanic rock, lying a few miles to the south of Rotomahana. Kakaramea is a conical sharply-peaked mountain, rising to 2,494ft., and consists of rhyolitic lava. On its sides, and visible from a great distance, are large tracts of variegated red and white clays produced by the hydro-thermal action to which the mountain has been and still is subject. In the early morning the steam may be seen rising in thick clouds from the mountain, giving the impression of a formidable degree of activity. Several crater-shaped hollows of considerable size exist on its sides, and these appear to have been blown out of the solid rock of which it is built. At the bottom of the craters are hot-springs or pools of warm water. At the base of the mountain and at various points down the valley are irregular basin-shaped hollows, some of them dry at the bottom, others occupied by lakes, the water of which is frequently of a vivid blue or green colour which it is impossible to describe in words. Around the mountain and in the neighbourhood of these hollows the ground is covered with angular fragments of volcanic rock, sinter, &c. These basin-shaped hollows are doubtless explosion-craters, and have been blown out of the ground by the expansive force of steam or heated water which has ascended from below and saturated the rocks until the accumulating tension of the vapour produced a hydrothermal explosion. They are, in fact, similar to some of the craters found at Rotomahana.

Such explosions seem to have been frequent in many parts of the Taupo zone. For instance, the solfatara of Ruahine, near Rotoiti, lies at the bottom of a crater on a hill-side; and the Blue Lake at Wairakei occupies a hydrothermal crater. It seems probable that many of the smaller lakelets of the district mark the position of basins hollowed by hydrothermal explosion.

About three miles to the south of Kakaramea is a group of hot-springs and sulphur fumaroles. One of the most considerahle of these springs has formed a deposit of sinter, which has received the name of the "Primrose Terrace." On the flat summit of a slight elevation is a platform of sinter some 50yds. in diameter. In the centre is a large circular pool of water, its margin formed by a raised rim of sinter of beautifully-fretted form. The water appears to be in a state of ebullition; it showed however at the time of my visit a temperature of only 170° Fahr., the apparent ebullition being due to the escape of gas. The water flows down a gentle slope, which spreads out in a fan-like shape. This slope is covered with greyish-white sinter, which is not properly terraced, but shows very beautiful ripple marks. To the right is a pool of intensely yellow (or sometimea orange-red) mud, which owes its colour to the presence of sulpha containing selenium. This is, I believe, the first time that this scarce element has been described from the district. It has been found associated with sulphur in other volcanic regions; as, for instance, in the Lipari Isles, which like the present district is characterized by rhyolitic rocks.

The water from the terrace forms a stream which flows over a waterfall into a gully, and then with winding course passes into a chain of crater-like excavations. The bed of the stream and the rocks at the waterfall are

covered with greyish-white sinter, with here and there patches of a purer white. The course of the stream is also marked by other small hot-springs; and just below the waterfall is joined by a small stream from the left.

Carried along on the surface of the latter stream are vast numbers of small black beads of an oval or pear-like form and shining lustre. These were about ¼in. in diameter, and an application to the flame of a candle showed they contained much sulphur, Analysis proves that they consist mainly of sulphur, discoloured by black mud. I had not an opportunity of following up the stream, and tracing these curious objects to their origin; but Mr. Percy Smith informs me that they appear to be brought to the surface by water welling up from the centre of a small lake. The lake appears to be of considerable depth, and as the beads are evidently formed front melted sulphur it is probable that a hot-spring containing sulphur exists at the bottom of the lake at a sufficiently high temperature to melt sulphur, and that the beads of sulphur are thrown up by the escape of gases. Sulphur melts at 114.5° C., but does not generally solidify till 111° C., and at the depth of 20ft. below the surface water would not boil at 100° but at about 111° C.

To the south of the terrace mentioned are numerous other groups of hot-springs, and to the north, on the slope of Maungaongaonga, a very active group is situated. There are sinter deposits forming small terraces, but none which at all approach in beauty to the Rotomahana Terraces destroyed during the recent eruptions. The whole region of the Waiotapu Valley, however, is one of very great interest, and is likely to become well known to visitors.

The next points of activity along the Ruapehu—White Island line are Rotomahana and Tarawera, but the account of these is placed later so as to precede the description of the eruption.

Mount Edgecombe.—Passing further along the line we come to Mount Edgecombe, a volcanic cone of typical form, about fifteen miles north-cast of Tarawera Mountain. It rises boldly above the low hills where the Kaingaroa Plains pass down into the Te Teko Swamp. Near Te Teko the ground is but little above the sea-level, and the area between this point and the seashore between Matata and Whakatane is practically a delta formed by the Whakatane, Rangitaiki, and Tarawera Rivers, so that much of it lies low and is swampy. As seen from this low ground near the Bay of Plenty, Mount Edgecombe presents a conspicuous land-mark, standing prominently up above the surrounding low country. The sides of the cone from almost every point of view present an unbroken curving slope of 27° to 33°. As the volcano had never, so far as I was aware, been visited by any geologist, I took the opportunity of a visit to the agricultural districts to ascend the mountain. Its sides are thickly covered with vegetation, especially on the western side, where the bush is extremely difficult to penetrate. The top of the mountain is obliquely truncated; the highest point being to the east, and reaching the height of 2,946ft. On the top of the mountain are two craters; the first is of regular circular form, about 300yds. in diameter, with sides of varying height I covered with large forest trees and sloping down to a trefoil-shaped lake of green water. This lake was about 120yds. in greatest diameter, and its waters had a very strong mineral taste, like that of many hot-springs. The water, however, was cold, and it seems probable that the mineral matter was not derived from springs in the lake but had been dissolved out of the ashes from the late eruption of Tarawera, which covered the sides and bottom of the crater.

The second crater is of less regular form; it has high steep sides, and to the south-east its side is broken down, and the cavity of the crater is continued down the side of the mountain as a gully excavated by the rain-water which falls within the crater and flows outwards by the gap.

Huge masses of lava crop out on various parts of the mountain, hut the greater part of the surface is thickly covered with luxuriant vegetation, partly of forest-trees, partly of tutu and bracken-fern, the latter growing to the height of 8ft. or 12ft. The thick covering of Tarawera ashes, too, did much to conceal the character of the superficial rocks.

On the inner slope of the first crater the ashes were 14in. in depth. We have here the curious phenomenon of a volcanic mountain thickly covered with the scoria; from another, fifteen miles distant. If an eruption of Mount Edgecombe were to occur before the scoriæ had time to decay or be removed by denudation the layer might be preserved, and if ever brought to light again at some future period would scarcely be referred to so distant a source as Tarawera. This example shows that the scoria; found on any volcano are not necessarily derived from an eruption of that volcano but may possibly have their origin from a distant vent.

The thickness of the vegetation, the amount of ash, and a rainy day precluded a detailed examination of the mountain in the time available. All the rocks seen by me, however, were augitc-andesitea, and I saw none of the rhyolites supposed to be so characteristic of the Taupo zone. The commonest variety was a dark-grey rock showing numerous felspar crystals, reaching the size of a pea, and smaller augites.

The Tarawera River, which drains the lake of the same name, flows past the western foot of Mount Edgecombe, and on the bank of the river opposite the mountain are the hot-springs and sulphur-deposits of Oncpu. There are numerous hot-springs here, and deposits of sulphur so abundant that they are worked and the sulphur sent to Auckland for the manufacture of sulphuric acid. The crude sulphur as it comes to market contains 80 per cent, of pure sulphur.

The thick vegetation on the mountain, and the size of the rimu and other forest-trees, show that it is long since Mount Edgecombe has been in activity—certainly not since the Maoris have been in New Zealand. The hot-springs of the Onepu would seem, however, to be connected with the heated rocks below the mountain.

A few miles from Te Teko a large hot-spring rises at the foot of the low ridge of hills along the base of which the road to Whakatane winds. There is a copious supply of water at a temperature of about 140° Fahr.

A few miles from the coast between Matata and Whakatane are Whale Island and the Rurima rocks, composed of volcanic rock. Hot-springs are found on Whale Island, and Major Mair

Trans. N.Z. Inst., Vol. V., p. 151.

states that on the neighbouring Rurima rocks the ground may be seen steaming in places when the condition of the air is favourable, and that at one time the islands must have abounded in hot-springs.

The last point along the main line of activity in the Taupo zone is formed by White Island, a volcano which is now in the solfatara stage. In the centre of the island is a crater, half a mile in diameter, which until recently was occupied by a lake of acid water. From the I crater a dense cloud of steam constantly rises, and forms a white cloud I visible for fifty miles around.

Most of the other hot-springs in the Taupo zone may be grouped along two lines parallel to the main line from Ruapehu to White I Island. It appears probable that these lines of springs are due to fissures extending through the surface rocks to the region of heated rock; the surface waters which sink down over the whole of the neighbouring country coming in contact with the heated rock and rising at those points where the line of fissure allows them an easy I. ascent.

1. The first of these lines is situated to the cast of the main line, the distance between them being about seven miles. At the south end of this line are the numerous hot-springs, fine geysers, and sinter terraces of Orakei-korako, on the banks of the Waikato. Then to the north-cast are the hot-springs and fumaroles on the eastern face of the Paeroa Range. At the north end of the line, thirty-seven miles I; from Orakei-korako, are the hot-springs of Rotoehu. Hochstettcr was of the opinion that the low-lying country between the Paeroa Range and Horohoro to the west had been thrown down, and that the first line of hot-springs corresponded to the line of fault at the foot of the Paeroa Range, whilst the next line of springs would correspond with the line of fault to which the steep face of Horohoro owed its: origin. It will, however, be noticed (see Map I.) that the face of Horohoro is not quite parallel to the direction of the line of hot-Springs.

2. The second line of hot-springs is still farther to the west, being about eight miles from the first line. Near the south end of the line are the hot-springs near the Waipapa Creek, a tributary of the Waikato. On the banks of the Waikato at Niho-o-te-kiore are some small hot-springs, and the rocks on the river-bank in the neighbourhood show brilliant red fumarole clays. A mile or more to the north-east are the hot-springs and sinter deposits of Waipupuwerawera. The Maoris inform me that a small hot-spring exists to the south of Haperangi (east of the Taupo Road), and blocks of sinter lie along the roadside near here; but the next considerable group of springs is at Whakarewarewa, at the south end of the Rotorua basin. Here at the foot of a ridge of rhyolite rocks are numerous fine geysers with extensive sinter deposits.

All along the southern shore of Rotorua are the innumerable hot-springs of the Rotorua Township, Ohinemutu, and Te Koutu, I Further along the line we meet with hot-springs on Mokoia, the island of rliyolitic rock in the centre of Rotorua, the solfataras of Tikitere, Ruahine, and the hot-spring at Manupirua, on the shore of Lake Rotoiti. Some small hot-springs occur also near the coast at Maketu, but it is doubtful whether these should be referred to the Rotorua line.

It may be well to mention here that, if these two lines are produced to the south-west, they will be found to coincide with the general lie of the western shores of Lake Taupo. The Rotorua line corresponds with the west shore of the lake in that portion of the lake known as Western Bay, whilst the Orakei-korako line coincides with the western shores of the lake south of Western Bay. This circumstance suggests that the fissures marked by the rise of hot-springs are the continuations of those dislocations which have determined the position of the shores of Lake Taupo.

Rocks of the Tavpo Zone.—The most complete account of the rocks of the Taupo zone has been given by Hochstetter. He states

"Voyage of the ' Novara,'" p. 107.

that all the rocks collected by himself around Lake Taupo and throughout the district, as far as the Bay of Plenty, belonged to the family of rhyolites. He mentions elsewhere, however, the trachytic tuffs as forming the western boundary of the district. So far as I am aware, no other rocks were described from the district before the time of the eruption of Tarawera, but to these must now be added the augite andesites, occurring not only amongst the recent ejecta from Tarawera, but also at Ruapehu and Ngauruhoe in the south, and at Mount Edgecombe to the north of the zone.

We may class the rocks of the Taupo zone as follows:—

- Older volcanic tuffs of submarine origin.

- (*a*.) Rhyolitic lavas and tuffs, and showers of pumice, &c. (*b*.) River-gravels and terrace formations of pumice and various rhyolitic fragments. Lake-beds.
- Augite-andesite lavas and tuffs.

See note, p. 21.

1. *Older Volcanic. Tuffs*.—The older tuffs of the volcanic tableland forming the western boundary of the Taupo zone were described by Hochstetter as trachytic, and are probably of submarine origin. As found between Oxford and Rotorua the tuff is a soft lilac-coloured rock containing numerous broken crystals of felspar, of which a fair proportion are triclinic, and quartz-crystals in double hexagonal pyramids

The abundance of quartz-crystals in some of the tuffs suggests that the rocks are really rhyolitic. Sections of the tuffs, owing to the more or less altered character of the block, do not afford very conclusive evidence. They contain, however, fragments of rock with a felsitic base, which point rather to the rhyolites. The writer has thought it desirable to make a more extensive examination before altering Hochstetter's term.

This rock forms the whole of the hills to the west of the Rotorua basin, north of the mountain Ngongotaha. The hills to the north of Rotorua are composed of the same tuff, and the streams have excavated very deep ravines in it, as, for instance, the picturesque Mongarewa Gorge, through which the Tauranga Road passes. It is found farther along the same road as far as Oropi. To the cast of Rotorua it crops out in a few places amongst the hills, as, for instance, to the east of the Ngae.

Farther to the south the tuffs are light-coloured rocks with considerable quantities of pumice. In the opposite direction, north of the Cambridge Bush and near Matamata, there is a break in the character of the rocks forming the range. The lilac-coloured tuff gives way to massive augite-andesite rocks and the altered forms of volcanic rocks known as propylites. It is in these altered rocks that the auriferous reefs of the Thames and Te Aroha Goldfields occur.

2. *Rhyolidc Lavas and Tuffs*.—The predominating rocks of the Taupo zone are rhyolites. The rhyolites form a group of volcanic rocks characterized by the high proportion of silica they contain—70 to 80 per cent.,—and frequently the excess of silica in the rock has separated in the form of crystals or glassy blebs of quartz. The rhyolites are remarkable for the great number of varieties in which they occur. Zirkel has given the most complete description of the rliyolitic rocks.

"Microscopical Petrography," p. 8.

He divides them, according to their structure, into the following groups:—

- Nevadites or granitic rhyolites—varieties which appear to the naked eye to have a completely crystalline character. A more careful examination however always shows a certain proportion of ground-mass in which the crystals are imbedded.
- Rhyolites proper—the liparites of Von Richtliofen. These include the felsitic and porphyritic varieties. The former have a dull stony-looking or felsitic ground-mass, which may or may not include crystals recognisable by the naked eye: the latter consist of numerous crystals of quartz, felspar (chiefly sanidine), and sometimes black mica, hornblende, &c., imbedded in a distinct ground-mass which is of very variable character in different varieties.
- The glassy or hyaline rhyolites, which consist entirely, or in very large part, of glass. Many obsidians, pitchstones, pumice, and perlites belong here.

I have not met with any of the nevadites in the Taupo district. Zirkel,

"Voyage of the 'Novara:'" Geology, Vol. I., p. 110.

who examined the rocks collected by Hochstetter, states that a nevadite occurs at Mokoia, the island in the centre of Lake Rotorua. The only rocks, however, which I collected on the island belong to the rhyolites proper. The rhyolites proper and the glassy rhyolites are represented by very numerous and interesting varieties.

Massive rhyolites or rhyolitic lavas occur in very many places around Lake Taupo, sometimes forming steep cliffs or bluffs rising above the waters of the lake. To the north of the lake the rocks showing, which crop out from beneath the superficial deposits of pumice, are chiefly light-coloured tuffs with pumice, until we approach the Hot-lake district. There is, however, a large patch of rhyolites (spherulitic obsidian .and felsitic varieties) about six miles south of Atiamuri. The picturesque Atiamuri rock, which rises with vertical sides high above the valley of the Waikato, is composed of a laminated rhyolite. Rhyolitic lavas are also found to the west of Atiamuri and in Maungaiti. On the south-east border of the Rotorua basin the mountain Ngongotaha (2,554ft.) is composed of a spherulitic obsidian. The southern boundary of the basin is formed by a ridge of spherulitic obsidian, which stretches from the west of the Hemo Gorge to the old Mairangi Pa, overlooking the Wairoa Road. Most of the hills between Rotorua and Lake Tarawera are composed of rhyolitic lavas. The following are the commonest types: (*a*.) A spherulitic obsidian, composed of a black volcanic glass, in which are imbedded large numbers of round bodies about the size of small peas (1/8in. to ¼in. in diameter). These are sometimes bluish-grey in colour; more frequently they are pink or red, or when weathered they may be of a rich orange-brown, (*b*.) A porphyritic variety of a light-greyish colour. Crystals of felspar, quartz, and black mica

are imbedded in a light-coloured porous ground-mass, which the microscope shows to be a porous glass. (*c*.) Porphyritic obsidian, a black volcanic glass, with a small number of crystals of quartz and felspar.

Pumice.—The surface of the ground over the greater part of the Taupo zone is composed of pumice, or of a soil formed from the decay of pumiceous material. These deposits extend far beyond the belt of country which forms the Taupo zone, being found nearly as far as Napier to the south, and Lichfield to the north.

Moreover, immense quantities of pumice have been and still are being carried down by the rivers which radiate from the centre of the North Island—as, for instance, the Waikato and Ongaruhe. The courses of these rivers are marked by valleys, which have been filled up with immense quantities of pumice sand and gravels, out of which the river has excavated the numerous terraces for which the valleys are so remarkable. As will be seen below, much of the superficial pumice in this district has been distributed in the form of great showers of ash, resembling in character, and probably exceeding in magnitude, the shower which fell during the recent eruption of Tarawera. Around Lake Taupo the country is covered to a great depth with pumice; and the cliffs around the north-east shores of the lake, rising to the height of 300ft., consist entirely of stratified pumice.

This pumice extends to the north-east, covering the Kaingaroa Plains. Towards Lake Taupo the tributaries on the right bank of the Waikato have cut deeply into these loosely-compacted strata, and now flow in ravines with vertical sides, rising to 100ft. or 200ft. or more. These gullies represent miniature canons, and the preservation of their vertical sides is due largely to the porous nature of the strata, which allows the rain to sink into the ground, instead of streaming over the surface and wearing water-channels along the margin of the canon. The preservation of the steep faces of the canons of the Western States of America is attributed to the almost rainless character of the region. Here, where the rainfall is considerable, the same effect is produced by the porous nature of the strata. Huge blocks of pumice are found along the shores of Lake Taupo; and the Kaingaroa Plains for the distance of twenty miles towards the sea are covered with blocks of considerable size, becoming smaller as the distance from Taupo increases.

These vast accumulations of pumice have been attributed to the great volcanoes of Tongariro and Ruapehu; but I have found that the pumice becomes distinctly less abundant towards the south end of Taupo, and that on the lower slopes of Tongariro it is seldom 3ft. thick, and is often much less. Beneath the pumice the mountain is composed of basic lavas or ashes. It may, perhaps, be suggested that much pumice may have been buried under the lava and ashes of more recent eruptions of Tongariro; but, as pumice now lies on the surface, it is clear that eruptions of pumice have taken place at some point in the Taupo district since the last great eruption of Tongariro. Moreover, fragments of rhyolitic rocks are scarce amongst the ejecta on the top of the mountain.

The pumice has also been attributed to vents occupying some portion of the area of subsidence covered by Lake Taupo. As evidence bearing upon this point I may mention that the pumice around the lake contains considerable quantities of the laminated rhyolite which has been called lithoidite. I have found blocks of it embedded in the pumice which reached the diameter of 4ft. Such blocks must point to an origin at no very great distance. The only locality near Taupo known to me where this peculiar variety of lava is found *in situ* (and not in loose fragments) is Motutaiko, the island in the lake. The significance of these facts need scarcely be pointed out.

Records of former Showers of Ashes.—Although the Taupo district abounds at the present time in the minor manifestations of volcanic energy, it does not seem to have been the scene of any considerable eruption for many centuries past. If any eruption of the magnitude of the recent one had occurred since the arrival of the Maoris in New Zealand, some five or six centuries ago, they would, we can hardly doubt, have preserved the tradition of it. But there is nothing in their traditions which hints at any such great volcanic catastrophe.

Trusting, however, to the present being the key to the past history of the earth, we may well believe that eruptions of the kind and degree of that of 1886 have occurred again and again in the district, and we may therefore ask whether there is now any trace of showers of ashes having in past time overwhelmed large areas of the North Island. A careful study of the mode of distribution and arrangement of the ashes which fell recently, will form a safe foundation for the interpretation of the traces of former showers which may be left on the surface of the country, or included in old lake-deposits which are now again laid bare by denudation.

The principal characters by which we may expect to identify an old shower of ashes are the following:—

- The deposit will follow the contour of the former surface upon which it fell.
- The ashes will show a more or less pronounced stratification which will follow the old surface of the land.
- The coarser fragments will, generally speaking, be the lowest, then will follow the finer, and lastly the finest dust.
- The fragments for the most part will be angular or rough. They will consist mainly, if not entirely, of fragments of volcanic rocks, especially the porous ones (pumice and scoriæ).
- As we approach the source of the ashes the deposit will be thicker, and the component fragments larger. Close to the source, however, there will be less regularity in the arrangement of the ashes.

We may expect to find the deposit wanting in many places, as, for instance, where it has been exposed to running water, or on steep slopes whence it may have been washed by the rain. In other places the conformation of the ground may have allowed a greater accumulation, as at the foot of slopes. The deposit will have been subject to decomposition, and wherever it was thin it may have been obliterated by the progress of decay into soil.

Applying such principles to the study of the superficial deposits in the district, we may note the existence of the remains of several distinct showers of ashes, each of which has fallen over a wide area of country.

Rotorua Shower of Ash.——We will consider first a shower of pumiceous ashes which, for the sake of distinction, may be called the Rotorua shower, as it is well marked in the neighbourhood. All around the basin in which Lake Rotorua lies the present surface is formed by a pumice-ash some feet thick, in layers which follow the contour of the ground, the coarsest fragments being below, the finer at the top passing into a brown pumiceous soil. The greatest thickness of the ashes, so far as I observed, was along the Wairoa Road, about three miles east of the Rotorua Township. There the ashes varied from 7ft. to 10ft. (in one place 15ft.) in thickness. The surface-layer, of course, consisted of soil, a brownish pumiceous loam stained with vegetable matter: this passed down into a brownish sandy substance, which doubtless represents the finer pumice-ash, for small pumice-fragments were to be detected in it. This gradually becomes coarser and less decomposed in character till at 4ft. from the surface it passes into unmistakable but fine pumice-ash. Below, the pumice-fragments grow larger, and are arranged in distinct strata with a peculiar wavy character about the layers, which reproduces the details of the stratification shown by the ashes of the late eruption of Tarawera. The coarsest fragments are at the bottom, and reach i the diameter of one or two inches, or exceptionally as much as 4in. Below the pumice is a brown loamy layer, which, doubtless, represents the land-surface which was overwhelmed by the ashes above. About 85 to 90 per cent. of the fragments consist of a pumice weathered buff or cream-coloured outside, but white and fresh within. The remainder consist of fragments of obsidian, pitchstone, and various rhyolites. All the largest fragments are pumice.

The layers of this pumice-ash follow the present contour of the land, and this character, as well as the freshness of much of the pumice, seems to indicate that the shower took place at no very distant date—probably not long before the Maoris came to New Zealand. On the west side of Lake Rotorua are to be seen old lake-beds deposited when the water stood at a higher level, before the drainage-channel to the north was lowered. The lake had been lowered and the lake-beds subject to denudation before the pumice-shower fell, as may be clearly seen in the sections afforded by the road-cuttings.

I have traced the present deposit in various directions, and its characters conform everywhere to the principles formulated above. It will not be necessary to enter into details, but simply to state that to the west it may be traced for twenty-four miles along the Rotorua-Oxford Road. The soil in the forest along this road (Cambridge Bush) is brown; below it passes into a yellowish more or less fine pumice-ash. The last distinct trace of this is seen at a point ten miles east of Oxford; but the character of the soil would seem to indicate that the shower extended farther to the west, though now all the fine ash is decomposed. To the north it may be traced along the Tauranga Road past Awahou as far as Oropi, thirty-two miles from Ohinemutu. Along the Maketu Road it may be followed as far as Waiwhakaretu (twenty-nine miles). To the south the ash may be seen at Pakaraka (eleven miles from Rotorua), where it is still several feet thick, and at Pareheru. It may also be traced still farther along the Wairoa Road to Tikitapu and Rotokakahi; but the thickness of the more recent ash renders continuous observation difficult here, and I have had no opportunity of detailed study.

The interesting question of the source of this vast shower of pumice, which spread over so large an area of country, must therefore be left for the present undecided; but the direction in which the ash thickens points to an origin either near Tikitapu or Rotokakahi, or in the same direction.

The remains of other pumice-showers may be distinguished farther to the south of the Taupo zone. The road-cuttings on the Taupo-Rotorua Road south of Atiamuri show sections with two, or perhaps three, layers of volcanic ashes, as follow:—

- Soil.
- Pumice in angular fragments, 1ft.—3ft.
- Fine bluish-grey ash, ½in.
- Brown sandy layer (old soil), 1ft.-2ft.
- Pumiceous ash.

Pumice belonging to Layer No. (2) above shows on the tops of all the hills between Atiamuri and Orakei-korako, and Professors Brown and Hutton inform me that they traced this deposit to the west as far as Lichfield. It was traced by myself northwards past Horohoro, where it was 6in. to 12in. thick nearly as far as the Hemo Gorge, within three miles of Rotorua. This shower must therefore have affected a very wide area of country, and the direction in which it thickens indicates an origin in the Taupo neighbourhood. The bluish-grey ash was very irregular in its distribution, being often wanting, or washed down into the underlying layer. It

could, however, he distinctly recognised as far north as within seven miles of: Rotorua. Its thickness increases as it is traced southwards: eight miles to the south of Atiamuri it reaches the thickness of one inch. This ash is curiously similar in colour to the ash of the recent Tarawera eruption, but differs in its microscopic characters. This layer must have been covered up by the pumice-ash soon after it fell.

Immediately underlying the grey ash is a sandy layer of coarse brown colour. This doubtless represents an old soil; indeed, the upper part is sometimes coloured a darker brown, as if it still contained humus or colouring-matter of vegetable origin. Below the old soil was another layer of white pumiceous material, which probably represents another pumice-shower.

3. *Augite-andesites*.——As mentioned above, the recent lavas of Ngauruhoe are composed of basic lava——that is, a lava possessing a lower proportion of silica and a higher proportion of the metallic bases (alumina, iron oxides, lime, magnesia, soda, &c.). I have described these rocks elsewhere, and shown them to be augite-andesites. Similar lavas occur on Ruapehu; and Mr. Cussen informs me that around Ruapehu and Tongariro there is much less pumice

Since the above was written the writer has visited the country to the south of Lake Taupo. The lower slopes of Tongariro are covered with a thin layer of pumice-ash; below there is a great thickness of a basic volcanic ash or basic lavas. The flat summit of Tongariro shows seven craters, some of which are half a mile or more in diameter. The lavas are basic, and rich in augite. Most of them are free from olivine; but others are rich in this mineral, and must be termed basalts. In one of the craters a true pumice was found forming the surface of a small area of ground; otherwise no acid pumice was observed.

than elsewhere in the Taupo district, the soil being of a darker-brown colour and greater fertility. It seems probable that this soil has resulted from the decomposition of ashes from the eruptions of the more basic lavas which seem to have succeeded the rhyolites.

Augite-andesites occur also at Mount Edgecombe. The commonest variety is a rock with a dark-grey ground-mass, in which are imbedded numerous felspars, which may reach the size of a pea, and smaller dark augites. The sections for the microscope show that the felspars are chiefly plagioclase, though sanidines are present. The felspars are sometimes remarkably full of inclusions of brownish glass; sometimes they are so numerous that only a narrow rim of the felspar substance is left free from them, forming a kind of frame to the rest of the crystal. The ground-mass consists of microliths cemented by grey glass and with a few magnetite grains. In another variety a similar ground-mass shows patches of brownish glass free from microliths like that which forms the felspar inclusions.

Augite-andesite also forms the lava from the recent eruption of Tarawera, as will be shown further on.

II. GEOLOGY OF TARAWERA AND ROTOMAHANA.

The Tarawera Mountain.——Mount Tarawera is situated on the eastern shore of the lake of the same name, its sides sloping down to the level of the waters of the lake (1,040ft.), or ending abruptly in high steep cliffs. The top of the mountain before the eruption presented an uneven table-land of an elongated rectangular shape, about two and a half miles in length and one mile in breath (PI. p. 22), This was interrupted towards the northern end by a distinct notch or gap 700ft. deep, marking off a portion of the top, about one-fourth of the whole area, which was known as Wahanga (see Map II.).

About the middle of the western border of the remaining and larger part a deep gully could be seen descending from the table-land. An indistinct division into two parts was thus produced, the part to the north known as Ruawahia, whilst that to the south of the gully was the only part to which the name Tarawera was applied by the Natives. Europeans, however, usually found one Native name sufficient to remember, and therefore used Tarawera as the name of the whole of the mountain.

The highest part of the mountain was at the northern end of Ruawahia, and rose to 3,606ft. above the sea, the highest level attained by any mountain in the Hot-lake district.

Viewed from a distance the mountain appeared to have a nearly flat top: strictly speaking, however, it was not level, but was higher towards the middle, and had a very rugged surface. This was covered with hummocks strewn with angular blocks of rock, and occasionally rose into peaked hillocks'. There was no sign of any crater. Around the flat top of the mountain the sides descended at first in a steep

Tarawera as seen from the South West.

From a photograpn by J. Marun, E.Q.S. Before the eruption Survey Deat Liypeo 1886. face of coarsely jointed rock, only scalable in a few places: this was some 400ft. in height; and at its foot stretched a *débris* slope having an angle of about 30°, and descending to the level of about 1,000ft. above Lake Tarawera. From this height downwards to the lake the lower slopes had a much more gradual fall. This characteristic form of the

mountain, with the table-like top, and the steep wall-like side surmounting a *débris* slope, is well marked around the greater part of the mountain's circumference. Along a portion of the south-east side, however, the symmetry of its form is a little disturbed by a broad shoulder which abuts against the mountain-side below its upper wall-like face.

It was doubtless the flat appearance of the summit of Tarawera and its wall-like face of reddish-grey jointed rock which led Yon Hochstetter to compare it with Horohoro. He says,

"Voyage of the Novara,'" Vol. I., p. 106.

"Tarawera Mountain, however, and Horohoro Mountain, are excellent examples of the remains of a plateau: their upper surface marks the original level of the district."

The two mountains, however, are of very different structure. Horohoro is a portion of the Patetere plateau of the older tuff, whilst Tarawera, as will be seen below, is a true volcanic cone. Von Hochstetter did not ascend the mountain, and possibly any proposition to do so would at that time have been opposed by the Natives, as the mountain had been used as a burial-ground for long generations, and was therefore *tapu*. It must be remembered, also, that Hochstetter spent less than five weeks in the Taupo zone. Indeed, remembering the time he was in the district and the difficulty of travelling in it, the extent and accuracy of his observations are very remarkable.

The formation of the series of craters along the mountain-top daring the recent eruption has afforded an admirable opportunity of examining its structure. The whole of the flat top of the mountain is composed of a porous rhyolite lava of a light-grey colour, or, where weathered, of a slightly-reddish grey tint. It is always somewhat porous, and towards the margin of the plateau is often coarsely vesicular. Most of the recent craters on the summit have very steep sides where they pass through this rock, but it is just possible to descend into the last two craters on the top of Tarawera proper, and portions knocked off the rock in situ in the wall of the fissure at the depth of 450ft. below the present level of the crater-edge show a very finely porous structure, which may be best described as slightly pumiceous. Thin sections for the microscope show that the rock has a glassy ground-mass, in which are imbedded numerous crystals of quartz (in double hexagonal pyramids), felspars (most of which are sanidines, though a few are plagioclases), hexagonal plates of black mica, and a few magnetites. The glass of the ground-mass is nearly pure, but shows a few microliths in places, whilst it contains vast numbers of narrow elongated steam-pores, which are arranged parallel to one another in streams, which show the most pronounced fluidal structure, so that, viewed with the microscope, the rock almost seems to flow. The specific gravity of the rock is 2.39.

It is in the craters between Ruawahia and Wahanga, however, : that the true structure of the mountain is most instructively shown. We sec here a section through the side of a scoria-cone composed of inclined beds of pumice, &c. On each side the beds dip outwards; in the middle of the exposed section they dip to the south-west under the mass of rhyolite lava forming the cap of Ruawahia, whilst in the opposite direction they dip towards and under Wahanga. This evidence alone is sufficient to show that a volcanic vent existed on the site of Tarawera long before the eruption of last year. During the eruption preceding that which forms the subject of this report, a fissure must have been opened across the pumice-cone in a north-east and south-west direction, and up this fissure welled a mass of lava, very viscid, as the acid lavas usually are, which filled up the crater and spread out on each side, solidifying so as to form the flat cap of porous but massive rhyolite lava which we now see. The lava on the summit of Wahanga, it is true, forms a distinct mass from that on Ruawahia and Tarawera, but it agrees so closely in its form and structure, and even in the microscopic details of its finer structure, that there can be but little doubt that the two masses were formed at the same time. The lava, therefore, must have risen to the surface along portions of the fissure only, just as in the eruption of 1886.

The summit of the mountain has doubtless suffered a good deal from denudation since, as is shown by the slope of *débris* underneath the steep rampart-like face of the upper part of the mountain, and by the deposits of fragments and boulders spread on the lower slopes and the broad stony beds of the numerous watercourses which stretch downwards in all directions from the mountain.

The lower slopes are composed in many places of lava-streams, which have often come down as far as the lake, and form bluffs rising high above its waters. The lava has usually a glassy base; it is sometimes a porphyritic obsidian, which may be coarsely vesicular or almost free from pores. One variety collceted by me showed under the microscope a glass free from microliths, with a few small but perfect crystals of quartz in double hexagonal pyramids, sanidines, and hexagonal plates of black mica. Other specimens, however, were crowded with slender microliths. Sometimes the rook is full of red mil-like spherulites, as in the bluff between Ngawhiri and the next I bay to the north. Near Tapahoro, at the outlet of Lake Tarawera, the lavas show the most extraordinarily twisted and contorted flow-structure. The lava is laminated, and the laminæ are twisted, folded, and bent upon one another, like half-opened bales of cloth confusedly thrown together. Some of these lavas have a felsitie ground-mass; others are partly or purely glassy.

It will be seen, therefore, that the Tarawera cone had a mode of structure analogous to that of the domitic

Puys of the Auvergne district of Central France, and of some of the volcanoes of Hungary and Bohemia *(e.g.*, the Chodi-berg). Where the lava issuing from a vent is very viscid, and is not so highly charged with steam or gas as to be scattered by powerful explosions of expanding gases, it tends to heap itself over the vent in a rounded mass which shows no sign of a crater, the original crater or vent being, in fact, overwhelmed and hidden by the accumulation of lava. The first-formed shell is injected with fresh lava from below, and so the mass grows larger. The outer shell, if still viscid, will stretch; if it has cooled, it will fissure. Mr. Percy Smith informs me that the top of Tarawera, before the eruption, presented an imperfect network of fissures deep enough to conceal a man; between these fissures the surface was formed by rough broken masses of rock, occasionally rising into hillocks. The fissures may be best explained as due to the cracking of the outermost portion of the extruded lava.

A rounded hill formed by such an outwelling of viscid lava usually forms a steep-sided mass, which, when its internal structure can be examined, generally shows a distinct concentric arrangement, which has been compared with that of the leaves in the bulb of an onion. This is well shown in the Chodi-berg of Hungary, a great bulbous mass of andesitic rock, and also in the excavation of the hill of the Grand Sarcoui, a similar mass composed of altered trachyte in the Auvergne

Judd : "Volcanoes," p. 161.

The rhyolites too of Hungary and Transylvania show a marked tendency to form isolated summits, which are regarded as the summits of masses formed by the outpouring of a viscid lava from a fissure.

Lapparent : "Traité do Géologie," p. 1163.

Something of this concentric structure can be traced in the section of the lava-cap of Tarawera, where it is exposed in the crater on the south-west side of Tarawera proper.

Rotomahana.—Some two miles to the south-west of Tarawera was the celebrated warm lake of Rotomahana. The lake was about one mile in length in a north-and-south direction, and on the average about one-third of this in breadth. At its southern end it received the waters of three small streams, whilst at the northern end the overflow of the lake formed the Kaiwaka Stream, which flowed with rapid current towards the Ariki arm of Lake Tarawera, and joined it after a course of about one mile in length. Most of the ground around Rotomahana was warm at a few inches below the surface, and at innumerable points hot springs or jets of steam escaped from the ground. The largest of the boiling springs were those on the top of the White and Pink Terraces, and the siliceous sinter deposited from their waters had in the course of ages built up the famous terraces on the ground which sloped down to the shores of Rotomahana (see Pl. p. 28). The water which almost constantly flowed over the terraces, together with the waters of all the other hot-springs about the shores, fell into the lake. Below the surface of the water of the lake were other hot-springs, and these must have contributed largely to the considerable body of water which poured by the Kaiwaka into Lake Tarawera.

About a quarter of a mile to the east of the White Terrace was Rotomakariri, a lake of cold water, as the Maori name indicates, This was only one-third of a mile in length from west to east, and about half as much in width. Its shores showed numerous circular cones, which, Hochstetter states, reminded him of the volcanic tuff-craters of the neighbourhood of Auckland, and he thought that they were probably due to the former action of hot-springs or explosions of mud-volcanoes around the lake. Around Rotomakariri the ground was swampy, and several smaller pools of water occurred here. The overflow of Rotomakariri formed the creek Awapurohe, which joined the Kaiwaka on its way to Lake Tarawera.

To the east of Rotomakariri was an alluvial plain, a few square miles in area, formed by the numerous watercourses which came down from the south-east and south slopes of Tarawera. The plain had a gentle slope to the west. But this neighbourhood must have been occupied at one time by a lake, for in the strata exposed in the craters due to the recent eruption may be seen a succession horizontal lake-beds, with beds of lignite at intervals, one of the latter being l½ft, in thickness. The strata are composed of pumice sands and gravels, and fragments of various rhyolites, together with volcanic ash, which apparently fell in water, for there is a marked separation of the finest ash from the coarser particles, as if the former had remained in suspension in water for some time, whilst the coarser part had settled at once. It may be noted here that similar deposits of volcanic ash, in which the finer material rests upon the coarser, may be seen amongst the lake-beds which form the cliffs around Rotorua. Here too the ash seems to have fallen in still water, which I held the finer material in suspension for some time, until the coarser particles had settled to the bottom,

The lake in which the above deposits accumulated may have been but a shallow one, and may have been drained at times, for under one of the bands of lignite may be seen stumps of trees growing erect, with their roots in the underlying sandy layer. The plain is bounded to the south by a kind of escarpment, which here forms the abrupt termination of the Kaingaroa Plains.

Much of the higher ground around Rotomahana was formed of massive porphyritic rhyolites, as in the hill between Rotomahana and Rotomakariri, though the nature of the rocks was much disguised by the intense hydrothermal action to which they had been so long exposed. To the west of Rotomahana the ground rose to the

height of over 1,900ft., forming the hill known as Te Hape-o-Toroa, which had an irregular but somewhat flat top. The summit of this hill is composed of a porous light-grey rhyolite, differing but little from that which forms the summit of Tarawera.

III. Premonitory Indications of the Eruption.

The eruption seems to have been preceded by few phenomena which can be considered as warnings of an impending outbreak. The eruptions of Vesuvius are frequently heralded by subterranean rumblings and earth-tremors, which gradually increase in frequency and violence until they culminate in the earthquake shocks attending the paroxysms of the eruption. But in the present instance no such warnings were given : the district around Tarawera was indeed visited during the months before the eruption by one or two small earthquake-shocks, but not more than was usual.

It seems, however, probable that the hot-springs at Rotomahana had shown a slightly increased degree of activity during the year or two preceding the eruption. At the top of the White Terrace was a geyser-basin of snow-white siliceous sinter about 90ft. in diameter. This was usually full of clear water of a deep-blue colour, the water in the centre boiling up violently to the height of 10ft. or 15ft. The basin commonly became dry whilst the south wind was blowing, but as soon as the wind changed it commenced to fill again. Captain Mair states that on these occasions, when the basin was almost full, "grand snow-white columns of boiling water, 20ft. in diameter are hurled 60ft. into the air."

Trans. N.Z. Inst., Vol. IX., p. 27.

Mr. Josiah Martin was camping near the Terraces in November 1885, and was a witness of much grander eruptions of the White Terrace geyser. The first eruption was on the 22nd, and the second in the early morning of the 24th. On the second occasion water was thrown up in a column to the height of more than 150ft., accompanied by dense clouds of steam rising to 1,000ft. The Maoris stated that no eruption of such violence had ever been observed by them previously. (See Pl. p. 28.)

The magnitude of these eruptions may be regarded as furnishing some slight evidence that changes were then taking place underground near Rotomahana which were merely the prelude to the greater changes which eight or nine months later culminated in the eruption

Various other changes were noticed in the hot-springs of the Taupo zone during the months preceding the eruption, but, as such changes have been of more or less frequent occurrence ever since the springs have been observed, it would be unsafe to attach any special significance to them. It may however be noticed that the acid waters of the crater-lake on White Island disappeared about a year before; the eruption, leaving the bed of the crater dry.

When visiting Roto-elu (a lake fourteen miles north of Tarawera) in July, 1880, I found its waters some 4ft. below their usual level The Europeans living in the neighbourhood stated that the lowering of the water took place three months before the eruption.

A more certain sign of increased volcanic activity in the Taupo zone is perhaps afforded by the fact that steam was seen rising from the top of Ruapehu in the month of April preceding the eruption Mr. L. Cussen ascended the mountain on the 10th April, for the purpose of making trigonometrical observations. He states that the crater of Ruapehu contained a pool of water on that day, though the whole of the top of the mountain is covered with snow and ice. The water appeared to be steaming, and either gas or steam-bubbles were escaping at the surface. On the 16th of April he noticed a well-defined column of steam rising from the crater, several hundred feet above the mountain-top; it was visible several days subsequently. The Maoris said they had never known of such a thing before. On the 23rd of May the weather was very clear and bright, and a larger colums than usual ascended from the crater, about 300ft. above the mountain spreading out horizontally into a cloud-like mass.

Trans. N.Z. Inst., Vol. XIX., p. 377.

Eruption of White Terracf.—22nd Nov 1885

From a Photograph by Mr J. Martin, F.G.S.

A party of tourists who visited Rotomahana on the 1st June (according to Sophia, the guide, and others, it was the 24th May), nine days before the eruption, stated that they had seen a kind of tidal wave on Lake Tarawera. On going down to the creek running into the lake, where the boats were kept, they found the creek dry. Then, with a rushing sound, the water came running up, quickly but gradually rising until it overflowed the creek. The water afterwards retired twice, coming back each time. The tidal wave was noticed also by the Natives at the Ariki. No mention is made of any earth-quake on this day; but it is possible that an earthquake shock on the further side of the lake, perhaps due to the Assuring of rocks underneath some part of Tarawera

Mountain, may have originated a wave in the waters of the lake, and that this wave was greatly increased in height by the form of the arm of Lake Tarawera which stretches towards the Wairoa. This arm gradually narrows after the manner of a funnel.

The guides to Rotomahana state that the hot-springs and steam-holes were much more active just before the eruption, especially on the Tuesday, two days before, when several holes which had been quiet for years were pouring out large volumes of superheated steam, But, although the statement is not improbable, and is indeed confirmed in part by the accounts of visitors, it is clear that much stress cannot be laid upon it.

IV. THE ERUPTION.

The story of the eruption has been so frequently told from the popular side that it is unnecessary to repeat here the thrilling experiences of eye-witnesses. The present account will therefore be confined to those points which are of geological interest, and enable us to understand the character of the eruption.

It should perhaps be stated that the district is very thinly inhabited, and that the nearest spectators of the beginning of the eruption—the Natives who lived at the Moura and Ariki settlements, on Lake Tarawera—did not survive to relate their experiences. The nearest observers were at the Wairoa (eight miles west of Mount Tarawera), Rotorua (fourteen miles to the north-west), and Galatea sixteen, miles to the south-east); and the hilly character of the country did not allow them a complete and unimpeded view of the eruption.

The evening of the 9th of June was fine and clear. There had been a little rain at the Wairoa, though none was registered at the meteorological station at Rotorua. The previous summer had been very dry, and the rainfall in May was 2.02in. A little rain fell on the 1st and 2nd of June; on the 4th and 5th 1.84in. fell. From that date until after the eruption no rain was registered by the rain-gauge at Rotorua. The variations of the atmospheric pressure as recorded by the self-registering barometer at Rotorua show no apparent connection between any atmospheric disturbance and the outburst of the volcanic forces. The barometer at 10 a.m. on the 8th stood at 29.44. From that time till 4 p.m. on the 9th it gradually fell, reading then 29.02. It then rose very slowly up to the time of the eruption early next morning, when it stood at 29.1 (The Rotorua station is 990ft. above sea-level.)

The moon was just past its first quarter, and there was to occultation of Mars by it at 10.20 p .m.; but no unusual meteorological or other phenomena marked the night until after midnight. About half-past 12 o'clock slight earthquake-shocks were noticed by some of the inhabitants of the Wairoa, and also by the Postmaster at Rotorua. They must have been of but little intensity, for most of those who were asleep at the Wairoa were not aroused till some time later.

The earthquake-shocks followed one another rapidly, and increased in violence. About half-past 1 a.m. the eruption seems to have commenced at Wahanga, the portion of the mountain to the north, for a column of dark vapour, described as black smoke, and probably charged with ashes, was seen rising from it by some of the inhabitants of the Wairoa. About half an hour later the dark column of vapour was also seen ascending from Ruawahia. Only a few people seem fan have seen these dark clouds; but all are agreed that at about ten minutes past 2 a.m. there was a violent earthquake, followed by a loud and prolonged roar. A black cloud could now be seen lying over the whole mountain, ascending in a broad column, which spread outwards at the top. This familiar feature in the behaviour of the steam-column rising from an active volcano is compared in Italy with the stone-pine tree so common there. At Rotorua it was compared with objects more familiar—viz., a mushroom or umbrella.

Red bodies, which were doubtless red-hot fragments of ejected rock, were now seen darting from the black cloud, whilst lightning! began to shoot out from it, accompanied by the roll of thunder, A red glow lit up the column; and from time to time, as a fresh outburst took place on the mountain, the clouds were lit up with stronger glow, and red-hot stones, described by observers as fire-balls were seen falling around the summit. By this time the mountain seems to have been in full eruption, and presented a magnificent spectacle. The electrical phenomena must have been of a very remarkable character.

It is not clear at what time the eruption commenced at Rotomahana, as lofty hills obscure the view in that direction, both from Rotorua and the Wairoa. It is probable, however, that the craters at Rotomahana were in eruption soon after 3 a.m., for about that : time the earthquakes were especially severe, the heaviest one noticed happening at 3.20 a.m. There is a similar uncertainty as to the hour at which the craters to the south-west of Rotomahana were opened; but the point is not one of much importance. It seems clear, however, that by half-past 3 the whole country was in violent eruption along a line nine miles in length, extending from the north-east end of Wahanga to a point 600 yards to the north-northwest of Lake Okaro. The observers at Rotorua noticed a distinct column of lurid yellowish vapour rising over the hills in the direction of Lake Okaro, so that it was thought that the lake had been blown up. The column, however, must have been from one of the last craters at the south-west end of the line.

It is important to note that, whereas the clouds rising from the Tarawera Range were illuminated with an intense red glow, doubtless the reflection of the red-hot lava in the craters beneath, the clouds from Rotomahana and the south-west were not lit up in the same way, nor were "fire-balls" observed there.

In the meantime the columns of vapour, as they rose from the mountain and the country to the south, spread out overhead in a dense pall of clouds. From this the stones and ashes commenced to fall. At the Wairoa the first stones fell about 3 a.m. The cloud spread slowly outwards, and as viewed from Rotorua appeared to be advancing slowly towards it, but also spreading out to the north and south. About 4 a.m. ashes began to fall lightly at Rotorua; but nearly at the same time a fierce south-west gale began to blow, and this drove the ash-laden cloud away from Rotorua and in the direction of the Bay of Plenty. As the cloud travelled before the wind it gradually dropped its burden of ashes over all the country between Rotorua and the sea.

The chief violence of the eruption appears to have been over before 6 a.m., the paroxysm having lasted only three or four hours. The ejection of matter was continued for some time longer, but with declining energy. Owing to the presence overhead of the dark clouds of vapour charged with ash, the district remained in total darkness till some time after the hour of sunrise. Even at Rotorua the darkness lasted till after 9 a.m. At the Wairoa mud or ashes continued to fall until 9 a.m., whilst to the east of Tarawera and in the direction the wind was blowing the fall of ashes and consequent darkness con- tinned still longer. At Opotiki (47 miles away) it was pitch-dark till 10.20 a.m., at which hour the fall of dust became lighter, and daylight gradually appeared.

E. P. Dumerque: Trans. N.Z. Inst., Vol. XIX., p. 382.

The earthquakes attending the eruption have been described as severe or heavy. They were not, however, severe enough to upset bottles or other light objects in the houses at Rotorua, fourteen miles away. Nevertheless the shocks, and still more the accompanying sounds, were perceived at a much greater distance. At Auckland, distant 133 miles in a direct line from Tarawera, a large proportion of the population were aroused by loud detonations and the rattling of doors and windows, thought by most of those who heard them to be due to the firing of cannon. It was supposed by some that the sounds came from a ship in distress in the Manukau Harbour. The discharges, however, were not regular like those of minute-guns, but rather resembled the sounds produced by a train of siege guns, including large and small cannon. The column of vapour rising from Tarawera, with its accompanying flashes of lightning, was also visible from Auckland.

Judge Puckey informs me that the sounds were heard even as far as Hokianga, 253 miles north-east from Tarawera, and that next day the Natives who lived near the North Cape came into Hokianga stating that they had heard the strange noises during the night, and feared some disaster had happened to their people.

The sounds of the eruption were heard in an easterly direction from Tarawera, all along the Bay of Plenty. At Gisborne, ninety miles to the cast-south-east, most of the inhabitants were aroused about 2.30 a.m. "by the rumble of distant explosions" and the continuous rattling of doors and windows. The cloud over Tarawera was distinctly seen in the clear moonlit sky; its height was calculated by Archdeacon Williams to be a little more than six miles above the top of the mountain.

Trans. N.Z. Inst., Vol. XIX., p. 380.

To the west of Tarawera the sounds reached Hamilton and Cambridge; to the south they were heard all around Lake Taupo, and as far as Wellington (228 miles to the south-south-west), and even as far as Christchurch (420 miles).

It should be observed that the detonations resembling the firing of cannon were not very noticeable at Rotorua, being lost in the general prolonged roar of the craters and rumble of thunder. sounds heard at a distance were probably due to the explosions of

Tarawera.

June 14th 1886.

From a sketch by S. Percy Smith.

General View of Craters.

[unclear: by G. S]

steam deeper in the fissure, the vibrations of which were conducted through the earth.

Decline of the Eruption.—We have already seen that the period of intense paroxysmal eruption was over before 6 a.m. on the 10th June. The eruption continued for some time longer, though with rapidly-diminishing energy. It is impossible to state exactly the condition of the vents during the two or three following days, for the cloud of vapour hung around the mountain, and it was not till the morning of the 13th that its top was clearly seen. Until noon on the day of the outbreak the lightning continued to play around the clouds, and during the whole of the day an almost constant rumble was heard from Tarawera.

When the top of Tarawera Mountain was first seen on the morning of the 13th June, it was found that it had increased in height, whilst its outline was changed (see Pl. p. 32). Columns of steam rose at intervals from its whole length : these were of small size, but Rotomahana and some of the craters to the south-west were emitting vast volumes of steam (see Pl. p. 33). The column from Rotomahana, or rather from the huge crater which included the former site of Rotomahana, rose to a great height, so that it was clearly visible at Auckland 133 miles away. The elevation above the horizon, as observed by myself, corresponded to the height of 15,000ft. above Rotomahana. Mud and numerous stones were thrown out from Rotomahana crater and some others to the south-west for two or three weeks after the eruption; but these gradually diminished in quantity, until at the time of my visit in the following July the ejection of material was for the most part confined to a few stones thrown out now and again when a sharper explosion took place in the craters. Much steam was still emitted from Rotomahana, and usually filled the crater so as to completely obstruct the view of the bottom. At times, however, a favourable breeze would drive away the clouds, and afford a glimpse of the hideous mud-craters and mud-fountains which covered the bottom some 600ft. below the margin.

Occasionally short spasmodic outbursts occurred both at Rotomahana and Tarawera; but they were of brief duration and of little intensity, and not due to a revival of the deeper-seated forces, but (amply to minor explosions of steam accumulated in the rocks lying at the bottom of some of the vents. They were commonly accompanied by earthquake-shocks; on one occasion a shock was of sufficient intensity to overthrow light objects at Rotorua. The earth-quakes or earth-tremors were especially frequent after rainy weather, when half a dozen or more would be noticed in the course of a day. On two or three occasions I observed small clouds of steam rising from the summit of Tarawera immediately after an earthquake-shock

About the middle of July heavy rains fell in the Hot-lakes district, and the earthquakes were especially numerous. On the 21st July, having ascended Tarawera as far as the uppermost crater of the chasm on its south-west slope, I found the side of the mountain covered with a bright-red volcanic ash, reaching the thickness of an inch, which had evidently fallen since the rainfall, for below it the older grey ask was found with a smooth, caked surface where wet by the rain. The rain-water had apparently found its way down to the lava, which lay still hot in the bottom of the crater. Here it soaked into the lava and accumulated until the growing tension of its vapour produced an explosion.

The earthquakes felt in the district after the eruption were thus due to explosions of steam either on Tarawera or at Rotomahana. This is still further confirmed by the records of a simple form of seismograph set up by Professor Brown at the Rotorua Sanatorium, under the charge of Dr. Ginders. The tracings given by this instrument almost invariably showed that the earthquake-shocks originated at Rotomahana or at Tarawera. It should be mentioned, however, that two sharp shocks, which occurred on the 12th July, were shown by the seismograph to have originated not at Tarawera, but at some place a few degrees to the west of south from Rotorua. These earth-quakes were not felt at Tauranga to the north, but were felt strongly at Taupo, reaching the latter place one minute earlier than Rotorua, the time being compared by telegraphic communication between the post-offices. The origin of these earthquakes seems therefore to have been more to the south of the Taupo zone than Rotomahana, and the writer is inclined to attribute them to some place near Orakei-korako, Perhaps these earthquakes indicate sympathetic disturbances at another part of the zone.

Black Terrace Crater.—Mr. Lundius and the writer, whilst travelling over the mud around the Rotomahana Crater on the 21st July, noticed at one place, about a quarter of a mile from the edge of Rotomahana, steam issuing with hissing noise from cracks in the mud. A fortnight later a survey party observed large clouds of steam rising from the spot, and, on approaching, it was found that a new crater had been formed, which was throwing out stones and mud with great vigour. This crater was about 200 yards or so in diameter and occupied the position of the Atetuhi Geyser, known also as the Black Terrace, from the colour of some of the sinter there. This crater, the last which was formed during the eruption, was therefore Map of fissure formed in the Tarawera Eruption, June 10 1886, To illustrate the report by A. P. Thomas called the Black Terrace Crater. It continued in active eruption for two days, and, with a smaller degree of energy, for some weeks longer.

The formation of the Black Terrace Crater was the last considerable event in the eruption so far as the subterranean forces were concerned; the changes which have since occurred in the craters are due rather to agencies acting at the surface, and will be considered : further on.

Alterations in the Rotorua Springs.—We have still to note some of the minor events accompanying the eruption. At the Native settlement of Ohinemutu, near Rotorua, a large number of new hot-springs broke out at various points, some of them on the public roads, and others even in the floor of the large Maori meeting-house—Tamatekapua. In front of the Government Agent's house a large spring of boiling water burst out; some months later this spring was still active, and its overflow formed a considerable rivulet of hot water. Most of these fresh springs were formed on the night of the eruption; a few, however, were formed during the following weeks.

The hot-springs at the Government Sanatorium gradually increased in temperature and volume of outflow

in the days following the eruption. The Rachel Bath, the normal temperature of which is 170° Fahr., had the temperature of 176° Fahr. on the 13th June, three days after the eruption, and 190° Fahr. on the 16th. On the 1st July it reached 196° Fahr.; and on the 12th and 13th of the same month, after heavy rain, it reached 198° Fahr. At the beginning of July the spring which supplies the Blue Bath (a hot swimming-bath 62ft. in length) was 15° Fahr. above its normal temperature, with unusually copious discharge. At the same date the Priest's Bath, which is situated on the margin of the lake, was a few degrees below its usual temperature, but had a much greater outflow. Afterwards its temperature rose, and on the 4th September was at 104.6° Fahr., some degrees above the normal.

At Whakarewarewa, two miles south of the Rotorua township, the geysers have been distinctly more active since the eruption. This increased activity did not appear at the time of the eruption, but afterwards. For instance, on the 25th June a large and very deep pool of clear and almost boiling water, which had long been used by the Natives as a cooking-place, partly because it was always at the same high temperature and free from spasmodic action, suddenly burst into eruption, throwing out boiling water and stones. The Maoris, thinking of Tarawera, were terrified by so unusual a circumstance, and left the settlement for the time. Waikite, a large geyser which had been altogether silent for more than ten years, suddenly became active, and threw up a column of water 40ft. and, at times, 60ft. in height. Other geysers have also become more than usually active, and have remained so up to the present time.

Natives from Orakei-korako reported that the hot-springs then were much disturbed, both at the time of the eruption and afterwards. The earthquakes also were severely felt there.

A question of much interest at once suggests itself here: Do the outbreak of the new springs at Ohinemutu, the increased temperature of the baths near the Sanatorium, and the greater activity of the Whakarewarewa geysers indicate increased subterranean activity near Rotorua, sympathetic with the eruption of Tarawera? Tempting as such an hypothesis may seem, a simpler explanation of the phenomena is to attribute them to the opening by the earthquake-waves of the fissures by which the heated water or steam finds its way to the surface. It may seem strange that the increased action should have shown itself at Ohinemutu immediately, whereas at Whakarewarewa it only appeared some days after the eruption. It must, however, be remembered that the earthquakes continued for some weeks after the eruption, and that the formation of new springs at Ohinemutu was not confined to the night of the eruption, but took place to a certain extent afterwards.

The rise in the temperature of the springs at the Sanatorium may be explained as clue in part to the rise in the level of Lake Rotorua along its southern shores, which occurred on the morning of the eruption, as will be shown immediately. It has always been noticed at Rotorua that the hot springs are more active when the water in the lake is high.

Level of Lake Rotorua.—During the morning of the eruption Tarawera the waters of Lake Rotorua rose along the shores near the Sanatorium. At the Government baths a register of the height of the lake was kept, and it was found that the lake rose 18in. up to 6.30 a.m., then sank 6in., only however to rise again. At Ohineamutu a similar rise of the lake was noticed, and the water in the Utuhina Stream was observed to be flowing backwards by Mr. Alloam and others. The Natives who lived around the lake, and the boat men, stated that the lake had fallen at the northern end. As the matter was one of much importance, we sailed round the lake, and calling at various points, we were shown at the Ngae, Awabou, and Mokoia stumps which were said to have been recently uncovered by the fall of the waters. Such statements, if to be relied upon, would point to a tilting of the basin of Lake Rotorua. They were however called in question, and even the rise of the lake-level at Ohinemutu and the Sanatorium denied. Mr. James Stewart, C.E., had taken the levels along the projected line of railway to Rotorua only a few months previously, and, when these levels were taken again after the eruption, it was found that no change of level had occurred along the railway-line. It should, however, he stated that the railway first approaches Lake Rotorua at a point 1½ miles south of Awahou, and that it keeps at some distance from the shores, ending in the Government township a quarter of a mile from the lake. The observation may therefore he perfectly consistent with a local subsidence of the ground close to the southern shores of the lake. That the lake-level here did rise at the time of the eruption must be accepted as an established fact from the careful observations of the Government officials at the Sanatorium. This rise of level could not be due to any influx of rain-water, for there had been comparatively little rain lance the summer. The lake is always higher in winter than in summer: and, when some time later the usual winter rains came, there was an additional rise of the lake, its level being higher than had ever been noticed before, so that the Native cemetery on the point near the old submerged pa was washed out. Further, the rise at the time of the eruption was a permanent one. I observed the lake-levels with some care during the summer of 1886—87, and found that the waters did not fall so low as during previous summers. I had been well acquainted with the shores of the lake near Ohinemutu (having frequently bathed in the lake), and noticed that familiar landmarks remained submerged even at the end of summer. The tea-tree which grew just at the former winter-level of the water had been killed, and a few inches of water still covered the place where it formerly grew, the dead sticks projecting from the water.

There is therefore ample testimony that a rise of level of the lake along the southern shores from Ohinemutu to the Sanatorium took place at the time of the eruption, and that this rise was permanent. Unfortunately such clear evidence as to the levels of the other parts of the lake was not obtainable, and, accepting only such evidence as is perfectly clear, it follows that a local subsidence took place along the southern shores of the lake. These shores are largely composed pumice sands and gravels; they are undermined by hot-springs which bring much mineral matter in solution to the surface, to be deposited as sinter around the boiling springs, or to be carried in solution into the lake. The rocks must therefore be more or porous or cavernous from the removal of the mineral matter, and the earthquakes at the time of the eruption may have caused these porous strata to settle down, thus causing a subsidence of the surface. The settling-down of the strata would doubtless assist in the formation of new outlets for the heated water, which would now find a free passage upwards by the fissures opened by the passage of the earthquake-waves.

Earthquake-fissures.—About five miles to the west of Rotomahana is a valley-fiat about three-quarters of a square mile in area, known as Waikorua or Earthquake Flat (see Map II.). The valley is surrounded by hills, and its bottom is quite flat, and has the appearance of a lake-basin which has been filled up with material washed off the surrounding hills. Crossing the flat in a N.E. by E. direction are a number of old earthquake-cracks, as well as some holes said to have been produced by earthquakes. I counted as many as eleven of these parallel cracks : some extend completely across the flat; others cannot be traced so continuously. During the recent eruption several of the old fissures were reopened, and it will be noticed that their direction is nearly parallel to the direction of the great fissure formed in the eruption.

Other earthquake-fissures were also formed at the time of the eruption, as, for instance, on the hills near Pareheru, about a mile south-east of Earthquake Flat. Here a crack was formed which could be traced for the distance of over a mile along the sides of the hills, All these cracks are comparatively narrow, usually only a few inches wide and rarely reaching as much as a foot in width. Still farther to the south-east old earthquake-cracks may be noticed amongst the hills, and some of them were reopened during the eruption. In some cases these earthquake-fissures are also lines of fault, the ground to the south-east being thrown down a few feet. Most of them have a direction nearly parallel to those on Earthquake Flat and to the line of the Great Fissure. One crack, however, had a north-and-south direction.

It can scarcely be an accidental circumstance that the old lines of earthquake-fissure are parallel to the new and much more extensive fissure formed during the recent eruption. It must point rather to former earthquakes originating in disturbances at the same volcanic focus where the pent-up subterranean forces found vent in the eruption of 1886.

During the earthquakes which happened about the 20th July a fissure was opened on the road from Rotorua to the Wairoa. About I half-a-mile on the Rotorua side of the Tikitapu bush was a dry basin among the hills. The ground on every side sloped down to the bottom of the basin, so that there was no escape for the rain-water except underground. After the fall of the ash, water collected at the bottom of this basin, forming a pool across the road. The fissure which was subsequently opened could be traced for the distance of some 250yds., its direction coinciding with the longer diameter of the basin. Towards the central part it was of considerable breadth, and subsidences had occurred along it. The largest of the depressions was a hole having the length of 70yds., and extreme width in the middle of 34yds., though at the ends it was only 10yds. and 4yds. wide respectively. The greatest depth was 98ft., and the materials shown in the sides of the chasm were pumice sands and gravels in horizontal beds. The fissure was opened along an old earthquake-crack, and it seems probable that the existence of this crack had determined the course taken by the drainage from the basin. The subsidences were probably due to the fall of loosely-compacted pumice-strata into hollows produced by the removal or settling of material along this subterranean watercourse. Deep holes of various sizes are of common occurrence in the pumice-gravels of some parts of the Waikato Valley and the Patetere country, and these seem to be due to similar subsidences along underground watercourses in the porous strata.

Sympathetic Action at other Centres.—From what has already been stated it will have been inferred that the eruption of Tarawera had deep-seated origin. It docs not follow that because the eruption bad such an origin it would be accompanied by disturbances at other volcanic centres in the same district. Nevertheless, any such sympathetic activity would furnish interesting evidence that the eruption had its source in changes acting along the line of fissure of the Taupo zone at a depth far below the surface. Some evidence of this kind may be cited, as, for instance, the rise of steam from Ruapehu ft phenomenon' which has frequently been seen since the eruption. A few slight subterranean rumblings from Tongariro or Ngauruhoe were also heard by the shepherds and road-makers who were near the mountains on the night of the eruption.

The earthquakes originating to the south of Rotomahana (probably at Orakei-korako) may also be mentioned here (see p. 34).

The increased activity of the springs in the Rotorua district should be ascribed to the effect of the earthquake-waves, and of the rise in the level of Rotorua, rather than to any sympathetic action.

White Island is reported to have shown greater activity after the eruption; and even after allowing for the much closer attention which the island received then, and the natural tendency to exaggeration at such a time, the reports appear to have been well founded. The increase of activity was not continuous, but from time to time unusually large clouds of vapour were observed rising from the island.

V. Nature of the Vents Formed in the Eruption.

The Great Fissure.—When the scene of the Tarawera eruption is examined it is found that a series of vents was formed extending along a line over nine miles in length, reaching from the north-east slope of Wahanga, through the heart of Ruawahia and Tarawera, down the side of the latter to Rotomahana and beyond, ending at a point about 600yds. to the north of Okaro Lake. This line has a mean direction nearly N.E. by E., or, more exactly, 58° E. of N., whilst that of the Taupo zone is 38° E. of N. It is not perfectly straight, but its deviations from a straight line are very slight.

The vents or craters along this line have been formed around portions of a great fissure which traversed the rocks of the earth's J crust. High-pressure steam escaping from below blew out the rocks forming the walls of the fissure, and thus produced crater-like hollows. Had the force of the explosions been uniform along the line, and the rocks of equal strength to resist the force of the escaping steam, the result would no doubt have been the formation of a deep narrow trench extending along the whole line. But the rocks differed in their power of resistance, and the supply of steam and its facility of escape varied at the different points. The eruption was further complicated by the rise of molten rock, saturated with steam, to the surface along the northern part of the fissure, and by the existence around Rotomahana of rocks which had long been subjected to the action of heated water rising from below.

As soon as the fissure was formed the high-pressure steam from below would tend to escape upwards. At certain points it would find a more ready exit, and, expanding explosively as it issued from the fissure, would blow out or tear away the surrounding rocks, thus forming a series of craters, separated by wider or narrower strips of ground which escaped the explosions. Such areas of ground are seen along the great Tarawera fissure, some of them extremely narrow, so that one cannot help wondering how they can have escaped the explosions, for they appear like mere walls dividing a crater into two; others are wider. The most considerable of the bridges is the one at the south-west end of Tarawera, where the former surface of the ground was left undisturbed for the distance of a quarter of a mile.

That the fissure actually passed through these bridges, which thus escaped simply by the more ready passage of the steam elsewhere, is shown by the narrow vertical cracks or fissures to be traced in most of the walls of rock which part successive craters. We may see here, moreover, that the line of fissure was not a line of fault, for the rocks on both sides of the fissure correspond exactly, there being no lowering of the rock on either side.

The materials ejected from the various craters naturally accumulated to the greatest thickness around their margins, and the size and depth of the craters were thus added to by the rock-*débris* piled up around them. The craters therefore are of double origin. They are, in the first place, hollowed out of the ground by explosions—*i.e.*, they are primarily explosion-craters—and, secondly, the upper portions are built up around the vents. The relative shares of these two causes in the formation of the craters of the present eruption are by no means the same in all cases. In some, one-half of the depth of the crater is due to the building-up of *debris* around its edge; but in most cases a smaller proportion of the depth is due to this cause—sometimes much less, as in some of the craters towards the southwest of the line, where less than one-tenth of the total depth is so formed.

The vents along the line of fissure may most naturally be described according to the following groups :—

- Craters on Wahanga, Ruawahia, and Tarawera.
- Craters from the foot of Tarawera to the end of the great Rotomahana crater.
- Smaller craters to the south-west.

1. *Craters on Wahanga, Ruawahia, and Tarawera*.—These occupy a line rather more than four miles in length, reaching from a point on the north-east slope of Wahanga, 900ft. above Lake Tarawera, to the foot of Tarawera Mountain, 260ft. above the lake. The only considerable interruption of the line of craters is the bridge at the southwest margin of the flat top of Tarawera, having a breadth of a quarter of a mile (see map of the fissure). To the west of this the fissure down the side of Tarawera has received the name of "the Tarawera Chasm" whilst to the east it stretches across the mountain in the form of a deep trench with steep sides, divided by narrow partitions, here the rock of the mountain remains in position, into a series of oblong craters.

This section of the fissure is distinguished from the other by the circumstance that fresh augite-andesite scoriæ were ejected from its whole length, except for a short distance at each end. The lava which rose from below was so highly charged with superheated steam that it did not escape as a lava-stream, but was hurled out

explosively, and is piled up in layers of black and red scoria; around the fissure.

That the lava welled up in the fissure in a molten state is abundantly shown not only by the vast quantities of scoriæ produced, but by various other facts. Bombs of the new lava are to he found abundantly in many places : these have assumed a spherical form whilst cooling from the molten condition in their passage through the air. At the bottom of one of the craters I found large masses of fresh black lava containing as much as 1,000 cubic feet. The rocky walls had been splashed with the molten lava, which had moulded itself in cindery, slaggy forms around the projecting rocks. Along the upper margin of the Tarawera Chasm the same moulding of the lava around projecting rocks was observed, showing that the ejected lava had fallen here whilst still in the state of fusion.

In the part of the fissure extending from its beginning on the slope of Wahanga as far as the Tarawera Chasm we may count twelve craters, separated by partitions of varying height. The first two craters are comparatively small and of no great depth; the others are long and deep, varying in depth from 300ft. to 800ft., and in width from 150yds. to 300yds., the deepest crater being that crossing the gap between Wahanga and Ruawahia. The sides of the craters are almost without exception so steep, in places being quite vertical, that it is not possible to descend into them. The only craters which I was able to get down into were the two nearest the south end of Tarawera. An aneroid reading at the bottom of the second of these showed it to be 450ft. below the highest point of its margin to the north-east. At this time steam was issuing from numerous points in the fissured rocks at the bottom.

The first crater begins low down on the slope of Wahanga. It is a long and narrow fissure, not more than 80ft. deep. The most interesting feature it presents is that it cuts across a small hill, or, rather, a spur of Wahanga, which had been divided by a gully worn by water descending from the mountain. The fissure shows a total disregard of the surface-features of the ground, cuts into the highest part of the spur, and crosses the gully at right angles. The spur consists of a lava-stream, covered above with a rhyolitic breccia. The end of the crater away from the mountain shows around its margin principally fragments of the old light-coloured rhyolites, hut nearer the mountain these become more largely mixed with black scoriæ, and then with red. Apparently the fresh lava was only thrown out from the part of this crater nearest the mountain.

The next crater is also of relatively small size, but shows far more scoriæ around its edges. The third and fourth craters are much larger and deeper, and are comparatively narrow. They lie immediately under the south-east wall-like face of Wahanga, part of which has been blown away. The margin of the craters to the north-west is formed by the flat top of Wahanga itself (3,500ft. in height), and from it there is a sheer precipitous descent of over 1,500ft. to the bottom of the craters. The opposite margin is necessarily much lower. The former wall is composed of the massive rhyolite lava of the mountain; in the opposite wall rhyolite breccias are to be seen.

The line of craters crosses the gap between Wahanga and Ruawahia. and, striking the north-east angle of the latter, cuts across the centre of Ruawahia and Tarawera. Three craters may be counted occupying the gap between the summits, or they may be regarded as the three divisions of one crater, for the partitions are very narrow, a mere knife-edge of the original surface being left, too narrow to support any thickness of *débris*, whereas the other margins of the craters are raised by a hundred feet or so of scoria; and other fragments of ejected rock. The craters are of great depth; the one nearest Ruawahia stretches down 800ft. below the gap. The southern part of this crater is excavated out of the side of Ruawahia, which just above reaches its greatest elevation of 3,770ft. From this point down to the bottom of the crater there is therefore a precipitous fall of 1,500ft.

The walls of the fissure here show very interesting sections, quite different in character from those seen elsewhere. Looking at the side of Ruawahia exposed at the end of a crater, we sec, underlying the ash and scoriæ recently deposited, first a flat cap of massive rhyolite lava, and below that again inclined beds of white rhyolitic ash or pumice, which form a striking contrast with the dark-red or black scoriæ. The pumice-beds show a very complicated arrangement, showing that the section has been taken across the rim of a cone and crater composed of pumice and other light-coloured rhyolites. Just under Ruawahia the strata in the centre dipped inwards, evidently towards the hollow of a former crater. At the sides the strata showed an inward dip towards the centre of the section, and then an outward dip away from the mountain. In the sides of the fissure stretching towards Wahanga a dip away from Ruawahia could be readily observed.

The line of craters is continued through the middle of the plateau-top of the mountain as far as the bridge above the "Chasm;" the depth these craters is greatest (600ft.) towards the north end of Rua- wahia, and diminishes gradually towards the opposite end. The craters are hollowed out of the rhyolite lava forming the top of the mountain: the sides are very steep here, at times quite vertical. On top of the old lava a small amount of rhyolitic breccias is observed filling up the hollows between the peaks which marked the top of the mountain. Above these is deposited a great thickness of scoriae from the recent eruption, varying from 80ft. to 200ft., the greatest thickness being found near the north-east part of Ruawahia. The upper parts of the crater-walls, where

they are formed by the newly deposited and incoherent materials, are naturally less steep than the lower parts where the fissure passes through the massive rhyolites.

The flat top of the mountain was, as already described, marked by smaller peaks or hillocks, and was therefore far from being even The newly-deposited matter, also, has not fallen regularly, but has formed along certain parts of the margin of the fissure deposits at least twice as thick as those along neighbouring parts. The margin of the fissure is therefore marked by undulating beds of scoriæ, which rise into low conical hills in which the layers slope outwards. The outline of the mountain, as viewed from a distance, has also undergone a change; it shows more conspicuous peaks than before, and is somewhat higher. The highest point of the mountain is at the north-east end of Ruawahia, and just on the west side of the fissure: this point, according to Mr. Percy Smith's observations, is 3,770ft. above the sea. The mountain was formerly 3,606ft. high, thus showing a gain of 164ft. The gain is naturally greatest near the fissure; farther away the deposit of ashes is less thick, and the height of the mountain less affected, so that the surface shows a slope away from the fissure on each side.

The freshly-deposited material on the mountain consists most largely of scoria; of augite-andesite, which give to the new strata, as seen in section along the margin of the fissure, a prevailing colour of dark-red, so that in the sides of the fissure the line between the old and new rock is very obvious. (See Pl. p. 44.) Amongst these darker scoria; are fragments of the older light-coloured rock, and towards the surface they are often very abundant. The surface of the mountain along the bridge above the Tarawera Chasm is remarkable for the profusion of angular blocks of rhyolite with which the ground is strewn. Most of these are about a foot in diameter, but: many of them are very much larger.

Near the edge of the fissure the augite-andesite scoria; are red in colour, whilst farther away they are black. This change of colour from black to red is due to the action of various volcanic gases and

Tarawera Fissure.

Shewing old surface of Mountain.

Looking South

Fissure in Ruawahia, W. Deverell air on the scoriæ whilst still hot, and may be imitated in the laboratory. If the black scoriæ be heated to a temperature below red-heat in a tube through which a current of air and steam is passed, the scoriæ slowly turn red, owing to the oxidation of the iron present in them, and its conversion into ferric oxide. If hydrochloric-acid gas be added to the air and steam passing over the scoriæ, the change of colour takes place much more rapidly, whilst parts of the scoriæ are attacked still more strongly, and become a bright yellow or orange-red colour, from a stain of perchloride of iron formed by the action of tie hydrochloric acid on the oxides of iron.

A precisely similar action on a larger scale took place amongst the lot scoriæ which accumulated on the margins of the craters. The steam, which escaped abundantly from the fissured rocks on the mountain after the eruption, was mixed with hydrochloric-acid gas, so that walking near the fissure was often rendered difficult owing to the choking character of the fumes rising from the ground. During the month of July the ground along the sides of the Tarawera Chasm appeared yellowish-green, as viewed from a distance, owing to the presence of large quantities of perchloride of iron. This yellowish tinge was popularly attributed to sulphur, as is often the case. After heavy rain the colour disappeared, the perchloride of iron being removed in solution by the rain-water. The beds of scoriæ along the margin of the Tarawera Chasm presented a most brilliant appearance, as their prevailing tint of dark-red or chocolate was marked by bands of bright orange-red or yellow where the perchloride of iron had gathered.

The ash near the margin of the fissure on the mountain seems to have undergone a very large amount of chemical change. The ground has in many places been traversed by hundreds of cracks, usually parallel to the margins of the craters, though sometimes at right angles to them. Along these cracks the acid vapours have escaped, and have acted upon the rocks. The perchloride of iron and other soluble products formed have been removed by the rain, and an earthy residue of bleached and decomposed rock left behind. The fissures, which began as narrow cracks, have increased in width and depth until some of them are hundreds of yards in length and 10ft. or more in breadth, with a depth of 5ft., 10ft., or more.

It should further be mentioned that the loosely-compacted materials which accumulated around the craters are gradually slipping down into them, so that already long talus-slopes of the fallen *débris* have collected below. By this constant fall of material into the craters they are naturally becoming filled up, and the depth greatly reduced. One of the difficulties in the way of exploring the bottom of the fissure on the mountain (so far as it is accessible) consists in the possibility of the sudden fall of an avalanche of loose scoriæ from above.

After what has been said concerning the fissure on top of the mountain, it will not be necessary to devote much time to a description of the Tarawera Chasm. The Chasm consists of a portion of the fissure about a mile

and a quarter in length, stretching from the edge of the plateau down the side of the mountain to its foot. (See Pl. p. 46.) The fissure is continuous the whole way down, but varies in width and depth: the bottom is marked by various crater-like hollows, which are doubtless the points whence the discharge of steam or lava was most energetic. The uppermost part of the fissure is the most considerable, a wide and deep crater having been formed here. At the back of the crater its wall is formed by the vertical rocks, rising up more than 1,000ft. to the top of Tarawera; at the sides the height of the crater walls diminishes. The amount of scoria; deposited around the upper part of the Chasm shows that it must have been very active, and it was doubtless the more ready escape of the volcanic forces along the side of the mountain which allowed the bridge of ground above to remain undisturbed.

Further down the Chasm becomes narrower and less deep, and ends at the foot of the mountain in a small crater, which when I first saw it, in July, 1886, contained a small lake. Later on this disappeared, and examination of the bottom shows that in the massive rhyolite forming the wall at the back a fissure exists which penetrates the hill, and is probably a portion of the main fissure. The rocks are in contact above, but diverge below, so that it is possible to advance a considerable distance into the mountain along the fissure.

Part of the site of the Tarawera Chasm was occupied by large trees, and during the eruption these, like the rocks, were blown up. Large stumps of trees found near Rotomahana are supposed to have come from this place, as no trees of so large a size grew on the other parts of the disturbed ground.

2. *Craters from the Foot of Tarawera to Rotomahana Crater.*— The character of the eruption along this and the remaining section of the fissure was different from that on the mountain. Here, on what we may call the lower country, no molten lava rose to the surface, and there was therefore no ejection of fresh scoriæ or bombs. The matter ejected consisted of the old rocks of the locality fractured and reduced to ash by the violence of the steam which escaped in such abundance. The eruption on the lower ground may therefore be

The Chasm

South-West end of Tarawera.

spoken of as a hydrothermal eruption, whereas that from the mountain was a true volcanic eruption. The terms "hydrothermal" and "volcanic" are used here in a very narrow and restricted sense, for most volcanic phenomena are also strictly hydrothermal, the immediate cause of volcanic eruptions being generally admitted to be the presence of large quantities of water and gases in masses of heated rocks. Whether the heat be sufficient to melt the rock or not is relatively a matter of minor importance. It is, however, both usual and convenient to distinguish between these two phases of volcanic activity.

The question which next suggests itself is, What was the source of the high-pressure steam, the active agent in the ejection of material from the remainder of the fissure? Were the rocks along the fissure at no very great depth from the surface charged with water and at a high temperature, and so ready to explode as soon as the opening of the fissure occurred? Or was the steam derived from a greater depth Rom the surface? Is it possible that the deeper part of the fissure across the lower ground was injected with molten rock just as the fissure along the mountain was, although the lava did not appear at the surface?

It would be interesting if we could know why the lava rose in the fissure along the mountain, where there was the additional resistance of half a mile of rock to overcome, rather than along the plain. It is scarcely a sufficient answer to say that the source whence this lava was derived lay at such a depth below the mountain that the additional thickness of half a mile of rock made no appreciable difference, for the fissure extended through the plain as well as through the mountain. A more satisfactory explanation may perhaps be found the supposition that the source of the lava lay immediately under the mountain, and that the old lavas of the mountain, notwithstanding their apparently firm and massive character, really offered, by reason of their abundant joints, comparatively little resistance.

The fissure extended to the distance of five miles beyond the mountain, and there is evidence that the whole of this fissure was of Beep-seated origin. It therefore seems somewhat remarkable that no lava appeared in the fissure along the low ground, and we are led to inquire whether there is anything in the character of the country here which may have prevented the rise of lava up the fissure, supposing it to have been injected into the fissure at a greater depth. The only agent which can be supposed to have obstructed the rise of molten rock is the large supply of water available on the plain. Not only was there Rotomahana, but also Rotomakariri, and other lakelets, as well as a considerable supply of underground water in the porous strata. What the behaviour of molten rock in a half-opened fissure would be, when the surface waters were let down upon it, it is impossible to say with any certainty, but the result would doubtless be the explosive conversion of the water into steam, and the consequent cooling of the lava. Whether any fragments of the fractured lava would be thrown up to and reach the surface would depend upon the depth in the fissure at which the explosions occurred. The occurrence of the fragments of the fresh lava amongst the ejecta from the fissure would then furnish some evidence of the

nature of the action which had taken place.

Fragments of the augite-andesite lava occur everywhere amongst the ejecta from the portion of the fissure along the lower country; but it is certain that a large proportion of these, and perhaps all, came from the mountain, and so the evidence is rendered valueless, It may be mentioned here as bearing upon this point that near some of the southern craters, more especially the Black and Echo Craters, large quantities of augite-andesite scoriæ occur; and it appeared to me at first probable that they had been ejected from this part. If it could be shown that the molten lava rose to the surface not only along the fissure in the mountain, but also at certain points near the south end of the line, the probability of its injection into the fissure along the whole extent would be greatly strengthened. Further close examination of the neighbourhood of these craters does not strengthen the impression, but seems rather to show that the fresh scoriæ found near them came from the mountain. Although such an injection of molten lava into the fissure south of the mountain cannot be proved, it is by no means improbable, and would explain some of the characters of the fissure. We must, however, look to another circumstance to explain the great size of the Rotomahana Crater. Around Rotomahana the ground everywhere had for centuries shown signs of vigorous hydrothermal activity. There can be little doubt that at moderate depths from the surface the rocks were saturated with water at a temperature far above its ordinary boiling-point, and that this water was simply kept from flashing into steam by the pressure of the overlying rock. If that pressure could have been relieved by the removal of the surface-layers of the ground the superheated water would have been explosively converted into steam. There were present, therefore, around Rotomahana all the conditions requisite for a hydrothermal explosion except the relief of the pressure due to the overlying rocks. The formation of the fissure during the eruption supplied the last necessary condition, and the result was therefore the stupendous hydrothermal explosion of June, 1886. The large area of ground around Rotomahana which had long been subject to hydrothermal action explains satisfactorily why the width of the crater is so much greater there.

But between Rotomahana and the mountain on the one side and to the south-west of Rotomahana on the other there are large sections of the fissure which passed through ground not known to have shown any signs of hydrothermal activity. Even in the sections afforded in the sides of the craters any alteration of the strata by hydrothermal action is generally wanting. Here therefore it must have been entirely the force of the steam rising from a deeper part of the fissure which caused the ejection of the surface-rocks. Along the central part of the Rotomahana Crater, where the fissure crosses it, the explosive force of steam rising in the fissure would be added to that already present in the surface-rocks, and hence it was that the crater was excavated to the greatest depth along the line of fissure, whilst away on each side the depth is so much less.

Resuming the description of the Great Fissure, we find below the Tarawera Chasm a bridge of undisturbed rocks about 100yds. in width. Then just under the slope of Tarawera is a circular crater about 250ft. deep, the bottom of which is occupied by a green lake. Close to the south-east side of this is another distinct but smaller crater. This occupies part of the site of a small isolated hill of rhyolitic lava which stood up from the plain at a little distance away from the slope of Tarawera. From the resemblance which the shape of this hill bore to the mountain above, it had been popularly called "the Baby Volcano," and, if we may judge from a section of what remains of it as exhibited in the wall of one of the craters, it had a mode of formation analogous to that of Tarawera.

A partition of no great thickness of rock divides the Green-Lake Crater from what is practically one continuous crater stretching from this point to the foot of Te Hape-o-Toroa, and including the site of the former Lake Rotomahana. This has a varying width and a length of a little over three miles, whilst its area is equal to three square miles. From its southern margin a hill of hard rhyolitic rocks known as "the Banded Hill" projects into the area, and partly divides it into two areas the one to the east may be termed the Roto-makariri Crater, whilst that to the west naturally receives the name of Rotomahana Crater. (See Map II.)

The walls of the Green-Lake Crater are chiefly formed of hard rhyolite lavas, but at the beginning of the Rotomakariri Crater there is a change to softer rocks—the horizontal beds of pumice and rhyolitic sands and breccias, partly lake-beds, described in a former part of this report. Owing to the soft and incoherent nature of these strata the volcanic forces have been able to blow out a greater quantity of material, and the fissure at once assumes a greater width. For the distance of a mile the fissure has a mean width of a third of a mile, and at its bottom contains a lake which has been called Hotomakariri, though not occupying the site of the old lake of that name. (See Pl. p. 46.) The sides of this part of the crater are 250ft. to 300ft. high. To the east there is a cliff with nearly vertical face, whilst on the opposite side the slope is more gradual. For a few days after the eruption large clouds of steam were seen to rise from the position of this lake; but by the middle of July the activity had almost disappeared, and only a few curls of steam were then rising from its margin. On the eastern side the upper 40ft. to 60ft. of the cliff are formed of grey volcanic ash, containing, however, a considerable quantity of black scoriæ from the mountain. Away from the margin of the fissure the thickness of the ash decreases rather rapidly, so that at the distance of 500yds. the tops of the tea-tree stems may be seen projecting from the ash. On

the western side of the fissure the ash reaches a much greater thickness. The level of the water in the new Hotomakariri two month after the eruption was 983ft. above the sea, or 57ft. below the level of Lake Tarawera.

At the cud of the new lake the fissure suddenly widens, and its bottom forms an uneven plain, bounded to the south-east by nearly vertical cliffs 250ft. in height, and to the south-west separated from Rotomahana Crater by the Banded Hill. To the north-west its boundary is formed by the Star Hill, the slopes of which are excavated by craters now extinct, but which poured forth volumes of steam for many weeks after the eruption. The flat is traversed by numerous broad watercourses, which have spread large quantities of ash over it. Small streams of water flow from the foot of the cliffs, The water of two of these is cold and pure; but that of a third which issues from the cliff nearer the mountain was warm, and strongly charged with salts of iron, oxide of iron being deposited copiously along its channel. It probably has its source in the rain-water which drains from the mountain, and the iron will be derived from the perchlorides, &c., dissolved out of the scoriæ by the rain.

Towards the centre of the flat is a crater-hollow, containing a lake. During the month of July steam was rising from the margin of this crater; but otherwise there was no activity left on the flat until a point nearer the Star Hill was reached. Between the latter hill and the Banded Hill is a narrower portion of the fissure leading to Rotomahana Crater. Here two crater-lakes, with steep sides, mark the direct line of fissure. They occupy the site of the old Rotomakariri (indicated in Map II. by dotted lines).

Near the top of the Star Hill, and close to the margin of the fissure, is a detached crater some 200ft. deep. This emitted much steam for many weeks after the eruption, and even during the following summer the water at the bottom was boiling at one side. About half-way down the steep sides of the crater the old land-surface could be distinguished, and close to this was a patch of green ferns—an unexpected and remarkable sight in a crater which had been so active, especially as no other trace of vegetable life was to be seen for miles around in the waste of steaming water and volcanic ash.

The Rotomahana Crater has a length of one mile and a half in the direction of the Great Fissure, and a breadth which somewhat exceeds this amount; whilst its total area, as estimated by Mr. Percy Smith, is slightly over two square miles. Its sides are steep, and some 200ft. to 800ft. high. In certain parts, as, for instance, the southern bay, there is a vertical cliff; but elsewhere the ash around the crater has slipped down, and lies at an angle of about 30°. Below this steeper part the bottom of the crater gradually slopes down to the central hollow. Shortly after the eruption the greater part of the floor of the crater was covered with mud-volcanoes, "mud-geysers," and fumaroles, which gave off dense clouds of steam, rising high into the air. At the beginning of July I noticed one particular line of ten or twelve mud-geysers near the deepest part of the crater which were throwing up fountains of liquid mud. The position of the line was approximately along the middle line of the Great Fissure, Towards the end of the month a lake of hot muddy water had collected in the deepest part of the crater, just along the line of fissure, and crossing the former site of Rotomahana Lake, as will be seen in Map II., where the former position of the lake and terraces is shown by broken lines. The level of the new lake was 565ft. above the sea, or about 500ft. below the old level of Rotomahana.

The crater receives the drainage from a considerable area of the surrounding country, and this, rushing down the watercourses, carries with it large quantities of mud and stones. The mud and stones at the edges of the crater have slipped down, and so the level of the crater-floor has been raised, and the size of the lake in the centre increased. By the following summer the lake had grown to a size at least equal to that of the original Rotomahana. As time goes on, the lake, having no outlet, will doubtless increase still further in size, and may even extend its area so as to form one continuous lake as far as the end of Rotomakariri. If, however, the level ever rises high enough to overflow the barrier of a hundred feet or so of mud and ashes with which the Kaiwaka Valley—the former outlet of Rotomahana—is blocked up, the great fall down to Tarawera Lake will give the water such excavating power that a few hours will probably see a deep channel hollowed out of the soft ash, and the relative levels of the two lakes again established.

The sites of the Pink and White Terraces, marvels of natural beauty, which attracted visitors from all parts of the world, have been identified with sufficient closeness by the surveys of Mr. Percy Smith, and it is shown that the ground around them and under them has been blown out for several hundred feet. Fragments of the sinter of which they were composed have been found amongst the *débris* around. The White Terrace was situated a little to the north of some bold, jagged rocks of massive rhyolite which stand up inside the edge of the Rotomahana Crater, and have received the name of Pinnacle Rocks from their peculiar form. These rocks were greatly fissured, and even in the summer after the eruption much steam issued from the cracks. The two plates (p. 52) show Rotomahana before and after the eruption; they are from photographs taken from the same point of view.

On the opposite side of the fissure the Banded Hill is also composed of massive rhyolite. It is the remains of the hills which lav to the east of Rotomahana Lake, and the whole of the western face has been blown off. Six weeks after the eruption, when the steam arising from Rotomahana had abated sufficiently to allow one to sec into the crater, the side of this hill presented a remarkable and very beautiful sight, especially if viewed

from the point projecting into Rotomahana on the south-west. Its face was greatly fissured, and from the cracks there issued thousands of jets of high-pressure steam, like the steam escaping from the safety-valve of a steam-engine, whilst the roar of the out-rushing steam reminded one of the sound of a busy railway-station multiplied a thousandfold.

The southern portion of Rotomahana crater differs a little from the other parts. Here the crater is bounded by high cliffs of horizontal strata, composed of volcanic sandstone and breccias, whilst, the floor of the crater shows an extraordinary confusion of huge blocks of brown sandstone, tumbled about in the wildest disorder: between them is the common deposit of grey ashes. When the writer passed across this place six weeks after the eruption, a river of boiling water was found rushing out from beneath a heap of such blocks of sand stone. Here and there the blocks are piled up around funnel-shaped hollows, which mark the spots where the steam that shattered the rocks escaped.

White Terrace and Lake Rotomahana

Rotomahana

Where the White Terrace stood.

THE FISSURE FROM TOP OF BLACK CRATER.

LOOKING-ACROSS ROTOMAHANA TO TARAWERA IN A NORTH-EAST DIRECTION.

Crater North of Black Crater

shewing how fissure has cut through the spurs of Hape-o-Toroa Hill.

During the summer after the eruption the activity in the Rotomahana Crater had greatly subsided. In many places the rise of steam was choked by the accumulation of mud brought down from the sides of the crater. The parts which remained most active were near the Pinnacle Rocks, and between these and the Hot Lake, and some very active fumaroles between the former site of the Pink Terrace and Te Hape-o-Toroa.

The deposit around Hotomahana consists chiefly of the surface-rocks reduced to the state of dust and sand. Larger fragments and blocks of all sizes occur, mixed with the finer matter, as well as scoriæ from the mountain. The deposit when moistened by the rain formed a mud, which made walking very difficult; but, on drying, it set to form a mudstone or kind of soft concrete.

3. *Smaller Craters to the South-west*.—Under Te Hape-o-Toroa the Rotomahana Crater narrows, and soon ends abruptly. The fissure is continued as a scries of distinct and separate craters, all of which are of relatively small size. In the middle of July, when first examined them, they were ten in number, and occupied a length of more than one mile and three-quarters. Shortly afterwards, however, the three small ones nearest to Rotomahana Crater were destroyed by the water draining in that direction. This part of the fissure corresponds to the lower part of a valley along which the Haumi Stream formerly flowed on its way to Rotomahana, and is now occupied by a watercourse with vertical sides which reach the right of 200ft.

One of the most interesting points in this section of the fissure is its independence of the surface-features of the country. The seventh crater of the series, counting from the south (see Map II.), lies at the bottom of the Haumi Valley, and it might have seemed most natural for the fissure to have continued its course up the valley, which is nearly straight. Instead of doing so, however, it (in the ft sixth crater) strikes up the side of a spur from Te Hape-o-Toroa (see Pl. 9), p. 53), and continues along the high ground a course parallel with the valley close below. The next two craters (the Black and No. 4 Craters) are situated on the top of the spur with the ground sloping down on either side; whilst the third crater is blown out of the side of the spur towards its end. Further on the fissure still shows a disregard of surface-features, for, whilst the Echo Crater Begins at one end in a valley, its further end is on top of a hill. The Southern Crater, the last of the chain and the termination of the fissure so far as can be seen, is likewise on top of a hill.

These craters have been drilled by the force of the explosions out of the surface-rocks. They have very steep and sometimes vertical sides; their depth is in parts over 250ft. The rocks which form the walls of these craters from No. 3 to No. 6 are chiefly rhyolite lavas but in part they are coarse volcanic breccias. In the Echo and Southern Craters, however, the rock is of a very distinct character: it is a compact rhyolitic tuff, usually white or buff in colour.

Around the last two craters large areas of the ground are covered with very large angular blocks of this tuff. These are particularly numerous in certain places, as if the fire of blocks had been directed obliquely towards them. As they lie quite on the surface they must have been ejected after the finer ash had ceased to fall. The hills in this neighbourhood were covered with volcanic ash as dry and fine as flour, of a greyish-cream colour. The surface of the ash was covered with hundreds of shallow conical pits, ranging from 1ft. to 30ft. in diameter. These marked the spots where blocks hurled out of the southern craters had fallen back to the ground. Often the blocks had fallen with such force that they were buried in the ash; in other places the blocks could be seen projecting from the centre of the hollow. One of the largest of these, 500yds. away from Echo Crater lay in a hollow 27ft. in diameter; it was 5ft. in length, and must have weighed over seven tons. The distance which so heavy a block had been thrown sufficiently testifies to the violence of the escaping steam,

Several of these craters to the south-west were very active for many days after the eruption. The Black Crater may be specially mentioned amongst these as ejecting large quantities of mud and stones. The ash and stones around its margin, however, only reach a thickness of from 10ft. to 20ft. Five weeks later its activity was only shown by a number of boiling mud-holes, and during the following summer these were reduced to a single boiling pool, throwing up fountains of mud to the height of 10ft.

Echo Crater (sec Pl. p. 54) is the largest of this series. It is about a quarter of a mile in length, and its steep sides reach a considerable height at its south-west end; but towards the opposite end they fall, as the crater here is blown out of the valley near the Inferno Crater, from which it is only separated by the space of 50yds. When I visited it six weeks after the eruption the bottom was covered with water, which in many places was boiling tumultuously, giving rise to large clouds of steam. Towards the valley mentioned above, where the walls of the Echo Crater are lowest, there was a copious overflow of boiling water, which formed a river of considerable size. This must have been over 60ft. in width at its beginning, whilst farther down the Haumi Valley it became very much wider and shallower.

THE FISSURE

LOOKING ACROSS ECHO LAKE AND INFERNO CRATERS IN A NORTH-EAST DIRECTION.

The Southern Crater.

Looking North-East along [*unclear:* Fis]

A river of steaming and nearly boiling water of such size is a very remarkable phenomenon, and, like the river in the south bay of Rotomahana Crater, must point to a very abundant supply of underground water in the neighbourhood of the fissure. Farther down the valley the river ended in a wide pool opposite the end of No. 6 Crater. The eddies in the middle of this pool showed that the water was pouring down into some underground channel, along which it doubtless found its way into the Rotomahana Crater. It is to the action of this stream in the first place that we must attribute the formation of the deep watercourse which cut through the small craters near Rotomahana. A week or two later the channel was dry owing to the failure of the water rising in the Echo Crater. During the following summer the lake had shrunk so as to occupy only the southern part of the crater, whilst all hydrothermal activity was confined to the escape of a little steam close to the walls.

The rocks thrown out of all these craters to the south-west consist of the rhyolitic lavas and tuffs of which the country was composed and there was no ejection here of the black augite-andesite scoriæ as on the mountain. Large quantities of fresh scoriæ are, however, found near the Echo Crater, as well as bombs and small angular blocks of the same rock; and I was inclined at first to think that they came from this crater, and, perhaps, also from the Black Crater. More careful examination, however, during the summer, did not tend to confirm this opinion; the scoriæ and bombs are not specially numerous near the margins of those craters, but are rather more abundant at a distance, and there is nothing to remind one of the abundant accumulation of fresh scoriæ found at the edges of the fissure on Tarawera, where it is quite clear that they were ejected. The apparent abundance of the black scoriæ here is partly due to the smaller admixture of the light-coloured ash, and partly to a local thickening due to these parts being in the line of fire of fragments thrown out obliquely from the chasm in the side of Tarawera. Such an oblique discharge of fragments may appear rather startling at first, but it certainly took place on a small scale from some of the smaller craters, and was indeed witnessed by some observers.

VI. NATURE AND COMPOSITION OF EJECTED MATTER.

It has been necessary, in speaking of the various craters formed during the eruption, to make frequent reference to the characters of the ejecta from them. It will therefore only be necessary to give here a brief summary of such facts as have already been referred to.

Immense quantities of volcanic ash, bombs, scoriæ, and fragments of all sizes up to blocks 10ft. in diameter were ejected during the eruption. As regards composition, these belong to two distinct types of volcanic rocks—viz., (1) rhyolites; (2) augite-andesite. All the rocks which occurred in the locality previous to the present eruption were various forms of rhyolitic lavas or tuffs : the augite-andesite which was ejected from the Tarawera Mountain is a rock new to the locality. The rhyolites are rocks of a distinctly acid type, *i.e.*, they are rich in silica, whereas the newer rock is basic.

It appears to be a well-established generalisation that at volcanic vents at which eruptive action is continued through long periods of time the lavas of different chemical composition appear in a definite order. Von Richthofen and other geologists have, indeed, maintained that in all volcanic districts an unvarying order of sequence of the different lavas can be traced. This order is as follows: (1) andesites (and propylites), (2) trachytes, (3) rhyolites, (4) basalts, Other geologists maintain that so many exceptions to the law occur when stringently laid down as to invalidate it. "When, however, the law is stated in the wider form that the first lavas to appear in a volcanic district are those of intermediate composition, and that these are followed by the acid and then the basic lavas, it is found to hold good in a greater number of eases.

The appearance of augite-andesite lava for the first time in the Tarawera district marks an important point in its history. The augite-andesites are of somewhat basic composition, though they are not so highly basic as the basalts. If the new lava from Tarawera be correctly identified as an augite-andesite, we have here augite-andesite succeeding rhyolite, a sequence which docs not follow Von Richthofen's law, but conforms to a certain extent to the wider generalisation : that is to say, we have a basic rock following an acid one.

In any case the appearance of the new kind of lava may be taken to indicate the establishment of a new stage in the volcanic evolution of the district; and if, now that the ancient volcano has roused itself to new life, other eruptions take place from the mountain, we may expect the products to be basic lavas, and not acid rhyolites as in a former period.

1. *Rhyolites*.—The only rocks occurring on or near the surface in the neighbourhood previous to the eruption were rhyolites. Some of the varieties of rhyolitic lavas occurring here have been mentioned in the account of the geology of Tarawera. Among the volcanic blocks recently ejected many other varieties occur, as, for instance, dark-green and grey perlites of typical structure, and felsitic and porphyritic forms of the most varied hues. Near the Tarawera Chasm huge masses of a grey perfectly laminated rhyolite lie amongst the *débris*. This variety is very similar to the lithoidite found in such abundance in the vast pumice-deposits around Lake Taupo; it consists of alternate laminæ of a light and dark colour, these often testifying by their curved and contorted forms to the unequal flow in the lava as it

It has been commonly stated that fresh obsidian bombs and pumice were ejected from Tarawera during the eruption

See also appendix to "Report of Tarawera Eruption," by Mr. S. Percy Smith.

As it would be somewhat remarkable to find two distinct forms of fresh lava ejected simultaneously from the same volcano, it may be well to give here the evidence bearing on the point. Previous to the eruption obsidian bombs, often of very perfect form, were known to exist on Haroharo, a mountain to the south of Rotoiti. The writer, when visiting Rotoiti a month after the eruption, was shown one of these by Mr. Fraser, who had obtained it long before the eruption. Next day a visit to the further end of the lake was made by boat, but no bombs of the kind were noticed. A few days later heavy rain fell, and owing to the nature of the volcanic ash the water ran off rapidly, scouring out the watercourses, and in many places cutting deeply into the surface-rocks. After these floods obsidian bombs were found floating at the farther end of Rotoiti, where the watercourses come down from Haroharo. It is clear, therefore, that the bombs must have been derived from the latter mountain, and not from the ejecta of the Tarawera eruption. This is confirmed by the absence of such bombs from the slopes of Tarawera and other parts of the ash-fields. Fresh pumice is also said to have been found. Pumice-fragments, in very small quantity, are to be found in various parts of the area covered with ash, but even when of somewhat fresh appearance there is no reason to believe that they are of recent formation. Occasionally they are coated with patches of black lava; these fragments are probably derived from the pumice-strata exposed in the gap between Wahanga and Ruawahia. It will be seen, therefore, that the statement that two kinds of fresh lava were ejected is without foundation.

2. *Augite-andesite*.—The molten rock which rose to the surface the fissure on the mountain was so highly charged with steam that, instead of overflowing the fissure and giving rise to a lava-stream, it was ejected explosively from the crater, chiefly in the form of porous scoria; or fine sand and dust. From the Tarawera Chasm, however, numerous bombs were ejected : these are much less porous than the scoriæ, and form round black masses lin. to 8in. in diameter, with cracked surfaces. They never show the elongated or spindle-shaped

forms with twisted ends which are so common amongst the bombs of the Auckland basaltic cones. The scoriæ and dust are widely distributed over the whole country affected by the eruption, whilst near the fissure larger and more solid blocks of the lava are found.

The rock has been identified as an augite-andesite; but in some respects it approximates to the basalts. The solid portions have a black and slightly resinous appearance, and almost homogeneous texture. The specific gravity is 2.93. Under the microscope thin slices of the rock show rather numerous small crystals of felspar and yellowish augite. The felspars are mostly small and in ledge-sham sections, but a few rather larger ones are present; they are nearly all plagioclases, but there are a few distinct sanidines. The augite is in small irregular crystals and granules. The ground-mass of the rock is a grey glass with abundant crystallites (globulites, longulites, and microliths) of translucent substance, and grains of magnetite. Much of the augite should perhaps be considered as belonging to the ground-mass.

Other varieties of the rock differ chiefly in containing a larger or smaller proportion of glass, and in the size and abundance of the augite-crystals. Some specimens have a large proportion of brownish glass. Olivine was found in a few small crystals in some specimens, but as a rule it is quite absent. Chemical tests also fail to show its presence. It cannot be regarded as an essential constituent.

On account of the absence of olivine as an essential constituent, the presence of abundant glass with microliths, and of a little sanidine, the rock has been identified as an augite-andesite. Still, it must be admitted that the rock approximates to the basalts, as is shown further by its chemical analysis. For this, as well as for analyses of the ash, I am indebted to Mr. J. A. Pond, Colonial Analyst. In an Appendix will be found the analyses of lapilli of this rock from various parts of the ash deposit. The percentage of silica varies from 50.9 to 52.5, an amount which is lower than that usually found in augite-andesites, whilst it is not higher than that found in some basalts.

The silica in the basalts is said to vary from 45 to 55 per cent. (Geikie), or from 36.68 to 53.76 per cent. (Green : "Physical Geology"). The average amount of silica in augite-andesite is 57.15 per cent.

But whether we call the rock an augite-andesite or a basalt without olivine

Messrs. Hague and Iddings ("American Journal of Science," Vol. xxvii., p. 456) state that in the Western States various transitional forms from basalt into augite-andesite are to be found.

docs not affect the results stated above, that the lava of the late eruption is basic, is new to the locality, and follows the acid rhyolites.

It should be mentioned that the black augite-andesite is frequently filled with light-coloured fragments of the rhyolites. This is not surprising when we consider that the molten lava must have forced its way between rhyolitic rocks. Some of these included fragments are large pieces of unweathered lava, as large as a man's head, and of the same variety as that which forms the top of Tarawera Mountain; other fragments are of all sizes down to small splinters and grains no larger than a pin's head. Sometimes these fragments are fused, and more or less completely blended with the rock that contains them. To this origin we must attribute some crystals of quartz and weathered sanidine which were detected in a specimen of the black lava.

Volcanic Ash.—After what has been already said on this subject, it is only necessary to speak of the general characters of the ash, more especially as found at a distance from the fissure. The ash consists everywhere of a mixture of rhyolite and augite-andesite, reduced to a more or less finely divided state. In tracing the ash to its origin from various parts of the fissure, we must remember that from the part across the mountain the ejecta consisted mainly of augite-andesite, but also partly of rhyolite, whilst from the rest of the fissure along the lower ground the ejecta were all rhyolitic. The latter included, however, not only fragments of rhyolitic lava, but also all Kinds of rhyolitic *débris*, older ash, sands, partly waterworn fragments from lake-beds, compact tuff of still older date, fumarole-clays formed by the energetic hydrothermal action which had been going on so long around Rotomahana, mud from the bottom of Rotomahana Lake, sinter, and the soil and decomposed surface-rock (an appreciable item over so wide an area of disturbed ground).

Though the ash is everywhere a mixture of andesite and rhyolite, yet in certain parts either the one or the other largely predominates, and the colour accordingly varies between light-grey or nearly white and a dark-grey or black. The ash shows a good deal of variation in the size of its component particles, even at points situated at equal distances from the fissure. It almost always contains a quantity of fine impalpable dust, which envelops the coarser particles, and may so completely hide their character as to give a misleading impression of the composition of the ash.

It was therefore necessary to employ some method of mechanical separation of the particles of different degrees of fineness, so as to permit a comparison between the ashes from different places. The finest dust was separated by washing with water, and then the coarser particles separated by sieves. The portion which passed through a sieve of thirty meshes to the inch may be termed sand; the coarser part remaining behind may be termed grit, or, when coarser than peas it should be called lapilli.

The coarser particles can be identified by the naked eye; the finer ones require the aid of the microscope. In

this way we find that the ash is composed of portions of augite-andesite lava of all sizes, from an inch in diameter down to the finest flour-like powder, and similar particles of rhyolites, including a small proportion of pumice. The ash contains the characteristic minerals of the rocks, separated from one another. The chief minerals recognisable are quartz and felspar (both sanidine and plagioclase); and less abundant are black and yellow mica, magnetite, and hornblende. Augite, iron-pyrites, and hypersthene were also identified, but only in occasional fragments. Volcanic glass, chiefly derived from the glassy rhyolites, formed a considerable proportion of the colourless fragments.

Two shells of a water-snail were found, one in a sample of ash from Tauranga, the other in the ash from Cape Runaway. These were probably blown out of Rotomahana.

The violence of the explosion was greatest on the mountain the column of steam laden with ash must have risen highest there We find therefore that at a distance from Tarawera the coarsest particles of the ash are fine scoriæ or lapilli of the augite-andesite. Sometimes by far the greatest part of the ash is composed of andesite. The fine dust which forms part of the ash has a varying composition: At the Wairoa it forms over 40 per cent. of the ash; it is white and earthy, but is not plastic, and can scarcely be called clay; it may contain a small proportion of fumarole-clays, but consists more largely of very finely divided rhyolite and andesite (chiefly the former). At Cape Runaway it had a rather dark-grey colour, and was chiefly composed of andesite.

One remarkable fact shown by the eruption is that, apart from the explosion of lava, the explosive action of steam rising along the fissure had the power of reducing the surface-rocks of moderate hardness to a very fine state of division. The fine flour-like dust which lies on the surface around the southern craters consists largely rhyolitic tuff reduced to dust, and must have been produced in this way by what may be termed hydrothermal explosion only.

VII. Distribution and Effects of the Volcanic Ash.

The distribution of the ash from the Tarawera eruption is some what complicated, owing to the number and varying size of the vents and the action of currents of wind. In the case of a single vent, when wind is absent, the distribution of the ejected material is simple enough. The ejecta naturally fall to the greatest thickness near the vent; those which fall into the crater are again ejected, whilst, as the distance from it increases, the accumulation of matter becomes less. In this way a cone of fragmental materials is built up around a crater. The column of uprushing steam from the crater carries with it more or less of the finer materials, and, as it ceases to rise, it spreads out above equally in all directions; the solid matter begins to fall, and covers the ground for a larger or smaller circle round the cone with volcanic ash. Any wind blowing at the time will sweep the clouds of steam as they spread outwards to one side of the cone, and the ash will then be distributed over a fan-shaped area. In the present instance, however, the ejecta came from a scries of vents arranged along a line nine miles long, and the intensity of the explosion at the different vents was by no means equal : the ash from the different pints of eruption was carried to various heights in the air. Again, the distribution of the ash was influenced by the winds which blew during the eruption. Up to about 4 a.m. on the 10th June the winds blowing in the district were light and of a more or less local character, observers at different localities giving different statements. At Wairoa and Rotorua the wind seems to have been from the south. But about 4 a.m. the wind changed to the south-west and blew fiercely, driving the ash-laden cloud towards the Bay of Plenty. The rise of this wind was not caused by the eruption, but was generally felt over a wide area.

The influence of these circumstances on the distribution of the volcanic ash will be best gathered from the map prepared for this report, showing the depth of the deposit over the surrounding country (see Map I.). This map is founded on over a thousand measurements of the thickness of the deposit, made during extensive travels over the affected area. For the thickness of the deposit east of Whakatane and Galatea I am, however, indebted to gentlemen residing in the district; the other measurements were made by myself. The map, of course, represents the average thickness of the deposit, and it has not been possible (on account of the scale) to take notice of small local variations.

The chief local variation was near Te Puke, where there was a slight thickening at the deposit.

Area covered with Ash.—The total area of land over which the ash fell is not less than 6,120 square miles. The lines on the map show the limits of the areas where the deposit reached or exceeded the thickness of 1in., 2in., 3in., 6in., 12in., and 3ft. respectively The following table shows the areas between the lines of equal thickness of deposit :—

The large area of country covered with fine ash to a depth of less that 2in. testifies to the force of the wind and the fine state of division of much of the ash.

The limit of the deposit near the sea-coast is near Tairua, on the north side. The southern limit is at Anaura, according to Arch deacon Williams; but Mr. Stubbs, of the Southern Cross Petroled Works, near Waiapu, in a letter for which I am indebted to Professor Hutton, states that a little fell in Tolago Bay township, ten miles

south of Anaura. The direct distance between Tairua and Tolago Bay is 165 miles.

The limit of the ash on the land can be ascertained with sufficient accuracy; but a good deal of the finer ash was blown out to see and we have no means of estimating how much, though its thickness on some of the outlying islands affords some slight indication Captain Fairchild found the deposit a quarter of an inch thick on Mayor Island, and an eighth of an inch on the Aldermen Islands. On Whale Island the ash was nearly 2¼ in. in thickness. Ash fell into the sea, as was observed by vessels crossing the Bay of Plenty, on the morning of the 10th June. Ash fell on the s.s. "Southern Cross whilst off the East Cape, which is 122 miles distant from Tarawera and on the s.s. "Wellington" near Mayor Island. When the s.s. "Hinemoa" crossed the Bay of Plenty four days after the eruption the air was still charged with fine floating dust.

Knowing the area of country covered with ash and its depth, it is not difficult to calculate approximately the volume and weigh ash which fell. The chief difficulty arises from the very unequal depth of the deposit near the fissure. It will be sufficient to state here that the estimated bulk of ash, &c., amounts in round numbers to 1,660,000,000 cubic yards. To this must be added that which feel into the sea, probably not less than 300,000,000 cubic yards. The total bulk of the ash, &c., would therefore amount to 1,900,000,000 cubic yards, or nearly two-fifths of a cubic mile.

On looking at the map it will be noticed how closely the lines of equal deposit approach each other to the south-west of the fissure. This, of course, is due to the strong south-west wind, which drove the ash-laden clouds in the opposite direction. It will further be noticed that in the opposite direction—more exactly, to N.E. by N., *i.e.* in the direction of Whakatane—the curved lines of equal deposit are prolonged into deep bays corresponding to the maximum deposit of ash along this line.

The curves also show that to the north-west of the fissure the ash fell more abundantly than on the other side. An examination of the ash from places in this direction throws some light on the point, At the Wairoa the ash is of a light-grey colour, but, when treated as described above, shows a proportion of black scoriæ varying from 7 to 22 per cent, by weight. The ash fell in more or less definite layers: some of these were richer in scoria; than others. The proportion of sand in the ash from the different layers varies between 37 and per cent., and the fine impalpable dust amounts to 41 to 49 per cent. Both sand and dust contain a small percentage of augite-andesite, but this does not exceed 25 per cent. It is clear, therefore, that the Wairoa deposit consists most largely of rhyolite, and, though a part of this may have been derived from the mountain, yet there can be little doubt that most of it came from the lower ground. At the west end of Rotoiti the proportion of augite-andesite in the ash is about per cent., and at Tauranga it is nearly 50 per cent. When we compare these ashes with the deposit from places more to the east we at once notice a striking difference. Even at the east end of Rotoiti the proportion of augite-andesite is much greater—about 85 per cent.—whilst passing along the coast from Tauranga to Whakatane and Opotiki we note a gradual rise in the proportion of the black andesite. At Whakatane there must be 80 per cent, of the andesite; and still farther to the east, at Opotiki and Cape Runaway, the production reaches or exceeds 90 per cent.

The estimates are based on a comparison of the washed ashes with various artificial mixtures of rhyolite and andesite, in which the proportions of the two rocks are known.

To the south-east side of the fissure the ash thins out at first more rapidly than in the opposite direction, and as soon as we get a few miles away from the Rotomahana Crater the andesite forms a much larger proportion of the ash than is the case at the correspond- ing distance to the north-west. So too all along the road from Galatea to Whakatane the andesite forms three-fourths or more of the ash. The ash here is generally very coarse for the distance from the mountain, consisting mainly of lapilli or very fine scoriæ below, with a thin layer of finer sand and dust above.

These facts in the distribution of the ash are to be explained as follows : During the earlier part of the eruption a gentle wind, having a general south-east direction, was blowing in the neighbourhood of Rotomahana and Tarawera. The ash was therefore carried to the north-east, the cloud from Rotomahana and Rotomakariri passing in the direction of the Wairoa and Rotorua, and that from Tarawera keeping in a parallel direction, but more to the east. There was, of course, at the same time a large amount of mingling of the clouds. Then, before any considerable amount of ash had fallen, the strong south-west wind began to blow, and carried the cloud, which now had a very wide extent, in the direction of the Bay of Plenty, the clouds of steam struck by the cold south-west currents of air were partly condensed, and the rain carried down a quantity of the ash, including much of the finest dust, and so, from the Wairoa to Rotoiti, a good deal of the ash fell either as mud or in a moist, flaky condition, which wanted very little rain to convert it into mud. At the Wairoa it is stated that there was no difficulty in walking about on the surface of the ash next morning, hut after had been trampled on for a day or two the surface along the road was converted into mud. In a hole dug at the Wairoa for the purpose of examining the ash the depth was 2ft. 10in., and one of the deeper layers was in a very wet state. The mud cannot be supposed to have come direct from Rotomahana, for no doubt the escape of the superheated steam and the force of the explosions would dispel the water of the lake in vapour. Wherever I had an opportunity of

examining sections of the ash near Rotomahana Crater (a month after the eruption), whether in slips or in holes dug for the purpose the ash, though wet on the surface by the rain, was found to be dry and warm for many feet below.

The larger proportion of the rhyolite in the ash to the north-west of the deposit thus receives a simple explanation. It must remembered, however, that the ash there still contains a considerable quantity of the augite-andesite from the mountain.

Effects of the Ash on Vegetation.—Forests of large trees grew on the sides of the Tarawera Mountain, and these of course were wholly wrecked by the eruption. Those growing on the site of the Tarawera Chasm disappeared altogether, whilst at a distance many of the trees were prostrated by the falling *débris*, or the electric discharges attending the eruption. One totara tree in particular presents a remarkable sight: its trunk was 8ft. in diameter, and the top of the tree has been twisted off at some distance from the ground, and the stump with long projecting splinters stands up above the ash. At a distance from the fissure the trees are denuded of all foliage and mailer branches, and their stumps, bearing a few battered lengths of the larger branches, project from the ash.

Still farther away the forests suffered a great deal, as for instance the well-known Tikitapu Bush. A remarkable difference is shown, however, in different places according to the condition in which the ash fell. In the Tikitapu Bush and the forests on Mount Edgecombe the deposit does not differ much in its thickness, though it differs widely in its physical characters. In the former place it fell in a moist condition, almost as mud, so as to adhere to the foliage of the trees. The bush was apparently completely destroyed, the foliage and smaller branches were stripped from the trees, and the large timber over several acres was prostrated by the strong wind which, owing from the south-west up Rotokakahi, was deflected by the hills at its end up the valley to Tikitapu, and down the valley to the Wairoa. In both places the trees were thrown down, but their heads point in opposite directions. On Mount Edgecombe the ash fell chiefly as fine scoriæ; and on the sides of the crater, where I found 14in of ash, all the large trees seemed quite uninjured: large rimus were none the worse for the shower, though in the Tikitapu bush they were killed. During the following summer most of smaller soft-wooded trees in the Tikitapu Bush revived, putting out numerous fresh shoots; the larger hard-wooded trees, however, like the rimu and rata, were killed. Even where the fall of the ash was not sufficient to break down or cover up the vegetation, the green parts, as for instance the fronds of tree-ferns and bracken, were scorched quickly turned brown.

Some plants appear to withstand the effects of a volcanic eruption much better than others, but these are not always the most useful kinds. The docks near the Ngae were up through 4½in. of volcanic ash within five weeks of the eruption, although it was mid-winter. During the following summer it was noticed that the bracken-fern was the plant which appeared to be able to penetrate the greatest thickness of ash When this was 2ft. in thickness the fern was able to force its way up to the surface, though it appeared rather later in the season than it would otherwise have done. We have here an excellent example of the survival of the fittest, and it is, I think, à matter worthy of consideration, whether the prevalence of the fern over extensive areas of the North Island, where showers of ashes have been of frequent occurrence in past time, is not partly connected with its power of surviving such adverse conditions. No doubt fern grows abundantly elsewhere, but the power it has of coming up through great thicknesses of volcanic ash must have been of considerable use to it in New Zealand in former times.

Effect of Ash on Agriculture.—With the exception of a few patches at the Wairoa and at the settlements on Lake Tarawera destroyed by the eruption, none of the country covered with a great thickness of ash was under cultivation, so that little permanent damage was done to agriculture. On the other hand, the fall of the ash will ultimately prove a considerable benefit over large tracts of country. A good deal of the soil that is thickly covered by the deposit was of a light character, being formed from the decay of rhyolitic rocks, and often consisted largely of pumice. The rhyolites yield soils which, both in their mechanical condition and chemical composition, are too "light" The rocks contain on an average 74 per cent, of silica and only 26 per cent, of bases, but it is the latter which must be regarded in estimating the character of the soil which the rock is likely to form, for although the silica is taken up by plants and has other important functions to play in the soil, yet it is always present in sufficient amount, and in the rhyolites is in excess of any requirements, Part of the silica, too, is free in the form of quartz-crystals, which resist decay and remain as sand, valueless as plant-food, and rendering the soil lighter mechanically. In the basic rocks on the other hand the silica and bases are present in nearly equal amounts, so that as the rock decays a larger amount of valuable material is available as plant food.

The recent ash contains a large proportion of basic rock, and when this decays under the influence of the atmosphere and vegetation it may be expected to yield a distinctly richer soil than the pumiceous one existing before.

Between the mouths of the Tarawera and Whakatane Rivers is a large area of low-lying land, the Te Teko Swamp. This has received a coating of ash 3in. to 6in. in thickness, and much more of the loose ash will

doubtless be washed down into it from the surrounding hills. Not only is the level of the swamp raised, but the soil, rich in vegetable matter, will be distinctly improved by the addition of the ash.

In the agricultural settlements along the Bay of Plenty the deposit of ash nowhere exceeded 3in., and as a rule was less, No doubt even this thickness of ash meant a good deal of loss to the farmers in the first instance, for the grass was covered up, and the sheep and cattle reduced to starvation. But the benefit from the deposit was felt within a few months, for the old grass soon came up through the top-dressing of ash, and when I visited these settlements in the following summer an abundance of grass was to be seen everywhere, and the farmers reported that there had never been so abundant a supply as during that summer. The maize crops at Whakatane and Opotiki were also unusually heavy,

The ash, as shown by an analysis of Tauranga ash by Professor Brown, contained an appreciable amount of soluble matter (.3 per cent.), consisting of sulphates and chlorides of lime, soda and potash (the last substance in very small quantity), together with a little free hydrochloric acid. These substances were of value as manure, and were immediately available for plant-food, and no doubt contributed largely to the increased growth of vegetation where the ash had fallen.

Action of Rain upon the Ash.—The action of the rain upon the deposit of ash is a matter of much interest and importance in a country like the North Island of New Zealand, where great showers of ashes have frequently occurred in the prehistoric period. Many of the river-plains are formed of the *débris* of volcanic rock, much of which must have been brought by running water from ground covered by volcanic showers. The valleys have been filled up to enormous depths with pumice sand and gravel, out of which the rivers have subsequently carved their channels, leaving the sides marked by terraces, which indicate the successive heights at which the rivers have flowed. The formation of these terraces must have been connected with movements of the land, but in the prevalence of volcanic showers we have the source of the vast quantities of finely-divided material. Observation therefore of the mode of treatment of Be present shower by rain and running water will throw much light on the past history of the North Island. Already evidence is afforded of a rapidity of denudation and deposit which is far in excess of that to be ordinarily observed.

At the time of the eruption fears were expressed that where the ash fell in a state approaching to mud it would, under the influence of rain, be converted into thin mud, which would slide down the Slopes of the hills and fill up the valleys, and so prove a source of much danger. Such fears proved groundless. The ash or mud seldom slipped except in places where the slopes were precipitous. On slopes of 30° the ash showed little or no tendency to slip.

What really happened was as follows: To the west of the fissure the ash contained a large proportion of fine dust-like material, which rendered it somewhat impervious to water, and everywhere at a distance the last portion of the ash to fall was naturally the finest and formed a thin layer on the surface, through which the rain did not readily penetrate. This fine material generally formed a cake on the surface with the first showers, and subsequent rain streamed off the surface rapidly. This running water wore for itself channels in the ash, and every time rain fell these were deepened. The result was the formation of great numbers of deep and narrow watercourses. These are set closely side by side everywhere except along the tops of the spurs and ridges. It is almost a matter of impossibility to travel along the sides of the hills near Rotomahana, owing to the great number of these watercourses, varying in size, according to the distance below the top of the hill, from mere gutters to narrow gullies 40ft. deep and a few feet in width. Often enough, though they may be deep, they are sufficiently narrow to jump across; but the interval before the next parallel gully is not wide enough to permit one to alight at a safe distance from the margin, which crumbles when any unusual weight is brought to bear upon it. These watercourses are, of course, arranged in systems on the sides of the hills around every minor drainage-basin. The watercourses begin as very numerous small gutters, which stretch downhill, and, as they descend, join together to form larger and deeper gutters, These, again, join to form small watercourses, and so on, all the very numerous watercourses uniting in the central channel at the bottom of the valley. The appearance of these channels in the ash is seen in Pl. p. 46. The photograph was taken three months after the eruption, and the channels have since been greatly enlarged. Where the proportion of the finest dust in the ash is large it has set to form a material like a soft inferior concrete; and here the water courses are usually very narrow. Where the deposit contained less of the fine dust and more of the sand, stones, and scoriæ the watercourses are wider and less deep.

The watercourses mentioned above are not the deepest which have been formed on the deposit. The stream which occupies the valley of the Haumi and flows into Rotomahana Crater to the south-west has excavated for itself a gully 200ft. in depth. In various parts near Rotomahana are to be found dry gullies 40ft. to 50ft. or more in depth, and 30ft. to 100ft. in width, all excavated within eight months.

On the outskirts of the deposit, for instance near Rotorua, the rapid streaming of the rain-water from the surface of the ash caused the rivers to rise in flood, and a number of bridges were washed away, whilst the water flowing in such increased volume cut down deeply into the old beds of the watercourses, so that

considerable gullies were formed or enlarged. Near the Ngae a gully 20ft. deep, 120ft. long, and 40ft. wide was formed in the course of a single rain-storm. Between Lake Tarawera and Rotoiti the sides of the hills were washed out and numerous landslips were caused. So, too, near the Wairoa Road, large gullies were washed out on the hill-sides, whilst the road was rendered impassable by the numerous watercourses which cut across it. It is to be noticed, further, that this denudation is not confined to the removal of the deposit of ash, but that the underlying rocks were cut into and carried away.

The excavation of the watercourses and the washing-away of the Bill-sides implies, of course, the removal of a large quantity of material, to be deposited elsewhere. Much of that washed off the hills accumulates in the valleys, but a good deal of it has been carried down by the streams into the numerous lakes of the district. In Rotorua, Tikitapu, and Tarawera, as well as other lakes, beautiful examples of fan-shaped alluvial deltas have been thrown out into the waters. The waves on the lake tend to destroy these fans, so that the result is the accumulation of a strip of land along the margin of the shore, or the filling-up of the bays.

Much of the ash is also carried by the larger rivers to the sea. The Tarawera River, which before the eruption bad perfectly clear water, has ever since flowed with milk-white stream. Throughout the summer of 1886—87 the sea near its mouth in the Bay of Plenty was quite turbid and milky for the distance of a mile or two from the shore.

The rate of geological change, both with respect to denudation and consequent deposit, is therefore greatly in excess of that which is commonly recognised. The present shower of ashes is by no means the most considerable with which the country has been visited, and the present high rate of geological change is not a phenomenon of isolated occurrence, but one of frequent repetition.

VIII. Summary and Conclusion.

It will be well to state here that in many important respects the conclusions arrived at in the present report differ from those expressed other writers in papers published shortly after the eruption. As these, however, with the exception of the report by Mr. Percy Smith, profess to have the character of preliminary reports, and were written before it was possible to examine in detail the scene of the eruption or even to ascend the Tarawera Mountain, it has not been thought desirable, except in a few instances, to make special reference to their divergent views.

The following is a summary of the chief results of the writer's investigations, as stated in the foregoing pages :—

- The Tarawera Mountain was a true volcano.
- The eruption of 1886 had a deep-seated origin, and on the mountain was a true volcanic eruption.
- The eruption shows the re-establishment of a volcanic vent by the formation of a fissure.
- A fissure over nine miles in length was formed. From the part on the mountain basic lava was ejected.
- The eruption was complicated by the extension of the fissure beyond the mountain. From this part surface-rocks were ejected, (*a*) by steam rising from the depths of the fissure, (*b*) by high-pressure steam already existing in the hot ground around Rotomahana, which had long been subject to hydrothermal action.
- The eruption marks the beginning of a new stage in the history of the Tarawera Volcano, characterized by basic rocks, whereas the older lavas were acid rhyolites.

In some respects the reopening of the Tarawera vent after a long period of rest, which must date back to a time long previous to the arrival of the Maoris in New Zealand, reminds one of the famous eruption of Vesuvius in A.D. 79, when the mountain, which showed no signs of volcanic life and was scarcely suspected to be of volcanic origin, suddenly burst into eruption. The immense showers of ashes which attended it form a further point of resemblance; whilst the destruction of Pompeii and Herculaneum finds its parallel in the burial of the Native settlements at the Ariki and the Moura beneath heavy deposits of ash. The comparison, however, does not hold further, for, whereas in the eruption of Vesuvius half of the old cone was blown away, with the formation of a circular crater, in the present instance we have a very different result—viz., the formation of a fissure nine miles in length.

Much interest has of recent years been taken in a type of volcanic eruptions (never actually witnessed) which have been distinguished from the eruptions from cones, and termed "fissure eruption." Some of the most remarkable examples of this type of volcanic structure are seen in the Western States of North America. For instance the Snake River plain in Idaho is a vast plain of sand and hare sheets of basalt. The river has cut its gorge through the plain, and in the walls of this gorge the lava is seen to be formed of successive beds reaching a thickness of hundreds of feet. No great volcanic cones are to be seen on the surface whence the floods of lava can have been derived, and it is commonly supposed that the lava has issued from a system of fissures now hidden by the floods of lava which poured from them. Mr. Clarence King states that the lava probably flowed

for great distances, for it can be shown in certain cases that the lava received no addition by means of dykes for fifty or a hundred miles.

Strictly speaking, all volcanic eruptions are eruptions from figures, for the subterranean matter finds its way to the surface through great cracks in the rocks of the earth's crust. But, as a rule, these cracks get choked up except at particular points where the volcanic energy is concentrated, leading to the formation of cones.

The chief difference between a fissure-and a cone-eruption would therefore seem to be that in the former case the eruption of lava takes place continuously from a long line of fissure, whereas in the letter case action is concentrated at one or more points along the fissure. It is to be noticed that the lava of the typical fissure-eruption is usually of the most fluid kind—namely, the basaltic—and that only small quantities of scoriae appear to have been formed. With a very fluid lava the choking of a great part of the fissure is less likely to occur.

In the rise of lava to the surface along a considerable length (four miles of the fissure, the present eruption reminds us of a fissure-eruption; but in the dispersal of that lava as scoriæ, and the deposit of these around the margin of the fissure, we are reminded only of eruption from cones. It must be remembered that fissures are frequently formed on the sides of volcanoes : for instance, in the eruption of Etna in 1669 a fissure 12 miles long and 6ft. wide was formed on the flanks of the mountain. The peculiarity of the present instance lies in the formation of the fissure across the whole of the mountain, the practically continuous eruption from so great a length of fissure, and its extension far beyond the mountain. Mr. Clarence King

"Geological Survey of the Fortieth Parallel," I., p. 673.

has described a very instructive type of volcanic structure, which it will be interesting to cite here. The basalt lava to the south of the Truckee Range occurs in spurs or ridges, which show an arched structure of beds of lava. The beds slope down on each side from the top of the ridge, and have apparently been formed by the overflow of long vertical dykes: that is to say, fissures have been opened, and lava issuing from them has, by continuous eruption, piled up the centres of the ridge while the sheet of molten material poured down on each side.

The eruption of Tarawera shows a similar fissure, and the lava rising in it formed a dyke. No lava overflowed the fissure, for the explosive force of the contained steam caused its dispersal as scoriæ and dust. No such scoriæ were ejected from the extension of the fissure through Rotomahana, but it seems probable that the lava injected into the depths of that part of the fissure also, being perhaps prevented from rising by the letting-down of surface and subterranean water.

The Cause of the Eruption.—The immediate cause of the eruption lay, of course, in the existence below the district of a mass of molten material highly charged with water and gases. Whilst it was the expansive force of this imprisoned vapour which produced the eruption, it is possible that its occurrence was determined or hastened by the progress of subterranean events affecting a wider area of earth's surface. This is rendered probable by a certain degree of sympathetic disturbance shown at other centres in the Taupo zone, and perhaps also by the greater degree of activity displayed during the last two or three years in the volcanic belt of the earth's surface upon which New Zealand lies.

The eruption must therefore be looked upon as a normal event in the progress and development of the volcanic forces in the Taupo zone. The question then naturally arises, whether another eruption of Tarawera is likely to happen. Such an event is not improbable, but the present state of our knowledge affords us no clue as to when it may occur. It is, however, satisfactory to reflect that the history of other volcanoes shows us that, if the recent eruption be succeeded by another within a moderate number of years, the intensity of the eruption will probably be much less, and it is not likely to be attended by the production of such immense quantities of ash, so that the disturbance to the surrounding district will be comparatively slight. The intensity of a volcanic paroxysm is generally greatest after a long period of rest, and the severity of the late eruption may be ascribed to the long interval since Tarawera had been active so that the tension of the vapours in the heated rock below had to accumulate to a high degree before it could overcome the resistance of the cooled lava above.

Dr. von Hochstetter appears to have been of the opinion that volcanic activity was dying out in the Taupo zone, basing his opinion on the fact that so many alkaline siliceous springs are to be found there. According to the theory of Waltershausen and Bunsen, the first or earlier stage in the hot springs of volcanic districts gives rise to acid springs and sulphur deposits, whereas the later stage of decreasing temperature is characterized by alkaline springs from which siliceous sinter is deposited. But, though the theory may be correct enough when applied to individual springs or even groups of springs, it affords no safe indication of the state of the volcanic forces beneath a district. At Rotomahana alkaline siliceous springs and acid springs were to be found within the same area, whilst the same association of springs is to be found now in the Waiotapu Valley. Again, it has been shown that in the volcanic districts of Hungary, the western islands of Scotland, and elsewhere, deposits of sinter took place before the eruption of lava.

See Judd: "Volcanoes," p. 191.

The presence of the alkaline siliceous springs therefore cannot be appealed to as a proof that the volcanic forces are dying out in the Taupo zone, and the recent eruption of Tarawera, on the other hand, is an indication that such is not the case.

In concluding, the writer desires to thank the numerous gentlemen who have assisted him in the course of his investigation, and especially Mr. Lundius and other officers of the Survey Department. His thanks are also due to Messrs. Valentine,

Mr. Valentine's name has been omittted by the lithographer on Plates p. 52, which show Rotomahana before and after the eruption. Similarly, Mr. C. Spencer's name has been omitted from the Plate at p. 43.

Spencer, and Martin for permission to copy photographs of the scene of the eruption. He is specially indebted to the courtesy and kindness of Mr. S. Percy Smith, Assistant Surveyor-General, for permission to copy the map of the Fissure. The writer has ventured to make various alterations and additions to this, founded on his own explorations made in part prior to the date of the survey, but chiefly at a more favourable season of the year. Of these, the most important is a part of the fissure half-a-mile in length, here described for the first time, which includes its termination on the north-cast side of Wahanga, the most remote and least accessible part of the mountain. For the accuracy of these additions he is, of course, alone responsible.

Appendix.

ANALYSES of MATERIAL ejected and deposited by Tarawera Eruption, June 10 1886—By J. A. POND, Colonial Analyst, Auckland.—No. 1, dry ash, from Okaro; No. 2, mud, from Wairoa; No. 3, fine grey ash, from Tauranga; No. 4, from Whakatane No. 5, from Opotiki; No. 6, lapilli (augite-andesite), from Wairoa; No. 7 from Pareheru; No. 8, from east end of Rotoiti.

By Authority: GEORGE DIDSBURY, Government Printer, Wellington.—1888.

Patriotic Speech

Sir G. S. Whitmore, K.C.M.G., on Behalf of Those Who Defended New Zealand at a Time of National Danger.

Justice Wanted.

- To His Excellency Sir W. F. D. JERVOIS, R.E., G.C.M.G., C.B., Governor of New Zealand;
- To the Honourable Members of the House of Representatives and the Legislative Council;
- Also to the Electors of New Zealand.

Gentlemen :

The Naval and Military Settlers and Volunteers' Land Bill was successfully passed in the House of Representatives, and on the third reading the Defence Minister was congratulated on all sides. He replied that the credit was due more to the late Defence Minister than to himself, and he was very glad that justice would now be done to deserving men whose claims had been ignored through informalities etc., etc.

The Bill then went to the Legislative Council, with the result contained in the patriotic speech of Sir G. S Whitmore, and when the history of New Zealand is written it will occupy a place of honour, coming from one who had shared the dangers with those he now pleaded so earnestly and eloquently for—who had ventured their livid in the defence of law and order in this our adopted land; alas, how many lost their lives, and numbers their health in the fierce struggle. Give justice to those who so well deserve your gratitude. Can you so soon forget the perilous times gone by, when farms had to be abandoned and reoccupied by a savage foe seeking to tomahawk and shoot all they met, when settlers took refuge in Wanganui etc., etc., and will you throw over the claims of men who trusted in faith that the Government would always give them their land when they demanded it, as they had fulfilled their part of the contract, restored peace, and enabled settlers to live in safety on their farms and settlements.

I have the honour to be, Yours faithfully,

Sydney Stidolph.

Naval and Military Settlers and Volunteers' Land Bill.

SIR G. S. WHITMORE'S SPEECH ON THE ADJOURNED DEBATE.

Tuesday, 1*st August*, 1888, *on the motion for committal*.

The Hon. G. S. WHITMORE very much regretted that it had been decided in the Speaker's absence—and that, as far as he could judge, the Speaker concurred in that decision—that this Bill was an Appropriation Bill. He could not help it, but he was unable to concur in that view, although of course he submitted with respect to the chair, and to the ruling that had been given. He considered that if the Council abandoned its absolute right to deal with appropriation for land it gave up on a very trumpery bill a right which for the 25 years he had the honour to sit in the Council had always been jealously guarded. The decision arrived at rendered it the more difficult for him to obtain justice for his old comrades in There were a large number of those applicants—some three or four hundred persons—and because there were one or two cases which did not seem to rest upon a good basis there was furnished an argument for upsetting a valuable Bill. He congratulated the Government on having had the good fortune to introduce a Bill of this character, and he should feel very much regret if, through there being one or two disputed claims amongst a land number, the whole of the claimants were to suffer. The Hon. Mr. Waterhouse bad mentioned in his powerful speech against the Bill one or two instances which he did not think in fairness he should have done. There was the case of Colonel Nixon's Defence Force, for example. It had been said that these men bad very high pay, and therefore they must be content to do without land. But the Force did not receive very high pay, and they with the sole mounted Force that in those days the General and the army had to depend upon to do all the cavalry duty of the Waikato Campaign. Arrangements were made with that officer that his men were to receive a block of land, in return for which they found their clothing, saddlery, farriery, and their horses. The total amount received in the way of pay was 7s. 6d. a day. The Hawke's Bay Force, which he raised, obtained their land in Gisborne, and very useful settlers they had proved. Colonel Nixon no longer lived to give the Council the grounds upon which he gave his promise on behalf of the Government for his men's claims to land. He (Sir G. Whitmore) believed Colonel Nixon bad made the promise to his men, and that they were induced to enter the service upon such promise, and consequently it was only just and right that the colony should ratify that promise Then there was the question of Major Jackson's Forest Rangers. Those men he argued were paid a most unreasonable amount of money per day, and they were enrolled for a very short period; but it was absolutely proved by documentary evidence that at the end of that term they were to receive their land. They served in a very distinguised manner, and they did very valuable service to the colony, and therefore he asked upon what grounds, 25 years afterwards, was the Council to go back into this matter and to say that, because those men received a high rate of pay the bargain which had been made should not be carried out. Some of these Forest Rangers, however, had enlisted for a fresh arrangement, serving a new term for a further grant of land, and they were to be debarred because they had high pay and land under a previous arrangement with the Government. It was on record that Major Jackson, on behalf of these men, said to the then Minister of Defence before they re-enlisted, "If those men re-enlist are they to be, or are they not to be, debarred from further grants of land?" The Minister, in reply, said they were not to be debarred, and yet these gallant men were now to be debarred. He regarded with still more indignation the cases of his old comrades of the military service whom it was sought to deprive of what they conceived, and what he believed to be, their rights. He referred to the 37th clause, for Naval and Military settlers, under the Act existing at that time, and he asked, were these claims to be debarred, over circumstances over which they had no control, from obtaining land which they considered to be their due?

The The Hon. Sir G. S. WHITMORE referred to the claims of Major Edwards, formerly a Lieut, of the 14th Regiment, and also of Major Noake (Wellington Colonial Defence Force), but formerly a riding master in the 15th Royal Hussars, but as these are purely Imperial claims it is unnecessary to refer to them. Sir G. S. WHITMORE, continuing, referred to the claim of Lieut. Col. Crowe, who was one of the Commissioners of the last Commission, and whoso claim was also before the Commission of Col. Hal-tain in 1882. Col. Crowe did not appear to have made his application within the prescribed time, and cansequently it was rejected. If any honourable gentleman would take the trouble to read the report of that Commission they would see the narrow limits within which they supposed themselves to be confined. It was all very well for the Government to say,

with respect to 37 of the names which appeared on the Schedule, 25 had already been considered, and therefore ought not to be considered again. That was quite true; but for all that, they might be good claims. Where grants had been given in the Province of Auckland it was in order to get expert men who were trained to the use of arms and to soldiers duty to remain and defend the common country; and the true defence of Auckland might be considered that of Taranaki Acting entirely upon this idea, he knew for a fact that something like 10 or 12 old soldiers threw up their chanees of land in order to enlist and fight the battles of the colony in the Province of Taranaki. They came down—and did many volunteers—never dreaming that the colony would not keep faith with them, and never imagining that under such circumstances they were forfeiting their land, through not having completed their five years of residence, which was necessary to the granting of the land under the rules which had been laid down for their guidance. All regarded the Col. Defence Force and the Forest Rangers, and several other Volunteer Regiments, they, at any rate bad an equitable contract to urge on their behalf. He had already pointed out how narrow was the distance by which these Colonial Forces had missed exactly complying with the law, and be bad noticed that when he had said that, his honourable friend (Mr. Waterhouse) had appeared not to be convinced. He had, however, turned up the report of the Committee, and he wished honourable members to read for themselves exactly from that report the grounds on which they had acted in rejecting or granting claims. They laid down—

"That it was not within our province to go beyond the law by entertaining claims that might have been valid had they been preferred at the proper time and in the proper manner, but which had been allowed to lapse through the manifest neglect or indifference of the claimants themselves."

Under these circumstances there was every possible ground for asking the Legislature to consider as a matter of fair play the claims that might have lapsed through these omissions which, as the law had laid down, would bar them, but were nevertheless harmless and trifling. To show that the claims in these cases could not have been such forced, be might point out that they had, during the war. 14,000 troops in the colony, of whom fully a quarter had settled in the colony. It appeared to him that the number of those persons who were entitled to claim land under the Bill being so small the Council should have no difficulty in passing the Bill. He hoped it would never have to be said of the Council that, because they were now out of the fire they had forgotten those people who had stood by them in times of trouble. He well remembered the time when, in both Houses of Parliament, a question such as this would not have required to have been put to the vote—when everybody in the country recognised his obligations to those who bore the heat and burden of the fray, and was anxious to be foremost in recognising their services. Now that the wolf was away from the door it did not appear a very creditable thing to forget it. He hoped it would never be said that New Zealand had turned her back upon, and had ungratefully forgotten the services of those who had fought her battles in the past.

decorative feature

S. Clapham, Printer, Upper Willis Street, Wellington.

From the "Transactions of the NZ. Institute," Vol. XXII., 1889.

ART. XLI.—*Note on the Wandering Albatros (Diomedea exulans).*

By Sir WALTER BULLER, K.C.M.G., D.Sc., F.R.S.

[*Read before the Wellington Philosophical Society, 19th February, 1890.*]

VOLUME XXI. of our "Transactions," just received in London, contains a paper by Mr. A. Reischek on "The Habits and Home of the Wandering Albatros."

The author of that paper, having visited the Antipodes and Auckland Islands in the Government steamer "Stella" during the breeding-season of that species, seems to have enjoyed exceptional opportunities for studying its history in the adolescent state. But, unfortunately, through an obvious inaccuracy of observation, he has failed to give us any very definite in-formation on the only point that presents any difficulty.

He says (*l.c.*, p. 128), "The albatros takes five years to become fully matured, and in each year there is a slight change of plumage. The young, which are hatched in February, are covered with snow-white down, *and a beautiful specimen in this stage exists in the Otago Museum*. In the following December they lose their down, and the plumage is of a brown colour, with white under the wings and on the throat. In the second year the plumage is the same, except that there is more white on the throat and abdomen. In the third year there is still more white, although mixed with blotches of brown. In the fourth year they very nearly acquire the full plumage. The male is white with a few very fine dark specks, except the wings, which are dark-brown. In the fifth year they reach their full growth, and the mature plumage is displayed—white with blackish-brown wings."

Mr. Reischek's account of the nestling agrees with Mr. Gould's, which is as follows : "The young are at first clothed in a pure-white down, *which gives place to the dark-brown colouring mentioned above"* ("Handb. B. of Aust.," ii., p. 433).

But the specimen in the Otago Museum to which Mr. Reischek refers is not, as his remarks would imply, a nestling covered with white down, but a well-grown fledgling, with tufts of white down still adhering to the plumage. This fledgling has not assumed "plumage of a dark-brown colour," but is of pearly whiteness. It is thus described in my second edition of "The Birds of New Zealand" (vol. ii., p. 192) : "A fledgling, however, in the Otago Museum—obtained at Campbell Island—is entirely without the dark plumage. It has not yet completely lost the dense, fluffy, pure-white down which forms the clothing of the nestling. The head, neck, shoulders, rump, tail, and entire under-surface are of the purest white, having a fine silky gloss; the interscapular region is traversed longitudinally with club-shaped marks of greyish-black, increasing downwards, the larger feathers having their apical portion completely covered; upwards, towards the shoulders, these marks diminish till they become mere arrow-heads; on the mantle there are numerous marginal bars, but there is no vermiculation. The wings are brownish-black on their upper surface varied with white, all the coverts having white margins, and the quills are black. Bill yellowish-horn colour, with a bluish tinge on the upper mandible."

This is undoubtedly the "beautiful specimen" referred to by Mr. Reischek, because Professor Parker mentions in a letter to me that he had called his attention to it specially after his return from the Auckland Islands. Its condition is quite inconsistent with Mr. Reischek's account of a direct transition from the snow-white down into the dark plumage.

In my account of the species (*l.c.*) I have described another example, obtained at Waikanae, of small size, and evidently a young bird. This one had the whole of the plumage pure-white without any markings, excepting on the wings, which were black on their upper surface, largely dappled with white especially towards the humeral flexure. It is figured in my plate of the species, being the back figure standing on a rock.

The following was the only explanation I could offer (*l.c.*, p. 192): "We cannot suppose that the albatros is first pure-white, then dark-brown, and, after passing through several intermediate states, pure-white again in extreme old age. Nor would it be altogether safe, from the materials at present before us, to construct a new species. I am inclined rather to account for the differences I have mentioned on the supposition of the existence of dimorphic phases of plumage, as in some other oceanic birds." This view may be the right one, or it may not; and it seems to me unfortunate that, with such excellent opportunities for studying the subject, Mr. Reischek did not place that matter beyond all doubt.

As to its requiring five years for the albatros to attain the mature white livery, this must of necessity be only conjecture. In my account of the bird I have described no less than ten phases of plumage in its progress towards maturity. That it takes a considerable time—probably several years—to developed the fully-adult plumage is perfectly clear, but it is manifestly impossible to fix the annual changes of plumage without having the birds constantly under observation.

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Canterbury
(New Zealand,)
Its *Resources And Progress,*
1889.
Prepared by the Canterbury Committee For Free Distribution At the *New Zealand and South Seas Exhibition*.

School of Agriculture

LINCOLN, CENTERBURY, NEW ZEALAND.

Canterbury, its Resources and Progress.

THIS district was founded as a special settlement under the auspices of what was called the "Canterbury Association." The first settlers arrived in 1841, under conditions that gave the enterprise for some time the aspect of an isolated colony. As the first settlers of Otago were essentially Scottish, so the first ones of Canterbury were [*unclear:* sentially] English. But, with improved means of communication and the multiplication of interests and employments, Canterbury, like Otago, has become cosmopolitan. The population of Canterbury is now about 124,000, of which 41,205 reside in the chief town, Christchurch, and suburbs. There are 454 miles of railway; and a throughly efficient telegraph service extends to every point of any importance There are in the district 206 separate state schools with a total of 25,091 children on the rolls. Of the settlers in this, as indeed in almost every other part of the Colony, it may be said in truth that they enjoy an average degree of prosperity and general comfort, equal to if not above that which is the lot of any other community in the world. In Canterbury, enterprise and capital are more exclusively devoted to agricultural and pastoral interests than is the case elsewhere in the Colony. It may be fairly said that Canterbury is the "cornfield" of New Zealand. In no other part of it is there such a large area so suitable for and so easy of tillage. The extent of the Canterbury plains proper is about 3,000,000 acres. The ares of open land under 2,000 feet above sea-level is actually [*unclear:* 06.690] acres. The extent of open land above 2,000 feet above [*unclear:* -level] is 4,494,207 acres. The total area between the boundaries of the Hurunui and the Waitaki is 8,693,027 acres; and of this, 6,375,569 acres are classed as agricultural and pastoral.

The productive capacity of these lands is best illustrated by statistics showing that on the 31st May last there were 4,594,577 sheep in Canterbury, while the Agricultural figures for this district are as fellows:— Wheat. Oats. Barley. Potatoes. Acres Bushels Average Yield. Acres Bushels Average Yield. Acres Bushels Average Yield. Acres Tons Average Yield. tons image not readable image not readable 1,770,363 30.78 72,522 2,888,683 39.83 16,820 620,699 36.90 3,140 17,895 5.70 image not readable image not readable 3,621,320 20.83 128,384 3,237,462 25.21 17,062 371,009 21.74 4,613 26,766 6.80 image not readable image not readable 5,047,883 21.29 102,370 2,540,591 24.82 17,728 347,075 19.57 5,930 31,508 5.31 image not readable image not readable 4,450,667 24.43 129,133 4,157,766 32.20 19,450 557,443 28.66 5,893 37,717 6.40 image not readable image not readable 5,976,443 25.15 122,941 3,639,354 29.60 11,310 307,193 27.16 6,153 36,357 5.90 image not readable image not readable 5,531,560 22.86 133,810 3,631,294 27.11 18,677 532,150 28.49 6,619 26,226 5.47

And it should be borne in mind that these figures take no account the large numbers of cattle, pigs, and horses.

TABLE I.—THE AVERAGE YIELD OF GRAIN PER ACRE, AND THE TOTAL YEARS DURING THE LAST 14 YEARS, FOR WHOLE OF N.Z., HAVE BEEN AS FOLLOWS.

Year wheat. arley. oats. Acreage. Total Yield. Yield per Acre. Acreage. Total Yield. Yield per Acre. Average. Total Yield. b. b. 1876 57,500 1,770,363 30¾ 16,820 620,699 37 72,522 2,888,683 1877 92,417 2,707,625 29 1/3 16,047 505,700 31½ 70,032 2,106,890 1878 147,197 3,399,353 23 1/10 13,757 335,733 24½ 86,728 2,396,483 1879 173,895 3,621,820 20 4/5 17,062 371,009 21¾ 128,384 3,237,462 1880 270,198 7,610,012 28 57,484 1,751,432 30 330,208 12,062,607 1881 324,933 8,147,705 28.9 46,877 1,221,241 26.0 215,023 6,891,731 1882 365,715 8,297,890 22.25 29,808 664,093 22.14 243,387 6,924,848 1883 390,818 10,270,623 26.28 28,146 737,163 26.19 319,858 10.520,158 1881 377,706 9,827,136 26 32,907 964,456 29.15 262,954 9,231,339 1885 270,043 6,866,777 25 39,703 1,205,906 30.18 354,794 12.360,449 1886 173,891 4,242,285 24.24 39,703 1,205,906 30.18 329,488 8,603,701 1887 253,025 6,297,683 24.53 21,539 558,606 25.46 387,228 11,973,295 1888 357,359 9,424,059 26.22 27,912 760,874 27.30 330,474 10,512,119 1889 362,153 8,770,246 24.22 45,027 1,402,537 31.14 367,225 10,977,056 Mean average for the 14 years of Wheat, 25.2 bushels per acre.

The value of agricultural land on the Canterbury Plains ranges from £3 10s., to £30 per acre; while the average value of such land, reckoned within easy distance of a railway, may be taken as £8 per acre. The land is in general firmly held; and there are still many large block of freehold of excellent quality, in the possession of one individual People in Australia and elsewhere have not unfrequently [*unclear:* expre] their surprise at the prices at which our farming land is held. But [*unclear:* the] surprise disappears when one becomes acquainted with the combined advantages of soil and climate which Canterbury enjoys. Here the land is like the mill that grinds every day of the year. There [*unclear:* is] month in which the farmer may not sow something. This is true to a large extent of the whole of New Zealand. But in [*unclear:* Canterbury] presented the happy medium between the wetter and colder [*unclear:* climate] Southern Otago, and the hotter and drier one of the North Island Canterbury is the only district that is so far able to produce fat sheep for freezing, in equal numbers all the year round. This [*unclear:* becom] practicable by the suitableness of the climate for growing and maturing turnips as well as grasses.

The Canterbury plains present exceptional facilities for irrigation. They have a regular fall of about thirty feet per mile towards the [*unclear:* and] the great rivers run west to east directly with the fall. These may he tapped at almost any point, and their water conducted [*unclear:* to] the land lying at a lower level. These conditions have been taken advantage of so far as to lead the water for the purpose of watering stock, &c., and the many miles of water-races over the country supply nearly every farm. This supply has undoubtedly [*unclear:* eased] the stock carrying capacity of many districts, but, under [*unclear:* gation] proper, the country would present a very different aspect. This however, is a prospect of the future, as the grading of lands [*unclear:* irrigation] purposes is a costly operation, even under such [*unclear:* excepcually] favourable circumstances as are obtained here,

Partial irrigation, or the watering of grass lands may be more [*unclear:* ly] carried out, and good results have been obtained at the [*unclear:* bburton] experimental irrigation farms, and at that of the School of [*unclear:* griculture] at Lincoln.

The length of water-races of various sizes already constructed and [*unclear:* area] of land served thereby are as follows, viz.:—

To learn how the farming land of Canterbury acquires its great [*unclear:* suetive] value, it is only necessary to compare the conditions of [*unclear:* ate] with those of less favoured countries. In the United States [*unclear:* d] Canada, the land will be found sealed up by frost for about five [*unclear:* ths] of the year, while in Australia all vegetation withers for long [*unclear:* ods] under a scorching sun. It is easy to show that in Canterbury [*unclear:* average] profit per acre to the farmer is as great as the value of the [*unclear:* bole] average yield per acre in South Australia and Victoria. For simple, in Canterbury, land of the value of £10 per acre, produces on [*unclear:* average] 28 bushels per acre, at 3s., equal to £4 4s. Therefore taking [*unclear:* rest] or rent at 14s., and charges at 34s., the net profit is 36s. per [*unclear:* which] represents the whole value of the average yield per acre in [*unclear:* th], Australia, namely of 9 bushels at 4s, equal to £1 16s. To give [*unclear:* ther] actual case: a light land farm five miles from a railway station [*unclear:* t] year produced 20 bushels of wheat per acre which was raised and delivered at a cost of 1s. 6d. per bushel including every charge except interest or rent. The market value of this land is about £4 per acre. These cases show that grain growing in Canterbury is still a very profitable business with average seasons and the price about 3s. per bushel for wheat. It has to be remembered that a dry season will come occasionally, and in such case the product of the light land would be very small. But when a farmer has an average of 25 bushels wheat per acre, for six consecutive years, as is the case of Canterbury for the last six years, he must be an improvident man if he cannot afford to go for one year without a crop. The risks incidental to grain growing here are probably much the same in extent as in England. The greatest fear of the Canterbury farmer arises from North-west winds, more or less prevalent in the end of summer and autumn. But the danger of having grain shaken out by wind is much less since improved harvesting machinery has become available.

SOIL.

The soils occupied vary very considerably in quality and composition. Even on the great plain the widest diversity is found, due here chiefly to the action of the rapid waters of the large rivers, and also to a considerable extent to the effects of wind. For there can be no doubt but that the poorness of some of the central part of the plain—through most of which, unfortunately for the credit of the country the main trunk line of railway runs—is due to the action of strong westerly winds upon the river deposited silt. Thus the finer particles being carried seaward, accounts for the richness of the land toward the sea coast, where we find this deposit—loess—presenting us with soils of the greatest fertility.

These deposits being to seaward, have in many cases to receive the waters of the easterly running streams, the result being often swampy lands, which on being drained prove to be exceedingly rich, the accumulated vegetable matter having added to the natural fertility of the wind deposited loess.

It is from these lands the astonishing results that appear in the public prints from time to time, are obtained—results [*unclear:* which] often thought to be exaggerations by persons unacquainted with the productiveness of these soils.

On the low downs, both South and North, is land above average quality of that of most of the plain. And [*unclear:* the] here also are very diverse in character, being in some localities more or less calcareous, in others a stiff or less adhesive clay. Again we find that friable volcanic soil so conducive to the [*unclear:* pid] growth of good grass, having in abundance all the elements of [*unclear:* t] food, And all these lands are exceedingly well watered and [*unclear:* ined]

Towards the scientific examination of soils much has been done in the laboratory of the School of Agriculture, at Lincoln.

The following table of the chemical analyses of some soils, may prove of interest.

Table No. II.—Analyses of Some Canterbury Soils.

lts Calculated on 100 Parts Of Soil Dried At 100 deg. C. No. 36 College Farm. No. 4 College Farm. No. 8 College Farm. No. 18 College Farm. Salop Downs. Salop Downs. Island Farm. Hinds. Peaty Soil. 7.701 5.604 5.996 9.082 6.34 5.94 5.62 11.60 53.307 80.519 87.410 87.075 81.383 84.99 86.K5 83.46 77.85 37 509 .217 .031 .040 .198 ... ... .31 339 4.336 2.658 2.419 3.890 6.87 6.88 7.95 7.71 3.241 4.586 2.870 2.975 3.419 1.970 .617 .152 .219 .332 .22 .33 1.56 1.35 1.685 .335 .308 .394 .575 ... ... .73 .141 .564 .174 .187 .495 .51 .34 .43 .04 .387 .289 .167 .314 .169 ... ... .14 .253 .148 .144 .118 .205 .17 .03 .17 .19 .324 .044 .172 .020 .188 ... ... .09 .637 .021 .07 .005 .011 ... ... .07 .031 .623 .303 .232 .053 .90 .08 .81 ... .176 100.000 100.000 100.000 100.000 100.00 100.00 100.00 100.08 100.000 3.590 2.485 1.945 3.070 2.35 1.77 2.05 11.28 15.315 .245 .186 .328 .294 .238 .154 .182 .230 1.652

CLIMATE.

[*unclear:* To] the suitability of our climate is undoubtedly chiefly duo, not [*unclear:* ly] the high average yield of Canterbury, but more particularly [*unclear:* maintenance] of that average over a number of years, as set forth [*unclear:* table] No. 1. A glance at this table will show, amongst other [*unclear:* how] slight the fluctuation in the average yield per acre has [*unclear:* throughout] the period dealt with.

[*unclear:* A] few particulars as to rainfall and temperature will prove of [*unclear:* and] are given hereunder with a view of drawing attention to [*unclear:* equability] of our climate.

TABLE NO. III., SHOWING THE MONTHLY RAINFALL, AND THE NUMBER OF DAYS UPON WHICH RAIN FELL AT LINCOLN, FOR THE 10 YEARS 1880/89.

1880. 1881. 1882. 1883. 1884. 1885. 1886. 1887. 1888. 1889. Average. Month. No. of Days. Rain fall in inches No. of Days. Rain fall in inches No. of Days. Rain fall in inches No. of Days. Rain fall in inches No. of Days. Rain fall in inches No. of Days. Rain fall in inches No. of Days. Rain fall in inches No. of Days. Rain fall in inches No. of Days. Rain fall in inches No. of Days. Rain fall in inches Jan. 2.07 1.88 11 4.09 6 1.19 14 4 .45 12 1.69 9 0.62 6 1.41 11 1.96 5 0.41 9¼ 1.98 Feb. 0.15 0.39 5 0.61 11 0.67 8 1.78 8 1.26 6 1.35 10 1.83 5 2.35 2 0.06 7 1.46 March 1.72 1.88 6 0.90 12 3.15 12 1.46 14 5.10 13 2.55 6 1.02 10 2.06 12 4.19 10½ 2.40 April 0.71 1.09 10 2.13 19 3.68 5 1.72 5 0.55 10 4.21 9 1.71 9 3.26 9 1.60 9½ 2.07 May 2.68 2.16 15 1.27 16 2.66 7 1.28 13 1.55 9 5 86 24 2.66 12 3.42 7 1.37 13 2.49 June 1.49 3.90 14 1.69 7

1.08 7 1.48 3 1.40 14 5.07 20 5.98 6 0.65 16 2.84 11 2.56 July 2.12 4.07 19 2.21 17 3.72 10 3.88 17 3.03 8 0.33 13 5.02 13 2.32 13 1.65 13¾ 2.84 Aug. 1.17 3.14 11 3.44 8 2.00 13 1.93 12 2.90 25 8.43 12 2.55 20 6.11 9 0.98 13¾ 3.27 Sept. 0.30 1.25 5 1.72 14 5.51 12 1.98 4 0.57 15 2.09 14 1.62 6 1.30 12 3.66 10¼ 2.00 Oct. 1.22 1.21 11 1.42 9 0.98 12 2.24 16 1.39 12 2 22 10 3.77 11 0.77 11½ 1.69 Nov. 2.44 0.04 11 4.48 10 2.20 12 3.26 7 2.14 9 0.77 18 4.32 14 4.06 11½ 2.63 Dec. 1.60 0.77 10 2.67 10 3.48 14 2.99 7 0.55 9 1.74 7 0.99 11 0.89 9¾ 1.74 Totals 17.67 21.78 128 26.63 139 30.33 126 28.45 118 22.13 139 35.24 149 32.88 128 29.15 131 27.13

The most noticeable features in this record are the even distribution of the rainfall throughout the year, and the suitability of the averages for the particular month of the year.

A glance at the return of rainy days during each month shows even more forcibly than does the amount of rain, our freedom from drought, and from excessive rainfall.

The tables hereunder give the temperature recorded by exposed self-recording thermometers at the Lincoln School of Agriculture.

TABLE NO. IV., SHOWING THE HIGHEST AND LOWEST TEMPERATURE ON THE GRASS AS RECORDED BY THE TERRESTRIAL RADIATION THERMOMETER AT THE SCHOOL OF AGRICULTURE, LINCOLN.

Jan. Feb. March. April. May. June. Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1885 49 16 29 44 15 34 1886 49 31 44 55 34 47 53 30 42 54 20 38 49 21 36 36 16 26 1887 63 42 53 55 35 48 64 30 49 55 30 41 54 24 36 49 20 35 1888 51 34 45 54 30 44 55 28 42 47 25 37 50 21 97 47 20 31 1889 58 37 49 56 31 46 64 34 45 52 28 40 48 25 34 40 15 29 Average means for Month. 48 46 44½ 39 34½ 31 July. August. Sept. October. Nov. Dec. Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1885 45 18 31 43 17 31 45 19 31 33 23 34 53 25 38 51 30 42 1886 35 13 22 44 22 28 42 23 35 50 28 39 56 32 42 55 30 45 1887 43 22 32 45 22 32 44 24 34 47 26 37 51 29 42 56 ... ... 1888 44 23 31 45 27 26 43 26 34 50 22 38 46 25 36 59 28 41 1889 40 22 30 45 28 29 43 24 36 Average means for Month. 29 31 34 37 39½ 43

TABLE NO. V., SHOWING MONTHLY RECORD OF HIGHEST AND LOWEST TEMPERATURE IN THE SUN AS TAKEN AT THE SCHOOL OF AGRICULTURE, LINCOLN

Jan. Feb. March. April. May. Just Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1885 146 61 133 146 54 128 146 63 128 136 75 112 118 83 107 112 52 95 1886 155 105 137 148 97 137 148 80 121 142 63 115 119 57 94 130 46 91 1887 157 102 142 162 97 137 147 122 133 137 62 107 120 51 94, 107 58 85 1888 153 117 142 151 130 142 154 98 133 143 75 114 118 59 97 115 62 100 1889 159 92 140 146 115 135 154 99 129 127 86 115 123 58 104 112 51 80 Monthly Average Means 139 136 128½ 112½ 99 90 July. August. Sept. October. Nov. Dec. Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean Highest Lowest Mean 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1885 105 52 81 127 49 103 137 97 120 146 105 129 147 86 138 155 92 136 1886 115 85 94 119 62 90 131 90 112 138 90 124 148 107 135 158 117 137 1887 108 60 91 122 58 103 136 64 115 143 90 127 142 78 129 153 90 136 1888 116 59 97 125 58 94 135 72 117 146 94 129 146 85 129 157 123 140 1889 116 66 95 120 72 104 132 73 110 Monthly Average Means. 91½ 99 115 127 131½

The Canterbury A & P. Association.

THIS Institution was founded in the year 1863, having for its object the development of the agricultural and pastoral resources of Canterbury. With the exception of a small grant of money made by the late Provincial Council, the Society is supported by voluntary contributions.

The healthy rivalry which takes place from year to year at the annual shows of stock, &c., held by the Association, has been productive of immense advantage to the Provincial District of Canterbury in the general improvement of all classes of stock, implements, and manufactures. The work of the Association is not confined to the holding of annual shows. They publish a journal of agriculture (known as the "New Zealand Country Journal"); a "Draught Horse Stud Book"; a "Herd Book of Shorthorn Cattle"; and a "Herd Book for Other Breeds of Cattle." Trials of new machinery are also held, the results being published for the benefit of

farmers. Prizes are also offered for the best kept small and medium sized dairy and tillage farms with a view of encouraging a better system of farm management, The Association's rooms are furnished with a valuable library for the the use of members. Indeed, it may be claimed for the Canterbury Agricultural and Pastoral Association, that they are performing most efficiently in this district, all the functions of a State Department of Agriculture.

Lincoln Agricultural College.

THE School of Agriculture at Lincoln, Canterbury, New Zealand, is one of the Institutions under the control of the Canterbury College, and is the outcome of endowments of land, reserved by the Provincial Government of Canterbury, for the purpose of affording to succeeding generations of farmers, such an education, as would best fit them for the pursuit of their calling, under the conditions likely to obtain in this country in the future.

The course of instruction, therefore, whilst being eminently practical, embraces also a thorough study of theoretical agriculture, and also of the sciences bearing thereon, these being also dealt with practically in the laboratories attached to the institution. Land surveying, levelling, and book-keeping also form part of the course.

The farm is 660 acres in extent, comprising soils of various qualities, It serves principally for the purpose of initiating students into the performance of all descriptions of farm work, they taking part in the regular daily work. It also serves for illustrating the teaching of the lecture rooms, and for experimental purpose.

The farm buildings have been planned to be as complete as possible, the requirements of the country being, however, kept in view. The dairy contains the latest appliances; there are also blacksmith's and carpenter's shops, in which students take their turn at work.

The school-buildings (shown in the illustration) are of brick and stone, and provide accommodation for about forty-five students, each having a separate bedroom, and contain also, all necessary lecture and class rooms, laboratories, &c.

The course of instruction extends over two years, the year being divided into two terms. The fee payable being £20 per term, or £40 per annum. This payment includes everything but books, and the small quantity of apparatus required.

The prospectus, which contains very full particulars of the Institution, the scope of the teaching, &c., may be obtained, on application, from the Director, Lincoln, or from the Registrar of the Canterbury College, Christchurch.

Industries and Manufactures.

Industries.

TURNING to what are strictly the *industries* of Canterbury; by far the most interesting and important is that which has to do with the freezing and export of meat for the English market. Nothing could illustrate better the exceptionally favourable conditions of soil, climate and rainfall in Canterbury than the quality, regularity, and rapidly increasing volume of the exports of frozen meat. This industry commenced in 1885, with the factory at Belfast (Christchurch), and the export for that year amounted to 113,700 carcases of mutton There are now three factories in Canterbury—two at Christchurch and one at Timaru—and the total export for the ensuing years estimated at 500,000 carcases, for the ports of Lyttelton and Timaru The admirable equipment and working of the direct steam services have greatly facilitated the development of the New Zealand meat trade. The North Canterbury mutton commands the highest price of any frozen mutton that is sold in the English market.

With the extension of the *frozen meat* trade the business of fellmongering has assumed large proportions. Allied with sheep slaughtering, there are also manure and other industries that exist for the manipulation of the blood and offal. And experience and science have no doubt yet much to do in the way of turning to fuller account the parts of the animals now deemed of little value. Meat-preserving and bacon-curing are also important and successful industries, In dairy products, co-operation and machinery are now achieving better results in respect of uniformity of quality of both cheese and butter.

Manufactures.

In respect of manufactures, Canterbury is very far from being overdone, there is plenty of unbroken ground for the establishment of new industries, and for the further development of many already established. The railway now in course of construction between the Fast and West Coasts, which will have the effect of knitting Canterbury and Westland closely together, may be expected to give a great impetus to the manufacturing

concerns in and around Christchurch, by bringing coal and timber close to their doors, and by adding a large and thriving district to their constituency. The large production of wool and grain has naturally given rise to numerous factories and mills for the preparation of these products into articles of clothing and food. The Woollen Factories and Flour Mills accordingly bulk largely in the subjoined list, and among these the most important are the Kaiapoi Company's Woollen Mills at Kaiapoi, with their Clothing Factory in Christchurch, and the Timaru Milling Company's Flour Mill at Timaru. The province is also fairly well supplied with engineering establishments (chiefly agricultural), boot and shoe factories, and breweries, while the recent development of the trade in flax (phormium tenax) has brought about an important revival in this industry.

The figures given below are based upon the last census returns of 1886; but great progress having been made in many lines during the last three years, and exact statisticts not being obtainable, they are not put forward as being absolutely correct. The total number of manufacturing establishments in the Provincial District is 450; the total number of hands employed about 5,000, and the approximate total annual output £1,750,000.

The following are the principal industries:—

Commerce.

With the foregoing outline of the producing and industrial interests of Canterbury one should have no difficulty in judging of the nature of its commerce. The main business of the merchants is, of course, to find a profitable outlet abroad for produce, and to import id distribute commodities for consumption and materials for developing the resources of the district. The value of the foreign trade of Lyttelton last year (to 30th June) was £3,411,843, consisting of exports, £2,266,569, and imports, £1,145,274. At Timaru, the second port of Canterbury, the value of the foreign trade for the same period was £642,720, made up by exports, £566,429, and imports, £76,291 Those figures furnish an eloquent commentary on the wonderful expansion of the Canterbury export trade, in the fact that the exports represent 70 per cent, of the foreign trade. In other words, the relative values of exports and imports are as 7 to 3. In Canterbury: therefore, is presented the extraordinary feature: of a total population of only 124,000, having a foreign trade of £4,054,563 in valid Besides dealing with produce and merchandise the commercial interest in Canterbury has always been an important channel for the introduction of capital for promoting enterprise in the district. In concluding this sketch, it is due to the Canterbury Chamber of Commerce to say that it has always devoted its influence, with zest and with no small success, to the promotion, not only of what lay nearest to the commercial interest, but to every measure likely It promote the prosperity of the district as a whole.

Geology and Topography.

THE Canterbury Plains are half-moon shaped; some 120 miles long and with a greatest breadth of about 40 miles. Near the middle of the flat, or eastern side, is the cluster of volcanic hills called Bank's Peninsula. These were a group of volcanoes very many ages ago, and all signs of craters have long since been obliterated. They were active when the western islands of Scotland were also pouring out streams of lava. The curved side of the plains is bordered by high mountains to the west, but on the north and south by undulsting hills, which are, however, broken in places by high ridges too steep to plough. The plains themselves slope from the sea up to a level of about a thousand feet under the foot of the western mountains. These western mountains, as well as the high ridges that run from them on the north and south of the plains, are formed of sandstones and slates of considerable age, dating probably from the carboniferous and jurassic periods, and contain limestone but rarely. But fringing the western side of the plain as well as covering the spurs from the ridges north and south are many different kinds of much younger rocks which afford a great variety of soils and many useful minerals.

Limestones—all of them good for burning and some for building—occur from the Hurunui in the north through the Weka-pass district to Oxford, where there is a deposit of chalk. They are also found in the Malvern Hills, and again in the south near Mt. Somers, Hakahu, like Opihi and Tangawai rivers, and in the Valley of the Waihao.

Brown coals are found at the Malvern Hills, Mt. Somers, Kakahu, and Waihao, while at the Acheron, a tributary of the Rakaia, there is very good anthracite. Good pottery clays generally accompany the coal beds.

Volcanic rocks are by no means rare. Bank's Peninsula is entirely composed of basalts and andesites which decompose into valuable soils. The Malvern Hills also contains both basalts and andesites, although host of its volcanic rocks are rhyolite, which makes a comparatively poor soil; and it is the same with Mt. Somers and the Gawlar Downs. However, at Geraldine and Timaru, we again find basalts, which readily decompose.

The plains themselves are shingly near the great rivers, especially along their northern banks, bat generally the shingle is covered by a layer of silt, which towards the coast passes into rich black soil.

Much of the lower part of Bank's Peninsula, as well as the Mt. Grey and Moeraki Downs, the lower parts of

the Malvern Hills and the country between Timaru and the Waitaki river is covered by a silt deposit, often of great depth, forming a loam which would make an almost perfect soil if a little lime were added; and as limestone and coal are both plentiful in many places, the cost of burning and distributing it would not be very great.

Higher Education.

THE Province of Canterbury has from its foundation given great prominence to higher education. The Canterbury Association intending as it did to make it a colony of members of the Church of England, set apart a certain proportion of the proceeds of its land sales for the establishment of a church college and grammar school. And Christ's College Grammar School was started early in the history of the Province and flourished for many years as one of the best, if not the best of its kind in New Zealand, drawing a large number of its pupils from other provinces. But as the exclusively Church of England character of the district disappeared it became clear to the Provincial Council that its collegiate education must be founded on wider basis, and in 1873 large reserves were set apart, and by the Canterbury College Ordinance, vested in a Governing Body, whose twenty-three members were drawn from all sects. Thus an undenominational University College was founded, under the name of Canterbury College, and a staff of professors, able to give a complete liberal education of a university standard, was brought from England and commenced work in 1875.

Along with Otago University, the new college succeeded in gradually reforming the recently-established University of New Zealand, and putting its constitution and degrees on a more satisfactory footing; and now that institution practically consists of the three University Colleges in Auckland, Christchurch, and Dunedin, and has all its degree, senior scholarship, and honour examinations conducted by the most eminent examiners in the British Universities.

For several years the number of students was small, though increasing, as Christ's College still adhered to its original idea of adding collegiate education to its grammar school education, and there were no other secondary schools in the province to prepare students for matriculation. But in 1877 the Girls' High School was establish with a small endowment, and in 1881 the Christchurch Boys' High School with an ample endowment, and High Schools at Timaru, Ashburton, Akaroa, and Rangiora, with portions of the former primary school reserves to support them. The two former were placed under the governing body of Canterbury College, and along with the others were intended to prepare students for that institution These schools give great prominence to practical training, although they pay special attention to preparing pupils for entering on a University course. The last few years the Boys' High School has had a workshop in full operation, for teaching the pupils skill in various mechanical trades; whilst the Girls' High School has had for five or six years a highly successful cooking class, and as successful a class scientific dress cutting. It also insists on the physical training of the girls, gymnastics, drill, and swimming being part of the curriculum. In both schools there are offered every year a number of exhibitions for pupils entering them, and a few for pupils already in them.

Canterbury College draws numbers of students from the districts of Nelson, Wellington, Hawke's Bay, Wanganui, Westland and South Canterbury. And it has become the largest of the three University Colleges, having had during last session 165 matriculated students, and 153 unmatriculated students (in all 318) attending its lectures. Some of its classes, such as English Composition, have often above 150 students in regular attendance.

Of its students the great majority are merely pursuing a liberal course of education towards a degree in arts, a few are proceeding to a degree, and still fewer to a science degree or an engineering certificate. There being a small law faculty and a small engineering faculty in the College.

One of the features of the College that has made it so great a success has been the admission of ladies, not only to the lectures, but to all the privileges of undergraduates and graduates. The consequence is, a large number of the graduates, and some of these the most successful in gaining scholarships and honours, are ladies; it was the first University College in the British dominions to have a lady graduate; and nearly half of the undergraduates and almost as large a proportion of unmatriculated students attending lectures are ladies. No difficulty has ever arisen as to the two sexes attending the same lecture at the same times, and the effect on the male undergraduates has been the almost complete absence of discourtesy or breach of discipline on their part. It is one of the few colleges in the British Empire where ladies are seen daily in the lecture-rooms and courts in cap and gown, and it undoubtedly led the way in this.

Most of the lectures are so arranged that men in business, clerks, artisans, and teachers from the country, can attend them without giving up their daily avocations; and a single lecture per week may be attended during a term of fourteen weeks for a fee of half a guinea, as there is no matriculation or entrance fee. The consequence is that every session large numbers attend and study, who have no intention of proceeding to a degree; and the influence of the College on the professions, and the general culture of the neighbourhood, is

much wider than might be judged from the number of its graduates. Most of the teachers of the district and a large proportion of the young clergymen and lawyers pass through its classes.

But in degrees, scholarships, and honours, it stands easily first amongst the colleges of New Zealand, as will be seen by the following extract from the last annual report of the Chairman of its Governing body:—

"Out of 199 who have taken degrees in the University of New Zealand, 83 belong to Canterbury College; out of 71 who have taken M.A., 40 belong to it; and of 35 who have taken first-class honours 24 belong to it. Of the 66 senior and third-year and John Tinline Scholarships awarded by the University of New Zealand, during the last twelve years, the period during which the present scholarship regulations have been in force, 45 have been awarded to students attending Canterbury College, and of the 14 Bowen Prizes which have been awarded by the University for an essay on a subject connected with English History, and open to all undergraduates of the University of New Zealand, nine have been gained by students trained in College."

Primary Education.

THE system of elementary education embodied in the Education Act, 1877, did not, so far as Canterbury was concerned, introduce any novelty; being in its essential principles only a continuation the system which had been gradually established under the of peril of the Provincial Education Ordinances of 1864, 1871, and The subsequent increase in the number of schools and of children under instruction is attributable, not to any extraordinary stimulus to the application of improved administrative machinery, but to the steady growth of population, and to the care with which the provision of the means of education has been made to keep pace with the growing requirements of the people.

Canterbury is now divided into two educational districts under separate Boards, and the district of North Canterbury includes parts of Marlborough and Nelson. Omitting the latter, and taking the provincial district of Canterbury (*i.e.*, the country between the rivers Hurunui and Waitaki), there were in 1863, 38 schools (28 of them

denominational) with 1749 children on the rolls, and 1120 in average attendance. In 1874, aid to denominational schools ceased. In that year the number of district schools had risen to 84, the number of children on the rolls to 10,136, and the number in average attendance to 5847. At the close of 1877, immediately before the existing Act came into force, there were 116 schools, with 14,834 children on the rolls, and 10,736 in average attendance. And on June 30 in the present year—the latest date for which full returns are available—the timber of schools was 208, the number of children on the rolls 25,021, and in average attendance 19,847. The following table shows the rate increase in a readily intelligible form:—

The number of teachers employed in the 208 schools is 645, viz., 417 adult and 228 pupil teachers. The expenditure on teachers' salaries is at the rate of £55,341 per annum, and the allowance for incidental expenses, £6,552; making the total cost of maintenance £81,893.

An important feature of the educational system in the North Canterbury district is the Normal School. This institution was opened on the 19th February, 1887, and has proved highly successful, There are now in our schools upwards of 240 teachers who have been trained in the Christchurch Normal school, while of 45 other ex-students who have retired from the service the great majority had previously done some years of useful work.

A valuable link between the primary and secondary schools is supplied by the scholarships, of which the Board of Education every year offers seventeen for competition, open to boys and girls attending the Board's schools and tenable for two years at any of the public high schools within the district. The large competition shows how well these scholarships are appreciated. Since 1866, when they first offered, 244 scholarships have been awarded, and the number of individual holders is 176. The practical usefulness of the scholarships is strikingly shown by the results. Aided by them a great many pupils of primary schools have been able to obtain the advantage of the superior instruction, and pass on to the University, where many of them have gained high distinction.

The Canterbury Museum.

THE Canterbury Museum, an elegant edifice standing in the Domain Gardens, owes its building and great collections to the energy of the late Sir Julius von Haast. The Museum contains seven large galleries, exclusive of those devoted entirely to the exposition of the biology and geology of New Zealand, and of objects illustrating the history of the indigenes of the Colony.

The General Natural History Collections are typically very complete. The Antiquity Room contains a large and most interesting numbers of objects. In the Picture Gallery are hung many paintings by well, known English artists, as well as by the chief New Zealand painters. Here also are arranged casts of some of the most

celebrated specimen of ancient sculpture. One of the largest and best lighted rooms is devoted to Ethnology, where is exhibited the comparative art of savage and civilised races. The general geology of the earth is illustrated by a very complete typical collection, and in the adjoining Technological room, an almost complete metallurgical one.

One of the chief features of the Museum is its New Zealand collections, of which the specimens, in number and completeness, of the extinct Moas are unsurpassed anywhere in the world. The specimen illustrating its Zoology and Geology are also very extensive, well displayed and exhaustively labelled. A full descriptive catalogue now under preparation, and shortly to be published, will render the Museum still more instructive to the visitor. Altogether the Canterbury Museum, in illustrating all Departments of Knowledge, can claim to be a practical Educational establishment of special importance to the Province, and a most valuable adjunct to its schools and collegia The present Curator is Henry O. Forbes, F.R.G.S., Fellow Zoologcal Society of London, &c., &c.

Sport in Canterbury.

THE shooting season for ducks is generally from about April till the end of June, and good swan and duck shooting can be had in several places in the province, more especially at Lake Ellesmere, about twenty miles from Christchurch. Pheasants have become somewhat scarce, and can only be obtained in a few favoured localities. Partridges were imported some years ago, and at first increased very fast, but owing chiefly to the abundance of hawks, are now almost extinct. Hares are very abundant on the Plains.

Almost all the rivers in the Province afford the finest trout fishing be obtained anywhere in the world, the trout running extremely large. The season begins on October 1st and lasts up till April 15th, but November, December, and the early part of January are the best months. In October and November the large snow rivers afford abundance of sport, spinning with a Devon Minnow or Whitebait Phantom being the best way of making the largest bags, and a day's fishing; in some of these rivers will often give the angler from 30 lbs. to 60 lbs. weight for his day's catch. The best stations for the snow rivers; are for the Rangitata, Ealing or Rangitata Island; for the Ashburton, Ashburton; for the Rakaia, Rakaia Station on the Kin South Line; or Southbridge for the mouth of the Rakaia, but the difficulty with all these rivers when once the warm weather begins, to catch them in proper condition; the melting snow on the ranges keeping them too often muddy and in heavy flood. There is both fly and minnow fishing to be had all the summer, of first-class character, it Winchester and Temuka in the Opihi.

The finest river of all, however, in the Province is the Selwyn, about twenty miles from Christchurch, and this river not being affected by now water, is in good condition all the summer, and most excellent fishing both with fly minnow and live bait can nearly always be obtained. For the Upper Selwyn, the best places to stop are Glen-tunnel or Whitecliffs, both within easy reach of Christchurch by train; Ellesmere on the Southbridge Line, or Springston for the Lower Selwyn and the Lake, where the finest trout are caught. Last year several bags of trout weighing over 60 lbs. were caught; for the Lower Selwyn and the Lake, the angler should, however, have a tent, as there no hotel within three or four miles of the lake; by going, however, Ellesmere Station the train takes him close to the stream, and he can have a day's sport and return in the evening to Christchurch. There are also numerous smaller streams near Christchurch where first-class sport can be obtained with the fly.

New Zealand and South Seas Exhibition, 1889-90.

Province of Canterbury.

Commissioners:

- G.T. Booth, ESQ., President Canterbury Industrial Association, Christchurch.
- P. Cunnigham, ESQ., Christchurch.
- J. Deans, ESQ., President Canterbury A. & P. Association, Christchurch.
- K. O. Forbes, ESQ., F.R.G.S., Curator, Canterbury Museum, Christchurch.

- A. Kaye, ESQ., President Canterbury Chamber of Commerce.
- J. J. Kinsey, ESQ., Christchurch.
- C. Louisson, ESQ., Mayor of Christchurch.
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- D. M. Ross, ESQ., Mayor of Timaru.
- G. G. Stead, ESQ., Christchurch.
- P. Thomas, ESQ., Mayor of Ashburton.

Committee.

- C. LOUISSON, ESQ. (Chairman, Mayor of Christchurch)
- [*unclear:* Mis] HONOR MR. JUSTICE DENNISTON
- J. H. BAKER, ESQ.
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- W. R. MITCHELL, ESQ. (Hon. Treasurer)
- M. MURPHY, ESQ.
- G. G. STEAD, ESQ.
- H. J. L. SCOTT, ESQ.
- J. J. KINSEY, ESQ. (Secretary)

Catalogue of Exhibits

From the Province of Canterbury.

Avenue.

ENTRANCE.

1. Grain Trophy, consisting of—
2. Grain in Sheaf—

- Wheat grown by T. Pashby, Kaiapoi, 73 bushels to the acre
- Wheat grown by W. Boag, Fendalton, 69 bushels to the acre
- Wheat grown by Trott Bros., Springston, 62 bushels to the acre
- Wheat grown by J. Johns, Styx, 72 bushels to the acre
- Oats grown by. Pashby, Kaiapoi, 107 bushels to the acre
- Partridge Peas—Reuben Withell, Brookside, 40 bus. per acre

3. And Photographs showing the Harvesting of the above.
4. Terra-cotta Vases containing Tree ferns; the Vases manufactured and lent by Mr. J. McIlraith, of the Glentunnel Pottery Works

5. Collection of Ancient and Modern Coins—Exhibited by H. Zander, Ashburton.

6. G. Wilson, Christchurch—Photographic Camera and Apparatus; Stereoscopic Cameras.

7. Case of Fleeces, from Mr. Duncan Rutherford's celebrated Leslie Hill Flock.

8. Building Stones from the various Quarries of Canterbury, kindly lent by the Canterbury Museum, Christchurch.

9. Case containing Fleeces, Grown and Exhibited by Mr. Walter Macfarlane, Kaiwarra, Amuri.

10. Beer Trophy—S. Manning & Co., Ltd., Christchurch.

11. Flax Trophy—C. Chinnery, Rangiora; the Bales are ready as for Shipment.

12. Wool Trophy—Bales lent by Mr. S. Garforth, Spreydon; Mr. W.D. Buchanan, Little River; New Zealand Loan and Mercantile Agency Co., Ltd., Christchurch; Messrs. Mallock and Lance Horsley Down; Mr. Walter Macfarlane, Kaiwarra, Amuri, North Canterbury; and Mr. P. Crowe, the Warren Station, East Oxford.

13. Collection of Portraits of Colonists who have been identified with the History and Progress of the Province of Canterbury, kindly lent by the Canterbury Museum, Christchurch.

14. Photos of Akaroa, kindly lent by Mr. Black.

15. Photo of Prize Team.

16. Photo of H. Zander's Coins as exhibited (see No. 5). 17. A. Gibson, Temuka—Honey.

18. Chrystall & Co., Christchurch, J. White & Co's. Crescent Aromatic Coffee.

19. Mrs. J. T. Matson, Papanui, Christchurch, exhibit of Ostrich Feathers as taken from the birds. Fans similar to those presented to H. M. Queen Victoria, and H. R. H. the Princess of Wales.

20. Photograph of the Fans and Mrs. Matson's Ostrich Farm Papanui, Christchurch.

British and Foreign Court.

21. Milner & Thompson, Christchurch—Upright and Grand Pianos with Tuning Attachment.—By this patent device a piano stands permanently in tune after the strings are once stretched. Particulars and illustrated list may be obtained from Milner & Thompson. Bronze busts of celebrated composers.

22. H. Berry & Co., Christchurch—Butchers' Tools and General Requisites, Engine Boiler and Sausage Machine in Motion Largest and most varied stock in the Colony of Butchers' Machinery, Tools, Seasoning, Clothing and Sundries; Confectioners' Requirements, Essential oils, Fruit Essences Harmless Vegetable Colours, Cake Ornaments, &c. Specialists in Butchers' and Confectioners' Requirements.

23. Scott Brothers, Christchurch—Steam Engine, Turbine Water Wheel, Steam Pump, Specimens of Iron and Steel Castings Cooking Ranges.

Implement Court.

24. P. & D. Duncan, Christchurch—Agricultural Implements comprising Ploughs, Disc Harrows with Chilled Dirt-proof Bearings, Drills to distribute Agricultural Manure with Grain and Seed.

25. Andrews and Beaven, Christchurch—Self Bagging Chaffcutters Seed Cleaners, Animal Food Preparing Machinery, These Chaffcutters were originated by Exhibitors, and have obtained the Highest Awards in Australia and New Zealand.

26. Werner and Reader, Doyleston—Patent Tubular Cranes, suitable for an attachment to Drays or Waggons.

27. J. Anderson, Christchurch—8-horse Locomotive or Traction Engine, 6-horse power ditto.

28. Booth, McDonald & Co., Carlyle Works, Christchurch—Ploughs Patent Disc Harrow, Seeder, Screw Pulveriser, Lough's Patent Wool Press, Improved Flax Stripper, Windmill Irrigating Pump.

Dairy Court.

29. Mason Struthers & Co., Christchurch—Deering Steel Reaper and Binder, Model Working Dairy with DeLaval's Cream Apparatus This Dairy is one of the most interesting and instructive Exhibits in this Court.

30. Mason Struthers & Co., Agents—Kerosene Pumps.

Canterbury Court—*(Continued.)*

31. W Stocks, Christchurch—Mount Somers' Stone, in Block and Turned.

32. W. Cuddon, Fendalton—Pale Malt Crystalised Amber and Porter Malt Pearl Barley.

33. Wigram Bros., Christchurch—Pale Amber and Patent Malt.

34. James Rowe, Christchurch—Photographs and Oil Paintings of Pigs.

35. New Zealand Pickle and Preserving Company, Limited, Christchurch—Pickles, Sauces, Bottled Fruits,

and Ketchup.

36. F.J. Edmonds, Christchurch—Baking, Egg and Custard Powders.

37. Mrs. J. A. Young, Winchester—Tomato Sauce.

38. Jonathan All press, Timaru—Tomato Sauce and Chutney. These Sauces are guaranteed by the Manufacturer, and certified by Professor Bickerton to be absolutely pure and of fine flavour. Testimonials from Medical and many prominent gentlemen, Hotelkeepers, &c., supplied by Manufacturer, or Mr. Meadows at the Canterbury Court.

39. W. B. Common & Co., Christchurch—Clovers, Permanent Pasture Grass and other Seeds.

40. John Drapper, Christchurch—Paper Bags and Envelopes.

41. S. Manning & Co., Limited, Christchurch—Barley and Malt.

42. W. H. Price, Brass Founder and Pump Maker, Sydenham, Christchurch—Eclipse Patent Double Action Pumps, suitable for all purposes, including prevention of fire, domestic purposes, &c., &c. Full particulars with reference to these pumps may be obtained from Mr. F. N. Meadows in the Canterbury Court. Send for Illustrated Price List from Exhibitors.

43. Brick, Tile, Terra Cotta, Fire Clay, and Pottery Works, Glentunnel—'Tiles, Terra Cotta, Fire Clay Goods, Ornamental and Plain Bricks, Hoofing Tiles, Vases, Rustic-ware, General Pottery-ware.

44. W. Stokes, Christchurch—Patent Cup-shaped Lead Headed Nails.

45. G. Hedges & Son, Timaru—Russeltonia Osier, for basket making

46. Map of Godley Valley and Glaciers—kindly lent by J. H. Baker Esq., Government Land Survey Department, Christchurch.

47. Wm. McWilliam, Christchurch—Fishing Tackle.

48. Photograph—Result of a day's fishing in Canterbury—Angling competition, December 17th, 1888.

49. Photograph—Basket of Trout caught in the Lower Selwyn—kindly lent by W. H. Spackman, Esq.. Christchurch.

50. Two Oil Paintings of Stallions—lent by the A. & P. Association, Christchurch.

51. Wool in Fleece—Grown by Mr. Mathias; forwarded by The New Zealand Loan & Mercantile Agency Co., Limited, Christchurch.

Committee Rooms—*Exterior*.

52. Cocksfoot in Sheaf—Grown by J. T. Knight, Lavericks Bay, Banks Peninsula.

53. Head of the Celebrated Imported Bull, "Duke of Gunterstone"—The late property of John Deans, Esq., Riccarton.

54. Portraits in Oils—Lent by the Agricultural and Pastoral Association, Christchurch: Robert Wilkin, Esq., First President of the Association; William Norman, President, 1878; the late John Deans; George Gould, President, 1869-1874.

55. Cocksfoot and Timothy in Sheaf—Grown by H. Piper, Duvauchelle's Bay, Akaroa.

55A. Photographs of Institutions under the control of Canterbury College. Christchurch Museum—From Garden, do. Moa Room, do. Mammal Room; School of Agriculture, Lincoln Canterbury.

56. Wool in Bale—Grown by James Fulton, and from his Celebrated Black Merino Flock.

57. Oil Paintings—Kindly lent by W. Boag, Esq., Riccarton. "Grace Darling," the Champion Mare; "Alphonso," Champion Shorthorn Bull; "Gipsy," Champion Mare. Portrait in Oils of W. Boag, Esq., President of the A. & P. Association, 1886.

58. Wool in Fleece—Grown by Messrs. Mallock & Lance, Horsley Down, Hawarden, Mr. E. D. Giles, Manager.

Canterbury Court—*Continued*.

59. Photograph of the Rhodes Convalescent Home, Christchurch, N.Z. This Home has been built of brick and stone and handsomely furnished by the family of the late R. H. Rhodes Esq., and handed over by them to Trustees for the benefit of the Public.

60. Engraving of the Canterbury Plains, 1840—Lent by Mr. J. D. Garwood, Akaroa.

61. Abraham Morris, Fairlie Creek—New Zealand Manufactured Wines.

62. E. C Mouldey, Christchurch—New Zealand Manufactured Wines.

63. C. W. Fisher & Co., South Malvern and Christchurch, exhibit a Varied Selection from their manufactures of Glazed Stoneware Pipes, Unglazed Field Pipes, and Fireclay Goods. The attention of visitors is invited to these Exhibits, as showing the superior quality of the Malvern Clays and their great adaptability to this particular Manufacture.

64. C. Anderson, Rangiora—Pioneer Oilclothing Manufacturer in New Zealand. By 15 years' experience, combined with careful study, is now using a preparation which renders his Goods thoroughly watertight. The cut, style, finish, and durability is a speciality, being personally supervised. Tents, Horsecloths

65. J. Petersen—Model Ship in Sugar.

66. Sandford & Parsons, Christchurch—Chancel or Chamber Organ, Ten Stops. Manufactured by Exhibitors.

67. Springfield Coal and Fireclay, Company, Limited—Glazed Drain Pipes, Junctions, Syphons, Bends, Traps, Fire Bricks, Stove Lining, Fire Tiles, Malt Kiln Tiles.

68. Atlas Patent Roller Flour Mills. Henry Simons' System-Erected last year. Most Modern Machinery, capable of making 15 sacks per hour Samples of Wheat, Flour, &c., on view, Canterbury Court, Dunedin Exhibition. Evans & Co.. Limited, Timaru. William Evans, Managing Director.

69. Rayner & Sons, Christchurch—Boots and Shoes.

70. James Clegg, Christchurch—Improved Steel Bodied, Double and Single Hooded Perambulators, with Rubber Tyres, Patent Brake Attachment. Very Highly Commended A. & P. Association, Christchurch, 1889.

71. F. W. Gough, Christchurch—Bicycles.

72. Kent and Corrick, Christchurch—Bicycles.

73. N. Oates, Christchurch—Bicycles.

74. Hudson & Co., Christchurch—Sewing Machines.

75. Keen's Patent Unbreakable Saddle Co., J. Howarth, Manager—Keen's Patent Unbreakable Saddles, with Metallic instead of Wooden Tree.

76. Photographs of Pigs—Bred and Owned by Messrs. D'Auvergne Bros., Rangiora.

77. Wheat—White Tuscan and White Chaff Red—Grown by Mr. M. Macfarlane, Rangiora.

78. Cocksfoot Seed—Grown at Little River by Mr. G. Black. 20lbs. to the bushel.

79. Oats, Sparrow Bill—Grown by Mr. J. Haydon, Canterbury.

80. Wheat—Grown by Mr. J. Haydon, Canterbury. Yield 80 bus. to the acre.

81. Cocksfoot Seed—Grown by Mr. J. J. Knight, Akaroa. Exhibited by the N.Z. Loan & Mercantile Agency Co., Ltd.

82. Kaye & Carter, Christchurch—Peas, Beans, Tuscan Wheat, Hunter's White, Pearl Wheat.

83. Beans in Sheaf—Grown by Mr. T. Pashby, Kaiapoi.

84. Peas in Sheaf—Grown by Mr. R. Withell, Brookeide.

85. Mr. W Devenish Meares—Statistical Chart. Comparative Table showing the position of New Zealand as a producer of Cereals, Meat, Wool, Flax, and Root Crops.

86. Photograph of Ostriches owned by Mrs. Matson, Papanui, Christchurch.

87. Ignaz Gottfried, Christchurch—Marine Clock.

88. Thos. Gager, Manchester st., Christchurch—Ladies' and Gents' Electric Belts, Chest Expanders, and Protectors, Knee Caps, and Flannel Belts.

89. Photograph—Five Views of Canterbury College.

90. Kaye & Carter, Christchurch—Trophy and Show Case of Canterbury Grain:—

- Canadian Oats—Grown by Mrs. Davis, Kaiapoi. Yield 144 bushels to the acre.
- Nubian Oats—Grown by Mrs. Davis.
- Partridge Peas—W. Fablin, Brookside. Yield 46 bushels.
- Prussian Blue Peas—A. Palmer, Richmond. 55 bushels.
- White Peas for Splitting—P. O'Reilly, Irwell.
- Rye Corn—D. Cameron, Methven
- Tick Beans (machine threshed)—F. Spenser, Tai Tapu.
- Golden Melon Barley—F. C. Murray, Greenpark. Yield 50 bushels to the acre.
- Purple Straw Tuscan—Grown at Waikari.
- Hunter's White Wheat—Mrs. Davis, Kaiapoi. Yield 64.
- Poland Oats—Mrs. Davis, Kaiapoi. Yield 84 bushels.
- Dun Oats—J. Ruddenklau, Cust. Yield 58 bushels.

92. Photographs of Fat Cattle—Bred by Mr. Malcolm Macfarlane, Coldstream, Rangiora.

93. Photograph of Ostriches—Owned by Mrs. J. T. Matson.

94. Photograph of the Inglewood Flock and Herds, the Property of Mr. P. C. Threlkeld—Lent by Mr. J. T. Matson.

95. Photographs belonging to the Canterbury Committee—

- Paddock of Wheat—Owned by W. Boag, Fendalton.
- Paddock of Wheat—Owned A. M. Clarke, Temuka.
- First Prize Heifer Steer Owned S. Garforth, Spreydon.

- "Coldstream" Owned W. Macfarlane, Rangiora.
- Southdown Ewes Owned S. Garforth, Spreydon.
- Paddock of Oats Owned T. Pashby, Kaiapoi.
- "London Maggie" Owned Wm. Boag, Fendalton.
- Paddock of Wheat Owned Trott Bros. Spreydon.
- "Lady Elmwood" Prize Lincoln Ewe—Owned by T. Pashby, Kaiapoi.
- Paddock of Wheat—Owned by A. M. Clarke, Temuka.
- Southdown Ewes and Hoggets—Owned by S. Garforth, Spreydon.

96. H. Jewell, Wood Turner—Goods manufactured from 40 varieties of New Zealand Woods; also Pawa Shell and Fern Tree. New Zealand Birds Stuffed—Kiwis, Kakas, Huias, &c. Maori Curios.

97. A. P. Osborne, Christchurch—Caligraphy, Monograms, Engraving, &c.

98. E. C. Buckley, School of Agriculture, Lincoln, Canterbury—Pair of Frames of New Zealand Woods.

99. Photographs, Akaroa—Site where British Flag was planted in 1840; M. J. de Malmache, born at Akaroa, 1840; T. J. Wacherle do.; J. F. Lebeau, do.; Mdmc, Lebeau, do.

100. W. Ingram, Oxford—Chalk from quarries.

101. Trent Bros., Christchurch—Chicory grown in Canterbury. Photos, of Works and Mills.

102. W. H Henning, Akaroa—Cocksfoot Seed, Yorkshire Fog, and Walnuts.

103. John Deans, Christchurch—Native Coal from the Glentunnel Malvern Hills, and Brown Coal from seven foot seam.

104. W. Benn, Amberley—Flax trophy, dressed and baled ready for shipment.

105. J, Haydon, Spreydon—Cocksfoot and Wheat in sheaf.

106. J. Johns, Styx—Case of Wool in Fleece: half-bred Lincoln Ewe, ten months' growth; quarter-bred Romney cross, ten months' growth; quarter-back Romney cross, ten months' growth; quarter-bred Lincoln cross, ten months' growth; half-bred Lincoln cross, ten months' growth.

107. Water-colour Paintings—"Princess Alice," and "Ebor," owned by T. Pashby, Kaiapoi.

108. Canterbury Committee Photographs—(1) Southdown Ram Hoggets, bred and owned by S. Garforth, Spreydon; (2) Border Leicesters, bred and owned by W. Henderson, Spreydon; (3) Threshing Paddock of Wheat, owned by M. Macfarlane; (4) Threshing Machines, Rangiora; (5) Paddocks of Oats; (6) A Busy Day in Christchurch—Sale of Grain at Matson's Store.

109. Engraving of White Heifer—Bred by Robert Colling, Bampton.

110. Cocksfoot in Sheaf—Grown by H. Piper, Duvauchelles Bay.

111. Beans in Sheaf—Grown by T. Pash by, Kaiapoi.

112. G. G. Stead—Exhibit of Seeds, Grasses, &c.

- Colonial Cow Grass
- Colonial Red Clover
- English Cow Grass
- English Red Clover
- Swedish Alsike.
- 6. White Clover
- Timothy
- Rib Grass
- English Trefoil, Yellow Clover
- Lucerne
- Trefolium Incarnatum
- Sanfoin
- Sweet Vernal
- Meadow Foxtail
- 14. Crested Dogstail
- Sheep Fescue
- Meadow Fescue
- Tall Fescue
- Perennial Rye Grass
- Italian Rye Grass
- Cocksfoot
- Purple Top Turnip
- Green Top Turnip
- Devonshire Grey Stone
- Purple Top Mammoth

- Fosterton Hybred
- Swede Hybred
- Rape, Broad Leaved
- White Mustard
- Long Red Mangel
- Yellow Globe Mangel
- Belgian White Carrot
- Intermediate Carrot
- Linseed
- Golden Tares
- Winter Vetches
- Colonial White Clover
- Prussian Blue Peas
- White Field Peas
- Partridge Peas
- Black Oats
- Sparrow bill Oats
- Canadian Oats
- Dun Oats
- Chevalier Barley
- Cape Barley
- Purple Straw Tuscan
- Hunter's White
- White Straw Tuscan
- Velvet Chaff
- White Pearl
- White Champion
- Red Champion
- Indian Wheat
- Buck Wheat
- Rye Corn
- Maize
- Blue Gum
- Macrocarpa Seed
- Peppermint Gum
- Yarrow
- Horse Beans
- Colonial Trefolium Minus
- Gorse
- Stringy Bark
- Silver Wattle
- Prairie Grass

Also about 70 varieties of the most useful Natural Grasses, collected in the Province of Canterbury.

113. Wool in Fleece, shown in Wall Case, the Property of W. Macfarlane.

114. Mr. P. Cunningham, Christchurch, Grain Exhibit—

- Purple Straw Tuscan—Grown by Gould and Cameron, Methven. Yield per acre, 35 bushels.
- White Straw Tuscan—Wilder & Warner, Fernside. Yield per acre, 41 bushels.
- Velvet Chaff—Gould & Cameron. Yield per acre, 33 bushels
- White Pearl—J. W. Prebble, Prebbleton.
- Champion Wheat—T. Morland, Rakaia. Yield per acre, 40 bushels.
- Hunter's White—C. Hampton, Southbridge. Yield per acre 40 bushels.
- Red Champion—C. Storey, Greendale. Yield 48 bushels.
- Indian Wheat—T. D. Boag, Dunsandel. Yield 30 bushels.
- Chevalier Barley—C. Withell, Brookside. Yield 50 bushels.
- Carter's Prolific—J. Smith, Halswell. Yield 60 bushels.
- Canadian Oats—T. H. Taylor, Orari. Yield 53 bushels.
- Sparrowbill—C. O'Sullivan, Methven. Yield 35 bushels.
- Dun Oats—F. Wright, Ashley Downs. Yield 47 bushels.

- Prussian Blue Peas—J. Milne, Halswell. Yield 35 bushels.
- Partridge Peas—T. Townsend, Tai Tapu.
- Early Sunrise Peas
- Golden Tares—E. Parnham, Kaiapoi.
- Scotch Tares—T. E. Hewitt, Woodend.
- Italian Ryegrass—J. Borgfeldt, Papanui. 80 bushels.
- Cow Grass—J. Deans, Riccarton. 287 lbs.

115. Oil Painting of "Lady Derwont"—A. & P. Association.

116. photograph—Panorama of the City of Christchurch, six views; Municipal Buildings, two views.

117. Oil Painting of "Wilberforce "—A. & P. Association.

118. E. C. Buckley, School of Agriculture, Lincoln, Canterbury—Music Cabinet made of New Zealand Woods.

119. Wheat in Sheaf—Grown by Mr. T. Pashby, Kaiapoi.

120. Oil Paintings—"Prince of Clamis," Flock of Southdown Sheep, "Earl of Brunswick," "Melrose," Herd of Cattle, English Leicesters, Flock of Merinos," Queen of the Lothians,"—Kindly lent by the Agricultural and Pastoral Association, Christchurch.

121. Wool in Fleeces—Of Four-tooth Lincoln Rams and Hoggets—Bred and owned by Mr. H. Overton, Irwell.

122. Wool in Fleeces—Of Lincoln and Southdown Ewe Hoggets—Bred and Owned by Mr. John Deans, Riccarton.

123. Grouped Photographs, representing

- The different Families in the Riccarton Herd.
- Lincoln and Southdown Ewe Hoggets from the Riccarton Flock. Owned by Mr. John Deans, Riccarton.

124. Photograph of Llamas—Bred and Owned by Mrs. J. T. Matson, Papanui.

125. Photograph of Shorthorn Bulls—Bred and Owned by Mr. John Deans, Riccarton.

126. Photograph of Two Fans presented to Her Majesty the Queen, and H. R. H. the Princess of Wales, by Mrs. J. T. Matson the Feathers having been taken from the first Ostriches reared in New Zealand.

127. Oil Painting, "Lord Dunmore"—Owned by Mr. W. Boag Fendalton.

128. Case of Samples of Canterbury Grain, Seeds, &c.

- Cowgrass—grown by R. Howard, Ellesmere.
- Cowgrass—J. Deans, Riccarton.
- Red Clover—J. Milner, Leeston.
- Cocksfoot—Henning Bros'., Akaroa.
- Walnuts—Henning Bros'., Akaroa.

And Twenty-five various Samples.

129. Canon Balls—Fired from French Man-of-war *L'Aube*, at Akaroa in 1842.

130. A. Gundersen, 251, High Street, Christchurch—Marine Electric Tell-tale Clock for Watchmen, &c. (erected in various parts of the Buildings), made and patented by the Exhibitor.

131. Cocksfoot in Sheaf—Grown by J. Black, Akaroa.

132. James Carmichael, North Canterbury Steam Wood ware Factory, Rangiora—Churns, Cheese Moulds, Milk Vats, Butter Printers etc.; Butter Kegs and Firkins. These always kept in Stock; other Dairy Goods can be made to Order. All Goods at Lowest Prices

133. Midland Railway Company, Limited.—Specimens of Timber Useful and Ornamental found on the Route of the Line, Specimens of the following Timbers:—

The Woods are shown in the Rough, Planed, Polished, or Manufactured into:—

Overmantel—A. J. White, Furniture Warehouse, Christchurch. Shafts, Wheel Rims, and other Carriage Materials, manufactured from New Zealand Rata by W. Langdown & Co., Wood-benders, &c., Christchurch.

Venetian Blind, manufactured from New Zealand Cedar by Taylor, son, & Co., Christchurch.

Also, Doors, Paving Blocks, Split Palings &c. (See Appendix at and of Pamphlet).

134. New Zealand Loan and Mercantile Agency Company, Limited—Exhibits of Seeds—

- Bed Clover Seed—Grown by Mr. John Milner, Leeston.
- Cow Grass Seed—Mr. R. Coward, Ellesmere.
- Cocksfoot Seed—Mr. J. T. Knight, Laverick's Bay.

135. W. Henderson, Ch. ch. Agent, Murton & White's Sheep Dip.

Early History Court.

J. J. Kinsey, 2 Paddles, hansomely carved; 18 Clubs; 4 Waddies; large collection New Zealand Stone

Adzes; large collection Chatham Island Adzes; 4 Historical Tribal Meres, Moriori; Hei-tiki from Kaiapoi; Hei-tiki from Lake Mahinapua; Greenstone Hei or Neck Ornament, very rare; 6 Fish Hooks; Bone Needle, Goughs Bay; Greenstone Needle, Gough's Bay, rare; Maku; Various Greenstone Drills and Carving Tools; Moriori God; Canoe Head; Greenstone Earrings.

Committee Rooms.—(*Interior*).

The Furniture has been kindly lent by Mr. A. J. White of High Street, Christchurch. The Piano by Messrs. Milner and Thompson Christchurch, and the Water Colours by Mrs. Maurice.

The Ornaments in the Court have been kindly lent to the Canterbury Committee by the following Gentlemen:—

- *Horns*—Messrs. W. B. Burnett, Cooper, C. Kiver, S. Garforth (Lyttelton), Cresswell, Waymouth, and Feather.
- *Shields*—City Council, C. Louisson, Esq., Mayor, and G. G. Stead Esq.
- *Cases Mounted Trout*—Wm. McWilliam, Esq., Dr. Moorhouse, and Canterbury Museum.

N.B.—In the Avenue will be found filed on Stand current copies of the "Lyttelton Times" and "Canterbury Times." Also on another Stand, current copies of the Daily and Weekly "Press."

Ashburtoni Section.

Ashburton Committee:

CHAIRMAN: D. Thomas (Mayor of Ashurton).
JOINT TREASURERS D. Thomas and H. Zander.
SECRETARY: G. Bisset.

This collection, illustrative of the Products, Resources, and Industries of the Ashburton County, has been collected and is exhibited by the Local Committee, the expenses being defrayed by subscriptions sided by contributions from the Ashburton County Council, (W. C. Walker M.H.R., Chairman), and Ashburton Borough Council (D.Thomas, Mayor).

None of the produce or manufactures represented has been specially prepared or made for exhibition.

Grain and Seeds.

(Exhibited by D. THOMAS, Grain Broker, Ashburton.)

- Wheat—Champion White—Grown by A. Leatham, Wakanui.
- Pearl—Jas. Wilson, Wakanui.
- White Straw Tuscan—Jas. Wilson, Wakanui.
- White Straw Tuscan—Gould and Cameron, Methven.
- Purple Straw Tuscan—A. Frisby, Ashburton Forks.
- Hunter's White—J. Shearer, Ashburton.
- Oats—Dun—Grown by C. J. Harper, Hackthorne.
- Sparrowbill—G. W. Leadley, Wakanui.
- Canadian—R. McIntyre, Ashurton Forks,
- Tartarian—B, Mclntyre, Ashburton Forks.
- Danish—E. McIntyre, Ashburton Forks.
- Black—R. McIntyre, Ashburton Forks.
- Barley—Grown by A. Dawson, Waterton.
- —C. G Hawdon, Westerfield.
- Cape—A. Leatham, Wakanui.
- Peas—McLean's Little Gem—J. Sealy, Ashburton.
- Carter's Wonder—J. Sealy, Ashburton.
- Stratagem—Joseph Hunt, Ashburton.
- Telephone—Joseph Hunt, Ashburton.
- Malt Barley—Grown in Ashburton County. Malted by Ashburton Brewing Co.
- Golden Tares—T. Pearce, Ashburton Forks.
- Rye—E. G. Wright, Windermere.
- Linseed—R. Anderson, Greenstreet.
- Linseed—R. Luscombe, Waterton.

- Carraway Seeds—T. Andrews, Ashburton.
- Ryegrass—R. Kemp, Westerfield.
- Ryegrass—R. Kemp, Westerfield.

G. JAMESON, Grain Broker, Ashburton.

- Wheat—Champion, grown by J. Bonifant, Wakanui.
- Purple Straw Tuscan—J. Bonifant, Wakanui.
- Hunter's White—J. Bonifant, Wakanui.
- Velvet Chaff—J. Bonifant, Wakanui.
- Lammas—John Harrison, Rakaia.
- White Straw Tuscan—T. Wilson, Wakanui.
- Pearl—W. Cochrane, Wakanui.
- Golden Drop—J. Studholme, Junr., Coldstream.
- Oats—Sparrowbill—Grown by J. E. Trevor, Lismore.
- Dun—S. Christie, Mt. Somers.
- Black—E. Herring, Alford Estate.
- White Tartarian—W. Baxter & Son, Ashburton Forks.
- Canadian—O. Digby, Ashburton.
- Danish—Ashburton County Council Experimental Irrigation Farm, Elgin.
- Golden Tares—J. Grigg, Longbeach.
- Rye—R. R. Pitt, Seafield.
- Ryegrass—G. Murdoch, Lauriston.
- Cocksfoot—G. Murdoch, Lauriston.

FRIEDLANDER BROTHERS, Grain Merchants, Ashburton.

- Wheat:—Purple Straw Tuscan, Velvet Tuscan, Essex, Russian White Straw Tuscan, Champion White, Hunter's White, Pearl
- Oats:—Sparrowbill, Canadian.
- Barley:—Chevalier
- Tares:—Golden.
- Peas:—Prusian Blue, Partridge.
- Ryegrass:—Italian, Perennial.
- Cocksfoot Grass.

CANTERBURY ROLLER FLOUR MILLS (Ashburton).

- Wheat—Clean Pearl, Clean Tuscan, Clean Hunter's White, Clean Milling, varied (five samples), Dirty Milling, Rubbish extracted by Aspirator, Chaff (extracted by Aspirator), Screenings (extracted by Aspirator), Wire Screenings (extracted by magnets), Broken Wheat (extracted by brush machine); Dust (extracted by brush machine), Germ and Dust (extracted by brush machine), First Break, Second Break, Third Break, Fourth Break, Fifth Break, Canterbury Roller Flour (two samples). Bran, Pollard, Semolina, Semolina Purified.

Wool.

JOHN BONIFANT, Avoca, Wakanui.

- Leitcester Ram Hogget Fleece, grown by Exhibitor
- Leitcester Ewe Hogget Fleece, grown by Exhibitor
- Leitcester Aged Ewe Fleece, grown by Exhibitor

HON. W. S. PETER, Arama.

- Merino Hogget Fleece, grown by Exhibitor
- Merino Wether Fleece, grown by Exhibitor
- Merino Ewe Fleece, grown by Exhibitor

W. M. LYITTELTON, Rokeby, Rakaia.

- Merino 4-Tooth Ram Fleece, 11 months 22 days growth, 15lbs., grown by Exhibitor

- Merino 4-Tooth Ram (sample), 11 months 22 days growth, 14lb. 7oz., grown by Exhibitor
- Merino 4-Tooth Ram (sample), 11 months 22 days growth, 14lb. 11oz., grown by Exhibitor

D. THOMAS, Wool Broker, Ashburton.

M. FRIEDLANDER, Lyndhurst.

- Hampshire Down Fleece, grown by exhibitor.

G. JAMESON, Wool Broker, Ashburton.

CYRUS HOMERSHAM, Tinwald Wool Works, Ashburton.

- Collection of Samples of Scoured Wools.

Paintings, Photographs, &c.

- Max Friedlander, Ashburton—
  - Champion Hampshire Down Ram (Fodor).
  - Champion Hampshire Down Ram (Fodor).
  - "Blackwood Abdallah," American Trotting Horse (Fodor).
- W. Jamieson, Wakanui—Prize Pair Geldings (Fodor).
- Mrs. Cyril Hawdon, Westerfield—"Beer Tax," Hunter (Fodor).
- E. Cookson, Ashburton—" Kingfisher," Thoroughbred Horse (Foder).
- Mrs. Homersham, Tinwald—Watercolours: Landscape. Sea piece.
- Mrs. Homersham, Tinwald—Plaques: Peach blossom. Winter scene.
- John Cochrane, Elgin—
  - An Ashburton "Cockatoo's" Home, (W. Higgs.)
- D. McLean, Laghmor—
  - Photo—"The Chief of the Laghmor Highlanders"—(The McLean Tartan manufactured by the Mosgiel Woollen Company, Limited, Ashburton Woollen Mill.)
- Miss M. Sevall, Wheatstone—
  - Berlin Wool Pictures—" Daniel in the Lion's Ben;" "The Samaritan Woman at Jacob's Well."
- Miss Cass, Wakanui—
  - Berlin Wool Pictures—"Daniel in the Lion's Den:" "The Samaritan Woman at Jacob's Well."
- W. C. Walker, M.H.R., Valetta—
  - Water Colours—"Ashburton Gorge" (A. D. Barraud); "Alford Forest" (A. D. Barraud.)
- Miss A. Curtis, Tinwald—
  - Leather Work—Mirror Frame; Bracket.
- Ashburton Borough and County Council's Photographs of Harvest Scenes (C. Lawrence.)
- "Dinner Time," Springfield Estate; "In Stook," Longbeach; Residence of D. Cameron, Springfield Estate; Stacks, Longbeach (seventeen stacks in one field); Reaping, Springfield Stooking—P. Chalmers, Ashburton; Velvet Chaff Wheat 50 Bushel Crop, Ashburton; Threshing; Threshing; The Lake, Westerfield; Residence, Westerfield Garden Westerfield; Stacking; Reaping Machines, Spingfield Estate, 24 working in one field; Stacking; Stooks at Longbeach, Tile Works in distance; Reaping; Tuscan Wheat 57 Bushel Crop; Wheat Field, Springfield Estate; stacking at Longbeach; Wheat Field at Longbeach; Harvest at Longbeach.

West Street, Ashburton, Grain Season.

- D. Thomas', Wool and Grain Store.
- D. Thomas', Wool and Grain Store. Interior, Wool season.
- D. Thomas', Wool and Grain Store. Grain season.

East Street, Ashburton

- Miss. A. Jones, Ashburton—Sampler, year 1840, by late Mr. Jones.
- Chas. Lawrence, Photographer—Patent Automatic Revolving Camera Front.
- Waymouth Roberts, Ashburton—Patent Economical Candlesticks.
- E. Gates, Tinwald—
  - "Miss Kate," dam of Antelope, Sultan, Murat, and Catamount (Fodor). "Milford Sound" (W. Higgs).

- Ashburton County Conncil (W. Baxter, C.E., County Engineer.
- Map of the Lower Portion of the Ashburton County, showing Towns, Plantations, Reserves, Village Settlements, and Water Races—illustrating the progress of settlement.

JEPHSON & MOORE, Flaxmillers, Tinwald.

- Bale and Samples of New Zealand Flax, Ordinary Shipping Quality;
- Production 25 Tons per Month; Price £25 per Ton.
- Samples of Dyed Flax as used in the Manufacture of Carpets, Mats, &c. Green Flax.

R. "W. HART, Winchmore.

- Honey in Comb and Extracted. (Gold Medals Colonial and Indian and Melbourne Exhibition,) competing against the World.
- E. F. Wright, Collieries, Quarries, and Burton Lime Kilns, Mount Somers—Coal, Building Stone, Lime Stone, Lime.
- John Hood, Mount Somers Hotel—Fossil Oysters from Mount Somers, Limestone (50 miles from sea), Maori Weapons from Mount Somers Caves,
- Stott. Ede and Duncan—Mount Somers Hematite Iron Ore
- John Grigg, Longbeach—Drain Tiles (35 miles laid at Longbeach last two years). Specimen Ears of Wheat,
- Ashburton Brewery Company. Ashburton—Ale and Stout in bottle.
- Lion Brewery Company, Ashburton—Ale and Stout in bottle.
- Milsom & Co., Ashburton—Ærated Waters.
- Miss Dawson, Waterton—Butter (made October, 18, 1889)
- Ashburton County Council (A. C. Claridge, manager)—Irrigation Farm Products.
- Ashburton Acclimatisation Society—Photographs of Trout.

Anthropometrical Bureau.

Mr H. O. Forbes, Curator of the Canterbury Museum, was struck, as many others have been, with the effect of the salubrious climate of this colony and the less severe conditions of life here as compared with England, on the immigrants, animal, and vegetable world. Plant Life is pre-eminently more luxurious and more abundantly productive than at Home. It, therefore, occurred to him that the opportunity offered by the assembling of large numbers of New Zealand and Australian born members of both sexes should not be allowed to pass without an attempt to test by accurate methods the effect of the climate and new conditions of life on the human population transplanted into these colonies. One's general observation tends to the opinion that New Zealand born youth have on the average more bone and sinew—a general better physique—than those of the same age and standing at Home. It is noticeable also, that those of them who go to England to enter into mental conflict at our Universities and public schools, have not only held their own, but carried off a large share of the honours for which they have competed.

The Court set aside for this purpose has been fitted up, and will be administered under Mr. Forbes' direction. It is to be hoped, there-Fore, that those who visit the Exhibition, will not fail to pay a visit to the Laboratory, which is situated in the neighbourhood of the Educational Courts, in a central and prominent position. Those presenting themselves for measurement, and paying a fee of a few pence to cover the cost of the Court will be tested as to the colour of their eyes and hair; their height and weight; their eyesight will be examined to discover whether they are of normal, long or short-sight, Whether colour blind; the judgment will be appraised by their being required to estimate by eye, various lengths and weights. The open of arms, in relation to expanse of chest, and breathing capacity, will also be tested by various instruments, as well as the strength of the arms and quickness of blow. On entering the Laboratory, the visitor will be asked to fill up a card, on which information as to his age, birth-place, occupation, place of residence, and a few other data of a non-private kind, is required to give value to the personal observations made in the Laboratory. In addition to these observations Mr. Forbes hopes that he may be able, where parents with large families, or at least with several children, present themselves, to photograph each separately in order to obtain composite photograph of the girls and of the boys for comparison with the parental features and then a co-composite of the whole family for comparison with the photographs of the separate parents and of the parental composite Some results of very great interest are expected from these additional data, which were not attempted at the Health Exhibition in London Mr. Forbes hopes also that it may be possible for him to take photographs of a number of mature New

Zealand and Australian born youth in order to obtain a composite—a type—of the Australasian colonist.

decorative feature

The N.Z. Midland Railway, and a General Account of the Country.

The New Zealand Midland Railway Company, (Limited), 79, Gracechurch Street, London, E.C. And Cathedral Square, Christchurch, N.Z. A General Account Of The Country Through Which The Midland Railway Runs, And Of Some Of Its Principal Productions, Also Descriptive Notes As To The Company'S Exhibit In The New Zealand And South Seas Exhibition, Dunedin, 1889.

The New Zealand Midland Railway Coy.,

(Limited),

79, Gracechurch Street, London, E.C. And Cathedral Square Christchurch, N.Z.

A General Account of the country through which the Midland Railway runs, and of some of its Principal Productions; also Descriptive Notes as to the Company's Exhibit in the New Zealand and South Seas Exhibition, Dunedin, 1889.

The construction of this railway on the land grant system has been undertaken by a Company formed in England for the purpose, which has contracted to complete the line of 235 miles within ten years. Although 17 miles are now finished and opened for traffic, the work has been delayed pending settlement of negotiations between the New Zealand Government and the Company as to details of the contract which required amending. These being now completed, the works are being pushed ahead again with vigour.

Contracts to the extent of £150,000 for formation of permanent way hare been let within the last few months, and tenders for work costing a similar amount will be called for immediately, to be followed by further contracts as quickly as the of the undertaking will permit engineering skill to cany it through.

The Company is to receive grants of land as each section of line is completed to the extent of about 50 per cent, of the cost of such sections.

The ROUTE of the Railway lies from the Government line at Springfield, near CHRISTCHURCH, on the East Coast, to Brunnerton, near the port of GREYMOUTE on the West Coast, and thence in a northerly direction via Reefton, until it joins Government line running from the PORT OF NELSON southwards to Belgrove.

ECONOMIC VALUE.

THE Railway is calculated to be of great importance to the South Island of New Zealand. Uniting as it will several centres of population, its construction will being not only the ordinary benefits of railway communication to a district hitherto almost isolated, but it will have the peculiar advantage of connecting districts of totally dissimilar character. On the one side there is a pastoral and agricultural country a food-producing country, but with little timber or mineral,—on the other a district containing timber, coal, iron, gold and many other minerals in abundance. Interchange of traffic between the two must therefore be considerable and permanent.

SCENERY.

The scenery of the country traversed by the line is of the most varied and picturesque character, and when it becomes more known must draw sightseers from all parts of the world. There is to be found along the route a combination of Alpine forest, lake, and river scenery which is unsurpassed in the world. The Otira Gorge Arthur's Pass, is already known to some extent as one of the chief sights of New Zealand, but the lake and river scenery of Westland, being off the beaten track, are almost unknown to the ordinary tourist.

Lake Brunner, the beautiful, with its mild and sunny climate, its charming variety of forest, stream, and mountain scenery, is undoubtedly well adapted for a fature health and holiday resort for thousands of pleasure-seekers and careworn business men from Australia and other countries.

Lakes Kanieri, Mahinapua, Rotoiti, and Rotoroa vie with Lake Brunner in beauty; and indeed the whole of

the district traversed by the line, its richness of foliage, its wealth of ferns, and its variety of minerals affords as wide and attractive a field for exploration to the botanist and the geologist as to the gold-seeker or to the mere Cher for beautiful scenery.

THE COMPANY'S LAND GRANTS.

The area of country benefited by the construction of the line, and in which the Company may select its land grants, is shown on the map which accompanies the Company's exhibit of timber, &c.

This area contains a large extent of pastoral, and a fair quantity of agricultural had, besides very extensive tracks of valuable forests.

The forest land, which otherwise would be useless, will, with railway communication yield to the Company a large revenue from the timber, which is of splendid quality, and can easily be brought to market. There will also be a source of profit from royalties on coal and other minerals (other than gold and silver) which are already known to exist in large quantities in the district and the production of which will be promoted by the cheap and speedy means of transit which the railway will afford.

The policy of the Company with respect to its laud grants is to encourage settlement by selling the land in suitable blocks at fair market prices to *bond fide* settlers, and to this end a series of auction sales have been instituted at which the lots are [*unclear:* cked] down to the highest bidder, the terms of payment being extremely easy. The first of these sales took place recently and was a pronounced success—34 lots being sold out of 39 offered; realising a total of £18,955 for 16,154 acres, prices ranging from 18/-to 95/-per acre. The Company is also prepared to treat privately for the sale or lease of any of its lands, and also to grant licenses to sawmillers to [*unclear:* timber] on royalty. Full information to be had on application to the Christchurch effect of the Company.

TIMBER.

[*unclear:* Official] papers state that the whole of the West Coast of the Middle *(i.e.* South) [*unclear:* d] from end to end is one immense forest, and the yield of timber is very high. Professor Kirk reported to the Government that "on the flats and lower levels the [*unclear:* rage] may be estimated at 40,000 superficial feet per acre for red and white pine."

The Company's Exhibit, which is composed entirely of marketable timber, and [*unclear:* of] "specimen" pieces, is complete evidence of the splendid quality and great [*unclear:* ty] of the timbers grown in this district. The supply is practically inexhaustible. [*unclear:* g] the purposes for which the various woods are specially adapted are house building, bridges and constructive works of all kinds, piles, sleepers, carriage materials, street paving blocks, joinery, furniture making, Venetian blinds, and for all ornamental purposes.

With the construction of the railway and consequent facilities for export, the [*unclear:* low] price at which this timber will be able to be placed on the Australian markets will ensure the opening up of a large and profitable trade, as in no part of the Colony is there now such a supply of marketable timber within such easy reach of a port.

Attached hereto is a short description of some of the kinds of timber grown in the district which can be exported in large quantities, and are sure eventually to find a ready sale in Australia and elsewhere as well as in New Zealand. The particulars are taken principally from Professor Kirk's Work on the "Forest Flora of New Zealand."

MINERALS.

In hardly any part of the world is such a variety of minerals to be found as is this portion of New Zealand.

To prove this it is only necessary to refer to the "Hand-book of New Zealand" by so high an authority as Sir James Hector, K C.M.G., F.R.S., &c., but it may also be useful to quote from the report on the subject of this Railway, by Mr. Blair M.I.C.E., Assistant Engineer in Chief to the New Zealand Government, in which [*unclear:* to] states that valuable though land and forest may be, "the minerals are of far greater importance than land and forest together. From Nelson, down the West Coast [*unclear:* is] Otago, there is scarcely twenty miles in which minerals of some economic value have not been discovered."

The map accompanying the Company's exhibit gives accurate indication of the varied and widespread character of the minerals already known to exist; but it is generally admitted that, owing to the density of the forest, and rough nature of the country, a very small portion of the district has been prospected.

Gold mining has been for many years the mainstay of the district, and it will be observed from the map that a large portion of the country is auriferous. Although some of the older alluvial diggings are supposed to be worked out, the use of [*unclear:* m] modern appliances for mining—in place of the very primitive methods

which [*unclear:* h] fore have alone been used in this district—will enable many of such diggings to be again worked at a profit, and give employment for many years to men and capital It is also most probable that fresh fields will continue to be discovered from times to time as the district becomes opened by settlement .

Quartz-mining is as yet in its infancy in this district, and offers a large field [*unclear:* for] the employment of capital and scientific mining knowledge and experience.

Attention has of late years been redirected to the auriferous deposits on [*unclear:* the] beaches of Westland—rich gold being found there intimately associated with magnetite (the "black sand" of the diggers), and the ordinary sand or shingle, along the coast for some 400 miles. Dredging claims are now eagerly sought for, and almost the whole of the sea beaches as well as those of the gold-bearing Westland are pegged out; the owners for the most part merely holding at present to satisfy themselves as to the best plant to use. This branch of goldmining requiring special machinery, commends itself to capitalists as being out to the province of the ordinary "digger." The ultimate success of the industry seems assured; if pursued with caution and with thorough prospecting of the ground large profits, will no doubt result. With improved mechanical appliances for raising and washing the sand and shingle, the lower and richer "leads" of gold which have never yet been worked—owing to the difficulty of contending with the water on the old system—will no doubt soon be made available.

Coal.—Though not so widely distributed as gold, coal is found in very large quantities within the district. The chief deposits now worked are near the towns of Greymouth and Westport. Coal is also found at Reefton, Mokinui, Upper Buller Owen, Kanieri, etc. Of late years the output from this district has greatly in increased viz.,—from 55,000 tons in the year 1880, to 322,000 tons in the year 1888. New Zealand coal cannot yet be said to be introduced into the Melbourne market, trough Greymouth coal sells there for 2s. 6d. to 5s. per ton more than is given for the best Newcastle, N.S.W., coal. This is for gas making. The Westport coal is highly esteemed for steaming purposes, and has already been much used in ocean-gang steamers. Quite recently the Chief Engineer of *H.M.S. Nelson* reported on it very highly as a steam coal, and the *Calliope* incident is to recent and well-known to need comment.

Three Companies holding leases of valuable coal areas on the North side of the Grey river, are now taking steps to open up their mines and to bring their coal to the port of Greymouth, whence it can be profitably placed on the Australian markets.

The quality of these coals being proved to be excellent, and the supply being sufficient for years to come, there is every reason to predict even a more rapid expansion of the coal industry of this district in the future than has been seen in the past, particularly as many capitalists are now making inquiries, with a view to investing in the district. Analyses of the various coals can be obtained from the N.Z. Midland Railway Co., Limited, at Christchurch, N.Z. A Feature of these coal scams is that many of them are outcropping, and can be won by driving without sinking. Coke of the highest quality is made from the Greymouth [*unclear:* seal]

Other Minerals.—As an inspection of the Company's maps will show, a great [*unclear:* riety] of other minerals have been discovered in the district. The only ores as yet proved to exist in payable quantities, in addition to those already mentioned, are [*unclear:* copper], and antimony. Recently some rich specimens of silver ore have been found in the Owen district, on the Buller River, and the indications seem to point to the existence of payable silver in that and other localities. Also at Mount Rangitoto, [*unclear:* Ross] there are indications of considerable quantities of silver, but combined with [*unclear:* d] and other metals in such a way that no method of separating them which has yet been applied has been successful. No doubt a suitable process will ere long to found. Lead, tin, zinc, and other metals, also excellent building stone, marble, and mineral springs, are known to exist in the district, but have not yet been turned to account.

DESCRIPTION OF THE PRINCIPAL KINDS OF TIMBER EXHIBITED IN THE MIDLAND RAILWAY COURT.

Red Pine, Rimu (Dacrydium Cupressinum).—Frequently attains a height of 100 feet, with a trunk of 60 feet free of branches. Diameter, 2 feet to 4 feet and sometimes 5 feet. It is of a deep red colour, well grained and handsomely figured. In strength nearly equal to English Oak. It is largely used for general building purposes and owing to its fine figure, is especially suitable for mantelpieces, panel work office fittings, cabinet work, and the manufacture of furniture of all degrees of excellence.

White Pine, Kahikatea (Podocarpus Dacrydioides).—Height, 60 feet to 100 feet and frequently up to 130 feet, with trunk 70 feet or 80 feet free of branches. [*unclear:* cter]. 1 foot to 4 feet and sometimes 5 feet. The timber is firm, compact, [*unclear:* gh] strong straight in the grain, and of fairly even texture. The growth being [*unclear:* d] it is easily seasoned, and it is very durable except in damp situations. It makes very superior flooring, lining, shelving, framing of houses, studs, and other inside [*unclear:* rk] it is also largely used for all kinds of boxes and packing cases, and is much Superior to Baltic white Deal for general purposes. Like the Red

Pine it grows in great abundance, and can be brought to market at exceedingly low prices.

Black Pine, Maitai (Podocarpus Spicata).—Attains a height of 80 feet, with a trunk 35 feet in length and from 2 feet to 4 feet in diameter. The timber is of great value on account of its smooth even texture, strength, and extreme durability. [*unclear:* It] is heavy and close grained, but easy to work, and is extensively used for bridges and constructive works generally, house blocks, framing, joists, weather-boards, [*unclear:* sleep] piles, &c. House blocks and fencing posts have been found in excellent condition after being down for 15 or 20 years or more; it is also now becoming much used for cabinet work, and looks very handsome when polished. This must not [*unclear:* be] founded with *Miro*, sometimes termed Black Pine, which is a much inferior Wood

Silver or Westland Pine, Manoao (Dacrydium Westlandicum).—Height, 40 feet to 50 feet. Trunk from feet to 2½ feet in diameter, sometimes reaching 3 feet and even 4 feet. Although not of so large dimensions as the other pines, this [*unclear:* is] of the most valuable timbers in the Colony owing to its extreme durability. It is straight and even in the grain, dense, firm and compact, of great strength, [*unclear:* tough] and elasticity, is highly resinous and shrinks but little while seasoning. It is suitable lor bridges, wharves, and constructive works, and is used with best results for piles and sleepers, being almost imperishable. As it is often handsomely figured and mottled, it is much used for furniture, cabinetmaking, veneers, and [*unclear:* ornam] purposes generally.

Yellow Pine (Dacrydium Intermedium).—Height, 40 feet. Trunk from 1 feet to 2 feet in diameter. The timber is of a reddish yellow, resinous, straight in the grain, firm, compact, and, though smaller in dimensions than the Westland Pine a also extremely durable and may be applied to the same purposes.

Red Birch (Fagus Fusca).—Sometimes upwards of 100 feet in height with trunk 2 feet to 4 feet in diameter. The wood is straight, even, and compact in the grain of great strength and toughness, and very durable. It is highly valued for [*unclear:* sleep] wharves, bridges, house blocks, framing, joists, weatherboarding, fence posts, &c., and being easily worked might be used for joiners' work. Well grown trees split [*unclear:* rea] and might be extensively substituted for Tasmanian palings.

Black Birch (Fagus Solandri).—Height, 60 feet to 80 feet and sometimes 100 feet, with trunk 50 feet free of branches. Diameter, 2 feet to 4 feet or more, The wood is tough, strong, and, if properly selected, very durable. It is of a pale red or greyish colour and sometimes handsomely figured; the heartwood is black and irregular in outline. It is largely used for bridges, sleepers, fencing and gate [*unclear:* pe] &c. Owing to its great strength it will carry enormous weights.

Totara (Podocarpus Totara).—Height 50 to 60 feet and sometimes even [*unclear:* as] as 100 feet, with trunk 2 feet to 6 feet in diameter, 35 feet and occasionally up to 60 feet free of branches. The wood is of a deep red colour, is clean, straight in the grain, compact, and of great durability, it is well adapted for all architectural engineering purposes, and is one of the best timbers in the Colony for telegraph poles. For marine piles it is unrivalled as it resists the teredo, and is Superior to Australain jarrah. Occasionally handsome mottled specimens are found, which [*unclear:* an] valuable for veneers and ornamental work.

Rata (Metrosideros Lucida).—Height 30 to 60 feet, with trunk 2 feet to 6 feet in diameter. The wood is heavy, compact, tough, and of great strength. It is largely used in shipbuilding—knees, crooks and timbers, of all sizes being readily obtainable also used for trenails, for the teeth of geared wheels, and for the framing of railway waggons, with the best results. As a substitute for hickory in the manufacture [*unclear:* of] vehicles for wheel rims, shafts, &c., Rata promises to become exceptionally useful, [*unclear:* as] it is capable of being readily bent under steam.

Cedar, Kawaka, (Libocedrus Bidwillii).—Height 50 feet to 70 feet, with a trunk 1½ to 2½ feet in diameter. The wood is of a red colour, remarkably straight in the grain is very light and somewhat brittle. It is of great durability in all situations, but is net strong being indeed one of the weakest of New Zealand timbers; it appears, however, to surpass Totara in durability and may be used for the purposes for which Totara is usually employed, except where great strength is required. It has been used for piles, house blocks, fencing posts, sleepers, weather-boards, &c. it closely resembles Californian Red Wood, and appears in every way suitable for the Manufacture of Venetian Blinds, for which purpose that timber is usually imported, while it can be supplied at a fraction of the cost.

Black Maire (Olea Cunninghamii).—Height 50 feet to 70 feet, trunk 3 feet to 6 feet in diameter. For combined strength and durability this is perhaps the most valuable of all New Zealand timbers. The wood is deep brown, the heartwood being often streaked with black, and highly ornamental. It is dense, heavy, compact straight and even in the grain, easily worked and takes a good finish. It is valuable for the framing of railway carriages and waggons, as a substitute for [*unclear:* etal] bearings for heavy shafts, framing of machinery, agricultural implements, &c. Old specimens are often beautifully streaked and figured, and are used for veneers and ornamental turned work, as napkin rings, bowls, egg cups, &c.

[unclear: Honeysuckle], Rewarewa, (Knightia Excelsa).—Attains a height of from 70 feet to 100 feet with a trunk 1½ to 3 feet in diameter. It is an ornamental timber of great strength, but not very durable when

exposed, is usually of a deep red colour, straight in the grain, and beautifully mottled. It is highly valued for all inlaid work, tables, writing desks, &c., as well as for all kinds of ornamental turnery.

Hinau (Elæocarpus Dentatus).—Height 40 feet to 50 feet. Diameter of trunk 1 feet to 3 feet. The timber is of a light, dull brown colour, the heartwood darker, often nearly black. It is tough, strong, and durable, and is used for bridges, culverts, sleepers, piles, survey pegs, &c, with good results.

decorative feature

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Memorandum and Articles of Association of The Co-operative Land Settlement Company, Limited.

decorative feature Dunedin: MATTHEWS, BAXTER & CO., GENERAL PRINTERS, DOWLING STREET. 1889.

"The Companies Act, 1882."

Company Limited by Shares

Memorandum of Association of

The Co-operative Land Settlement Company

(Limited).

- The name of the Company is "THE CO-OPERATIVE LAND SETTLEMENT COMPANY LIMITED."
- The Registered Office of the Company will be situate in Dunedin in the Colony of New Zealand.
- The objects for which the Company is established are:—

  ¶To acquire land and hereditaments of any tenure in New Zealand and to work manage and develop the same in such manner as the Company may think fit and in particular by clearing planting farming stocking grazing breeding sheep and cattle erecting houses factories stores and other buildings by mining and draining by constructing roads railways tramways, water ways and other conveniences and aiding in the establishment of settlements by manufacturing converting and rendering marketable Colonial products and by carrying on any trades businesses or undertakings the carrying on of which may be deemed by the Company conducive to the development of its property.

  ¶To buy sell and deal in all kinds of property in New Zealand and elsewhere necessary or convenient for the business of the Company and in particular lands tenements and hereditaments live stock wool consumable goods machinery timber goods and chattels.

  ¶To lend money upon such terms and to such persons as the Company may think fit and in particular to persons undertaking to build on or to stock or improve any property in which the Company is interested and to act as Agents in the management sale and purchase of property of all kinds.

  ¶To aid in the establishment and support of associations for the benefit of persons employed by or having dealings with the Company.

  ¶To enter into partnership or into any arrangements for sharing profits with any person or association or body corporate To acquire and hold shares or stock in any body corporate or association having objects altogether or in part similar to those of this Company or carrying on any business capable of being conducted so as directly or indirectly to benefit this Company.

  ¶To borrow or raise money by the issue of or upon bonds debentures mortgages bills of exchange promissory notes or other obligations or securities of the Company or by mortgage or charge of all or any part of the property of the Company (both present and future) and of its uncalled capital for the time being or in such other manner as the Company shall think fit.

  ¶To make accept indorse and execute bills of exchange promissory notes or other negotiable instruments.

  ¶To invest the moneys of the Company not immediately required upon such securities as may from time to

time be determined.

¶To sell work manage lease develop improve mortgage export or otherwise deal with the property of the Company subject to the following limitations namely:—

¶That the Company shall retain and work manage lease develop and improve so much and such part or parts of the lands acquired by the Company shall in the opinion of the Directors represent nearly as may be one-third of the total value of such lands.

¶That the balance of the said lands shall be laid out in farms and townships but so that no farm shall contain less than fifty acres or more than two hundred acres.

¶That no land shall be sold in any Township formed by the Company.

¶To secure the payment on all shares in the Company in respect of which ten shillings per share has been paid up of a dividend of Seven pounds per centum during each year in which the profits are adequate for such purpose or of such lessor dividend as the profits for that year will admit of and subject thereto to provide for the setting aside out of the profits of the Company such sum as the Directors the Company may think proper but not exceeding in any one year five pounds per centum of such profits as a reserve fund for meeting contingencies or for repairing improving and maintaining any of the property of the Company and to divide the balance (if any) of the profits of the company as a bonus among the settlers and such of the shareholders as shall happen to be in the service of the Company in proportion to the shares respectively held by them and in proportion also to the respective periods of service but so that no bonus shall be declared on any number of shares less than fifty nor more than two hundred Settler for the purpose of this clause meaning any person in actual personal occupation of any land belonging to or sold by the Company who at the same time holds shares in the Company.

¶To do all such things as are incidental or conducive to the attainment of the above objects or any of them.

- The liability of the members is limited.
- The capital of the Company is £20,000, divided into 20,000 shres of one pound each.

We, the several persons whose names and addresses are subscribed, are desirous of being formed into a Company in pursuance of this Memorandum of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names:—

Dated the twenty-third day of August, 1889.

Witness to the above Signatures—

E. S. Mantz,
Journalist,

"Sans Souci," Selwyn Road,

N. E. Valley.

"The Companies Act, 1882."

Company Limited by Shares.
ARTICLES OF ASSOCIATION OF THE CO-OPERATIVE LAND SETTLEMENT COMPANY (LIMITED).
decorative feature

Preliminary.

1. The regulations contained in the Table marked A in the first Schedule to "The Companies Act, 1882," shall not apply to the Company.

2. In these presents, unless there be something in the subject or context inconsistent therewith—

- "The Office" means the registered office for the time being of the Company.
- "The Register" means the register of members to be kept pursuant to Section 35 of "The Companies Act. 1882."
- "Month" means calendar month.
- "In Writing" means written or printed, or partly written and partly printed.
- Words importing the singular number only, include the plural number and *vice versa*.
- Words importing the masculine gender include the feminine gender.
- Words importing persons include Corporations.

3. The business of the Company may be commenced as soon as 5000 shares have been applied for.

4. The shares shall be under the control of the Directors who may allot or otherwise dispose of the same to such persons and on such terms and conditions and at such times as the Directors shall think fit; but they shall not be entitled to allot less than 50 nor more than 500 shares to any one person, and no person shall be entitled to hold less than 50 shares nor more than 500 shares in the Company.

5. The Directors may make arrangements upon the issue of shares for difference between the holders of such shares in the amount of calls to be paid and the time of payment of such calls.

6. If by the conditions of allotment of any shares the whole or part of the amount thereof shall be payable by instalments, every such instalment shall, when due, be paid to the Company by the holder of the share.

7. The joint holders of a share shall be severally, as well as jointly, liable for the payment of all instalments and calls due in respect of such shares.

8. In case of the death of any one or more of the joint holders of any share, the survivors shall be the only persons recognised by the Company as having any title to or interest in such shares.

Certificates.

9. The certificate of title to shares shall be issued under the seal of the Company and signed in such manner as the Directors shall prescribe.

10. Every member shall be entitled to one certificate for all the shares registered in his name, or to several certificates, each for a part of such shares. Every certificate of shares shall specify the number of the share in respect of which it is issued and at the option of the member the amount paid up thereon.

11. If any certificate be worn out or defaced, then, upon production thereof to the Directors, they may order the same to be cancelled, and may issue a new certificate in lieu thereof, and if any certificate be lost or destroyed, then, upon proof thereof to the satisfaction of the Directors, or in default of proof, on such indemnity as the Directors deem adequate being given, a new certificate in lieu thereof shall be given to the party entitled to such lost or destroyed certificate.

12. The sum of one shilling shall be paid to the Company for every certificate issued.

13. The certificates of shares registered in the names of two or more persons shall be delivered to the person first named on the register.

Calls.

14. Exclusive of the sums paid on application for and allotment of shares all calls shall be made monthly, and shall be of three pence per share; and each member shall pay the amount of every call so made on him to the persons and at the place appointed by the Directors.

15. A call shall be deemed to have been made at the time when the resolution of the Directors authorising such call was passed.

16. If the sum payable in respect of any call or instalment is not paid on or before the day appointed for payment thereof, the holder for the time being of the share in respect of which the call shall have been made or the instalments shall be due, shall pay interest for the same at the rate of £10 per cent, per annum from the day appointed for payment thereof to the time of the actual payment. But the Directors may where they think fit, remit altogether or in part any sum becoming payable for interest under this clause.

17. The Directors may receive from any member willing to advance the same, and upon such terms and conditions as they think fit, all or any part of the money due upon the shares held by such member beyond the sums paid up or payable thereon, and where the Company is indebted to a member in a sum presently payable, such member shall be entitled by notice in writing to require the Company to apply such sum or any part thereof in payment *pro tanto* of the amount remaining unpaid on any shares in the Company held by him and the Company shall be bound to comply with such requisition.

18. The Company may pay dividends in proportion to the amount called and paid up on each share in cases where a larger amount is paid up on some shares than on others.

Transfer of Shares.

19. Shares shall be transferable subject to the following provisions:—The instrument of transfer shall be executed both by the transferor and the transferee, and the transferor shall be deemed to remain the holder of such shares or stock until the name of the transferee is entered in the Register in respect thereof.

20. The instrument of transfer of any share shall be in the following form, or as near thereto as circumstances will admit:—

I, A B, of in consideration of the sum of pounds paid to me by C D of do hereby transfer to the said C D the share (or shares) numbered standing in my name in the books of The Co-operative Land Settlement Company

(Limited) to hold unto the said C D his executors administrators and assigns subject to the several conditions on which I hold the same at the time of the execution hereof. And I the said C D do hereby agree to take the said share (or shares) subject to the same conditions.

As witness our hands the____day of

21. The Directors may decline to register any transfer of shares upon which the Company has a lien. And no transfer of a shares shall be made to any person who shall not be approved of by the Directors and they shall have absolute discretion not controlable by any Court law or equity to accept or reject a proposed transferee and shall not be bound to give any reason for rejecting him.

22. Every instrument of transfer shall be delivered to the Company for registration, accompanied by the certificate of the share to be transferred, and such other evidence as the Directors may require to prove the title of the transferor or his right to transfer the shares.

23. All instruments of transfer which shall be registered shall be retained by the Company, but any instrument of transfer which the Directors may decline to register shall be returned to the person depositing the same.

24. A fee, not exceeding two shillings, and sixpence, may be charged for each transfer, and shall, if required by the Directors, be paid before the registration thereof. The transfer books may be closed. during such time as the Directors think fit, not exceeding in the whole 30 days in each year.

Transmission of Shares.

25. The executors or administrators of a deceased member (not being one of several joint holders) shall be the only persons recognised by The Company as having any title to the shares registered in the name of such member.

26. Any parent or guardian of any infant member, or any committee of a lunatic member, or any person becoming entitled to shares in consequence of the death, bankruptcy, or liquidation of any member, or of the marriage of any female member, or in any other way than by transfer, upon producing such evidence that he sustains the character in respect of which he proposes to act under this clause, or of his title, as the Directors think sufficient, may, with the consent of the Directors, be registered himself as a member in respect of such shares, or subject to the regulations as to transfer hereinbefore contained, may transfer the same to some other person.

Forfeiture of Shares.

27. If any member fail to pay any call or instalment on or before the time appointed for the payment of the same, the Directors may at any time thereafter during such time as the call or instalment remains upaid serve a notice on such member requiring him to pay the same, together with any interest that may have accrued and all expenses that may have been incurred by the Company by reason of such nonpayment,

28. The notice shall name a day (not less than 14 days from the day of the notice) and a place or places on and at which such call or instalment and such interest and expenses as aforesaid are to be paid. The notice shall also state that in the event of non-payment at or before the time, and at the place appointed, the shares in respect of which the call was made, or instalment is payable, will be liable to be forfeited.

29. If the requisitions of any such notice as aforesaid are not complied with, any shares in respect of which such notice has been given may, at any time thereafter before payment of all calls or instalment interest, and expenses due in respect thereof, be forfeited by a resolution of the Directors to that effect.

30. Any share so forfeited shall be deemed to be the property of the Company, and the Directors may sell, re-allot, or otherwise dispose of the same in such manner as they think fit.

31. Any member whose shares have been forfeited shall, notwithstanding, be liable to pay, and shall forthwith pay to the Company all call instalments, interest, and expenses owing upon or in resect of such shares at the time of the forfeiture, together with interest thereon from the time of forfeiture until payment at the rate of £10 per cent. per annum, and the Directors shall enforce the payment of such moneys or any part thereof, if they think fit, but not otherwise.

Lien.

32. The Company shall have a first and paramount lien upon all shares registered in the name of each member (whether solely or jointly with others) for his debts, liabilities, and engagements solely or jointly with any other person to or with the Company, whether the period for the payment, fulfilment, or discharge thereof, shall have actually arrived or not.

33. For the purpose of enforcing such lien the Directors may sell the shares subject thereto in such a manner

as they shall think fit but no sale shall be made until such period as aforesaid shall have arrived and until notice in writing of the intention to sell shall have been served on such member, his executors or administrators, and default shall have been made by him or them in the payment, fulfilment, or discharge of such debts, liabilities or engagements, for seven days after such notice.

34. The net proceeds of any such sale shall be applied in or towards satisfaction of the debts, liabilities, or engagements of such member as aforesaid and the residue (if any) paid to such member or his executors, administrators, or assigns.

Certificate on Sale of Shares.

35. Upon any sale, in purported exercise of the powers given by Clauses 30 and 33 hereof respectively, the Directors may cause the purchaser's name to be entered in the Register in respect of the shares sold, and the purchaser shall not be bound to see to the regularity of the proceedings, or the application of the purchase money, and after his name has been entered in the Register in respect of such shares, the validity of the sale shall not, as against him, or any person claiming through him, be impeached by the former holder of the shares, or by any other person. And the remedy of any member or person aggrieved by such sale shall be in damages only, and against the Company exclusively.

Increase of Capital and Preference Shares.

36. The Company may from time to time increase the capital by the creation of new shares of such amount as may be deemed expedient

37. The new shares, and also any shares in the original capital for the time being unissued, may be issued upon such terms and conditions, and with such rights, preferences and privileges annexed thereto as the Directors shall determine, and in particular such shares may be issued with a preferential or qualified right to dividends, in the distribution of assets of the Company, and with a special right of voting or without any right of voting.

38. The Company may, before the issue of any new shares, determine that the same or any of them shall be offered in the first instance to any persons in actual personal occupation of any lands belonging to or sold by the Company, whether members of the Company or not, or to all the then members in proportion to the amount of the capital held by them, or make any other provisions as to the issue and allotment of the new shares, but in default of any such determination, or so far as the same shall not extend the new shares shall be subject to clause 5 hereof.

39. Except so Jar as otherwise provided by the conditions of issue, or by these presents, any capital raised by the creation of new shares shall be considered part of the original capital and shall be subject to the provisions herein contained with reference to the payment of calls and instalments, transfers and transmission, forfeiture, lien, surrender, and otherwise.

40. If at any time the capital by reason of the issue of preference shares, or otherwise, is divided into different classes, all or any of the rights and privileges attached to each class may be modified by agreement between the Company and any person purporting to contract on behalf of that class, provided such agreement is confirmed by an extraordinary resolution passed at a separate general meeting of the holders of shares of that class and all the provisions hereinafter contained as to the general meetings shall, *mutatis mutandis*, apply to every such meeting, but so that the quorum thereof shall be members holding or representing by proxy two-thirds of the nominal amount of the issued shares of the class.

Eduction of Capital Consolidation, and Subdivision of Shares.

41. The Company may from time to time reduce its capital, and may by consolidation or subdivision divide the capital or any part thereof into shares of larger or smaller nominal amount.

42. The Company may cancel any shares which have not been taken or agreed to be taken by any person.

Surrender of Shares.

43. The Directors may accept from any member on such terms and conditions as shall be agreed a surrender of his shares or any part thereof.

Borrowing Powers.

44. The Directors may from time to time at their discretion borrow from the Directors or other persons any

sum or sums of money for the purposes of the Company, but so that the moneys at anytime owing shall not, without the sanction of a general meeting, exceed the nominal amount of the capital. The Directors may raise or secure the repayment of such moneys in such manner and upon such terms and conditions in all respects as they think fit, and in particular, by the issue of debentures or bonds of the Company, or by the creation of debenture stock, or by making, drawing, accepting, or indorsing on behalf of the Company any promissory notes or bills of exchange, or giving or issuing any other security of the Company, or by mortgage or charge of all or any part of the property (both present and future) of the Company and of its uncalled capital for the time being.

45. Every debenture or other instrument for securing the payment of money issued by the Company may be so framed that the moneys thereby secured shall be assignable free from any equities between the Company and the person to whom the same may be issued. Any debentures, bonds, or other instruments or securities may be issued at a discount premium or otherwise, and with any special privileges as to redemption, surrender, drawings, allotment of shares or otherwise.

46. The Directors shall cause a proper Register to be kept in accordance with Section 78 of the "Companies Act, 1882," of all mortgages and charges specially affecting the property of the Company.

47. If any uncalled capital of the Company is included in or charged by any mortgage or other security, the Directors may delegate to any person as trustee for the person in whose favour such mortgage or security is executed, the power to make calls on the members in respect of such uncalled capital, and to sue in the name of the Company, or otherwise, for the recovery of moneys becoming due in respect of calls so made, and to give valid receipts for such moneys, and the power so delegated shall subsist during the continuance of the mortgage security notwithstanding any change of Directors, and shall be assignable.

General Meetings.

48. The first general meeting shall be held at such time not being more than four months after the registration of the Memorandum of Association of the Company, and at such place as the Directors may determine. This meeting shall be called the statutory meeting.

49. Subsequent general meetings shall be held at such time and place as may be prescribed by the Company in general meeting, and if no other time or place is prescribed, a general meeting shall be held in the month of August in every year at such time and place as may be determined by the Directors.

50. The general meetings mentioned in the last preceding clauses shall be called ordinary general meetings. All other meetings of this Company shall be called extraordinary general meetings.

51. The Directors may, whenever they think fit, and they shall upon a requisition made in writing by not less than five members representing not less than 1000 shares, convene an extraordinary meeting.

52. Any such requisition shall specify the objects of the meeting required, and shall be signed by the members making the same, and shall be deposited at the office.

53. In case the Directors, for 14 days after such deposit, fail to convene an extraordinary meeting to be held within 28 days after such deposit, the requisitionists or any other members holding the like proportion of the capital may themselves convene a meeting, but no such requisition shall remain in force for more than two months from the time when ihe same shall be deposited at the office.

54. Seven clear days' notice at the least, specifying the place, day and hour of meeting, and in case of an extraordinary meeting, the purpose for which it is to be held, shall be given either by advertisement or by notice sent by post or otherwise served, as hereinafter provided Whenever any meeting is adjourned for 21 days or more, at least five days' notice of the place and hour of meeting of such adjourned meeting shall be given in like manner.

55. The accidental omission to give any such notice to any of the members shall not invalidate any resolution passed at any such meeting.

Proceedings at General Meetings.

56. The business of any ordinary meeting shall be to receive and consider the Statement of Income and Expenditure, the Balance-sheet, the ordinary Reports of the Directors and Auditors, to elect Directors and other officers in place of those retiring by rotation, to declare Dividends, and to transact any other business which, under these presents, ought to be transacted at an ordinary meeting. All other business shall be deemed special, and shall be transacted at an extraordinary meeting.

57. Three members, personally present, shall be a quorum for a general meeting, for the choice of a chairman, the declaration of a dividend, and the adjournment of a meeting. For all other purposes the quorum for a general meeting shall be four members, personally present, holding or representing by proxy not less than 1,000 shares. No business shall be transacted at any general meeting unless the requisite quorum be present at

the commencement of the business.

58. The Chairman of the Directors shall be entitled to take the chair at every general meeting, or, if there be no chairman, or if at any meeting he shall not be present within fifteen minutes after the time appointed for holding such meeting, the Directors present, or, if they decline, the members present shall choose a Director as Chairman, and if no director be present, or if all the Directors present decline to preside, then the members present shall choose one of their number to be chairman.

59. If within half-an-hour from the time appointed for the meeting a quorum is not present, the meeting, if convened upon such requisition as aforesaid, shall be dissolved, but in any other case it shall stand adjourned to the same day in the next week at the same time and place, and if at such adjourned meeting a quorum is not present, those members who are present shall be a quorum, and may transact the business for which the meeting was called.

60. Every motion submitted to a meeting shall (unless decided unanimously) be decided in the first instance by a show of hands, and in the case of an equality of votes the chairman shall, both on show of hands and at the poll, have a casting vote in addition to the vote or notes to which he may be entitled as a member.

61. At any general meeting (unless a poll is demanded by one-fifth of the members present or represented by proxy) a declaration by the chairman that a resolution has been carried, or carried by a particular majority, or lost, or not carried by a particular majority, and an entry to that effect entered in the book of proceedings of the Company shall be conclusive evidence of the fact without proof of the number or proportion of the votes recorded in favour of or against such resolution.

62. If a poll is demanded as aforesaid, it shall be taken in such manner and at such time and place, and either immediately or after an interval or adjournment (not exceeding seven days), as the chairman of the meeting directs; and the result of the poll shall be deemed to be the resolution of the meeting at which the poll was demanded.

63. The chairman of a general meeting may, with the consent of the meeting, adjourn the same from time to time and from place to place, but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place. The demand of a poll shall not prevent the continuance of a meeting for the transaction of any business other than the question on which a poll has been demanded.

Votes of Members.

64. Every member shall have one vote and no more.

65. Any parent, guardian, or other person entitled under clause 26 hereof, to transfer any shares, may vote at any general meeting in respect thereof, in the same manner as if he were the registered holder of such shares, provided that forty-eight hours at least before the time of holding the meeting at which he proposes to vote, he shall satisfy the Directors of his right to transfer such shares, or that the Directors shall previously to such meeting have admitted his right to vote thereat respect of such shares.

66. If there be joint holders of any shares, the member whose name stands first on the Register, and no other, shall be entitled to vote in respect of such shares, but the other or others of the joint holders shall be entitled to be present at any general meeting.

67. No poll shall be demanded on the election of a chairman of a meeting.

68. Members may appear and vote at meetings, either personally or by proxy, or by their attorneys, duly appointed under power of attorney The instrument appointing a proxy, and every power of attorney, or a verified copy thereof, shall be deposited at the office of the Company not less than forty-eight hours before the time of holding the meeting at which the person named therein proposes to vote, and every attorney may appoint a proxy for the member he represents.

69. The instrument appointing a proxy shall be in writing under the hand of the appointor, or, if such appointor is a corporation, under its common seal, and shall be attested by one or more witnesses Shareholders resident out of New Zealand or other the place where the meeting shall be held, may nominate as proxies persons other than shareholders, but otherwise no person shall be appointed a proxy who is not a member of the Company and qualified to vote, and no instrument appointing a proxy shall be valid after the expiration of twelve months from the date of its execution.

70. A vote given in accordance with the terms of an instrument proxy shall be valid, notwithstanding the previous death of the principal, or revocation of the appointment, unless notice in writing of the death or revocation shall have been received at the office of the Company twenty-four hours at the least before the meeting.

71. The instruments of proxy for a specified meeting shall be is the form or to the effect following:—

"The Co-operative Land Settlement Company, Limited."

"I____of____being a member of The Co-operative Land Settlement Company, Limited, hereby appoint____of____or failing him,____of____failing him,____of____) as my proxy to vote for me and on my behalf at the ordinary (or extraordinary, as the case may be) general meeting of the Company, to be held on the____day of____, and at any adjournment thereof (or at any meeting that may be held in the year____).

"As witness my hand, this____day of

"Signed by the said____in the presence of____"

72. No member shall be entitled to be present or to vote on any question, either personally or by proxy, or as proxy for another member at a general meeting, or upon a poll, or be reckoned in a quorum, whilst any call or other sum shall be due and payable to the Company in respect of any of the shares of such member.

73. Any resolution passed by the Directors, notice whereof shall be given to the members in the manner in which notices are hereafter directed to be given, and which shall within one month after it shall have so passed, be ratified and confirmed in writing by members entitled in the aggregate to three-fifths of the votes, shall be as valid and effectual as a resolution of a general meeting, but this clause shall not apply to a resolution for winding up the Company, or to a resolution passed in respect of any matter which by statute or these presents ought to be dealt with by special or extraordinary resolution.

Directors.

74. The number of Directors shall not be less than five or more than seven. The following persons shall be the first Directors:—Sir Robert Stout, K.C.M.G., William Mouat Bolt, William Thompson, william John Birch, James Wright, and John Smalley Pole, and they shall hold office until the first ordinary general meeting in the year

75. The Directors shall have power to appoint any other persons to be Directors at any time before the ordinary general meeting to be held in the year 1889, but so that the total number of Directors shall not at any time exceed the maximum number fixed by clause 74 hereof.

76. The qualification of a Director shall be the holding of shares in the Company on which no calls are in arrear.

77. A Director may resign upon giving one month's notice in writing to the Board of Directors, and such resignation shall take effect upon the expiration of such notice.

78. As remuneration for Ins services, each Director shall be paid out of the Company's funds such sum as the Company in general meetings shall appoint.

79. The continuing Directors may act and their proceedings shall be valid notwithstanding any vacancy in their body so long as there remains five Directors duly qualified to act.

80. The office of Director shall be vacated:—

- If he become or be adjudicated bankrupt, or execute any assignment for the benefit of or compound with his creditors.
- If he be found a lunatic or become of unsound mind.
- If he shall absent himself from the meetings of the Directors during a period of three months without special leave of absence from the Directors.

81. No Director or intending Director, shall be disqualified by his office from contracting with the Company, either as vendor or otherwise, nor shall any such contract or any contract or arrangement entered into by or on behalf of the Company with any company, corporation partnership of, or in which any Director shall be a member or otherwise interested, be avoided, nor shall any Director so contracting, or being such member, or so interested, be liable to account to the Company for any profit realised by such contract or arrangement by reason only of such Director holding that office, or of the fiduciary relation thereby established.

Rotation of Directors.

82. At the ordinary general meeting to be held in the year 1889 the whole of the Directors shall retire from office but shall be eligible for re-election if qualified, and at every succeeding ordinary general meeting two of the Directors shall retire from office.

83. The two to retire at the ordinary meeting to be held in 1890 shall, unless the Directors agree among themselves, be determined by ballot. In every subsequent year the Directors who have been longest in office, since the last election or appointment, shall retire. As between two or more Directors who have been in office for the like period, the Directors to retire shall, in default of agreement between them, be selected by ballot.

84. A retiring Director shall be eligible for re-election.

85. The Company at any general meeting at which Directors [*unclear:* reti] in manner aforesaid, shall fill up the vacated offices by electing a like number of persons to be Directors.

86. If at any general meeting at which an election of a Director ought to take place, the place of the retiring Director is not filled up the retiring Director shall continue in office until the ordinary meeting in the next year, and so on from year to year until his place is filled A Director retiring by rotation at any general meeting shall be [*unclear:* dee] to continue in office until the close of the meeting.

87. The Company in general meeting may from time to time increase or reduce the number of Directors, and alter their qualifications, and may also determine in what rotation such increased [*unclear:* and] reduced number is to go out of office.

88. The Company may by special resolution remove any Director before the expiration of his period of office, and appoint another person in his stead, and the person so appointed shall hold office during such time only as the Director in whose place he is appointed would have held the same if he had not been removed.

89. Any casual vacancy occurring among the Directors may be filed up by the Directors, but any person so chosen shall retain his office so long only as the vacating Director would have retained the same if no vacancy had occurred.

90. No person, not being a Director, shall, unless recommended by the Directors for election, be eligible as a Director at any general meeting, unless he or some other member intending to propose him has, at least seven clear days before the meeting, left at the office of the company a notice in writing under his hand, signifying his candidature for the office or the intention of some member to propose him.

Proceedings of Directors.

91. The Directors may meet together for the despatch of business, adjourn, and otherwise regulate their meetings as they think fit, and may determine the quorum necessary for the transaction of business, and until otherwise determined, three Directors shall be a quorum. A Director may, and the Secretary upon the request of a Director shall at any time summon a meeting of the Directors.

92. Questions arising at any meeting of Directors shall be decided by a majority of votes, and, in case of an equality of votes, the chairman shall have a second or casting vote.

93. The Directors may elect a chairman of their meetings, and may determine the period for which he is to hold office, but if no such chairman is elected, or if at any meeting the chairman is not present at the time appointed for holding the same, the Directors present shall choose some one of their number to be chairman of such meeting.

94. A meeting of Directors, at which a quorum is present, shall be competent to exercise all or any of the authorities, powers and discretions by or under these presents vested in or exercisable by the Directors generally.

95. The Directors may delegate any of their powers to committees consisting of such member or members of their body as they think fit. Any committee so formed shall, in the exercise of the powers so delegated conform to any regulations that may from time to time be imposed on it by the Directors.

96. The meetings and proceedings of any such committee, consisting of two or more members, shall be governed by the provisions herein contained for regulating the meeting and proceedings of Directors so far as the same are applicable thereto, and are not superseded by the express terms of the appointment of the committee or by any such regulations as aforesaid.

97. All acts done at any meeting of the Directors, or of a committee of Directors, or by any person acting as a Director, shall notwithstanding that it shall afterwards be discovered that there was some defect in the appointment of such Directors or persons acting as aforesaid, or that they or any of them were disqualified, be as valid as if every such person had been duly appointed and was qualified to be a Director.

98. A resolution in writing, signed by all the Directors, shall be as valid and effectual as if it had been passed at a meeting of the Directors duly called and constituted.

99. If any of the Directors shall be called upon to perform extra services or to make any special exertions in going or residing abroad or away from his usual place of abode for any of the purposes of the Company or otherwise howsoever the Company shall remunerate the Director or Directors so doing either by a fixed sum or by a percentage of profit or otherwise as may be determined, and such remuneration may be either in addition to or in substitution for his or their remuneration provided by Clause 78 hereof.

100. A Director may hold any other office under the Company in conjunction with his office of Director.

Powers of Directors.

101. The management of the business and the control of the Company shall be vested in the Directors who, in addition to the powers and authorities by these presents expressly conferred upon them may exercise all such powers and do all such acts and things as may be exercised or done by the Company and are not hereby or by

Statute expressly directed or required to be exercised or done by the Company in general meeting, but subject nevertheless to such regulations not being inconsistent with these presents as may from time to time be made by extraordinary resolution of the Company, but no regulation shall invalidate any prior act of the Directors which would have been valid if such regulation had not been made.

102. Without prejudice to the general powers conferred by the last preceding clause and to the other powers and authorities conferred as aforesaid, it is hereby expressly declared that the Directors shall be entrusted with the following powers:—

- They may pay all or any of the costs, charges, and! expenses preliminary and incidental to the promotion, formation, establishment, and registration of the Company.
- They may purchase or otherwise acquire for the Company any property, rights, or privileges, which the Company is authorised to acquire at such price and generally on such terms and condition as they may think fit.
- They may at their discretion pay for any property or rights acquired by, or services rendered to the Company either wholly or partially, in cash or in shares, bonds, debentures, or other securities of the Company, and any such shares may be issued either as fully paid up or with such amount credited as paid up thereon as may be agreed upon and any such bonds, debentures, or other securities may be either specifically charged upon all or any part of the property of the Company and its uncalled capital, or not so charged.
- They may secure the fulfilment of any contracts or engagements entered into by the Company, by mortgage or charge of all or any of the property of the Company (including its unpaid capital for the time being), or in such other manner as they may think fit.
- They may appoint and at their discretion remove or suspend such manager, secretaries, officers, clerks, agents, and servants for permanent, temporary, or special services as they may from time to time think fit, and may invest them with such powers as they may think expedient, and may determine their duties, and fix their salaries or emoluments and may require security in such instances and to such amount as they think fit.
- They may attach to any shares to be issued as the consideration or part of the consideration for any contract with or property squired by the Company such conditions as to transfer thereof as they think fit; they may give to members doing business with the Company any special rights, privileges, and benefits which may seem expedient.
- They may appoint any person or persons to accept and hold in trust for the Company any property belonging to the Company, or in which it is interested, and may execute and do all such deeds and things as may be requisite to vest the same in such person or persons.
- They may execute, in the name and on behalf of the Company, such mortgages, charges, and other securities on the Company's property (present and future), including its uncalled capital, as they think fit, in favour of any Director or Directors of the Company who may incur, or be about to incur, any personal liability, whether as principal or surety, for the benefit of the Company, and any such instrument may contain a power of sale, and such other powers, covenants and provisions, as may be agreed on.
- They may institute, conduct, defend, compound, or abandon any legal proceedings by and against the Company or its officers, or otherwise concerning the affairs of the Company, and also may compound and allow time for payment or satisfaction of any debts due, and of any claims or demands by or against the Company.
- They may refer any claims or demands by or against the Company to arbitration, and observe and perform the awards.
- They may make and give receipts, releases, and other discharges for money payable to the Company, and for the claims and demands of the Company.
- They may act on behalf of the Company in all matters relating to bankrupts and insolvents.
- They may invest any of the moneys of the Company not immediately required for the purposes thereof, upon such securities and in such manner as they may think fit, and they may from time to time vary or realize such investments.
- They may give any officer or other person employed by the Company, a commission on the profits of any particular business or transaction, or a share in the general profits of the Company, and such interest, commission, or share of profits shall be treated as part of the working expenses of the Company.
- They may from time to time make, vary, and repeal bye-laws for the regulation of the business of the Company, its officers and servants, or the members of the Company, or any section thereof.
- They may enter into all such negotiations and contracts and rescind and vary all such contracts, and execute and do all such acts, deeds, and things in the name and on behalf of the Company as they may consider expedient for, or in relation to any of matters aforesaid or otherwise for the purposes of the

Company.

Dividends.

103. The Directors may, with the sanction of the Company in general meeting, declare a dividend to be paid to the members according to their rights and interest in the profits.

104. No larger dividend shall be declared than is recommended by the Directors, but the Company in general meeting may declare a smaller dividend.

105. No dividend shall be payable except out of the profits arising from the business of the Company. The declaration of the Directors as to the amount of the profits of the Company shall be conclusive.

106. The Directors may from time to time pay to the members on account of the next forthcoming dividend such interim dividends as in their judgment the position of the Company justifies.

107. The Directors may deduct from the dividends payable to any member all such sums of money as may be due and payable by him to the Company, on account of calls, instalments or otherwise.

108. The Directors may retain the dividends payable upon registered shares, in respect of which any person is, under clause 26 hereof, entitled to become a member, or which any person under that clause is entitled to transfer, until such person shall become a member in respect of such share, or shall duly transfer the same.

109. Any general meeting declaring a dividend may resolve that the same or any part thereof shall be applied in paying up *pro tanto* the capital uncalled upon the shares held by the member to whom the same would otherwise be payable, and the Directors shall give effect to such resolution accordingly; but any member whose shares are fully paid up shall be entitled to be paid his proportion of the dividend is cash.

110. A transfer of shares shall not pass the right to any dividend declared thereon before the registration of the transfer.

111. In case several persons are registered as joint holders of any share, any one of such persons may give effectual receipts for all dividends and payments on account of dividends in respect of such share.

112. Notice of the declaration of any dividend, whether interim or otherwise, shall be given to the members in manner hereinafter provided.

113. The Company shall not be responsible for the loss of any cheque, dividend warrant, or post-office order which shall be sent by post upon the request of any member in respect of dividends.

114. All dividends unclaimed for one year after having been declared, may be invested or otherwise made use of by the Directors for the benefit of the Company until claimed. And all dividends unclaimed for five years after having been declared may be forfeited by the Directors for the benefit of the Company. No dividend shall bear interest as against the Company.

Accounts.

115. The Directors shall cause true accounts to be kept of the sums of money received and expended by the Company, and all matters respect of which such receipt and expenditure takes place, and of the assets, credits, and liabilities of the Company.

116. The books of account shall be kept at the office of the Company, or at such other place or places as the Directors think fit.

117. The Directors shall from time to time determine whether and to what extent, and at what times and places, and under what Editions or regulations the accounts and books of the Company or any of them shall be open to the inspection of the members; and no members shall have any right of inspecting any account or book or document of the Company except as conferred by Statute or authorised by the Directors, or by a resolution of the Company in general meeting.

118. At the ordinary meeting in every year the Directors shall lay before the Company a statement of the income and expenditure and a balance-sheet containing a summary of the property and liabilities of the Company made up to the 30th day of June in every year from the time when the last preeding statement and balance-sheet were made, or in the case of the first statement and balance-sheet from the incorporation of the Company.

119. Every such statement shall be accompanied by a report of the Directors as to the state and condition of the Company, and as to the amount which they recommend to be paid out of the profits by way of dividends or bonus to the members, and the amount (if any) which they propose to carry to the reserve fund, and the statement, report, and balance-sheet shall be signed by two Directors, and countersigned by the Secretary.

Audit.

120. Once at least in every year the accounts of the Company shall be examined, and the correctness of the

statements and balance-sheet ascertained by one or more Auditor or Auditors.

121. The first Auditor or Auditors shall be appointed by the Directors; subsequent Auditors shall be appointed by the Company at the ordinary meeting in each year. The remuneration of the Auditors be fixed by the Company in general meeting. Any Auditor quitting office shall be eligible for re-election.

122. If one Auditor only is appointed, all the provisions herein contained relating to Auditors shall apply to him.

123. The Auditors may be members of the Company, but no person shall be eligible as an Auditor who is interested otherwise than as a member of the Company in any transactions thereof, and no Director or other officer shall be eligible as Auditor during his continuance in office.

124. If any casual vacancy occurs in the office of Auditors the Directors shall forthwith fill up the same.

125. The Auditors shall be supplied with copies of the statement of accounts and balance-sheet intended to be laid before the Company in general meeting, seven days at least before the meeting to which the same are to be submitted, and it shall be their duty to examine the same with the accounts and vouchers relating thereto, and to report to the Company in general meeting thereon.

126. The Auditors shall at all reasonable times have access to the books and accounts of the Company, and they may in relation thereto examine the Directors or other officers of the Company.

127. Every account of the Directors, when audited and approved by a general meeting, shall be conclusive, except as regards any error discovered therein within three months next after the approval thereof Whenever any such error is discovered within that period, the accounts shall forthwith be corrected, and thenceforth shall be conclusive.

Notices.

128. A notice may be served by the Company upon any member whose registered place of address is in the Colony of New Zealand, either personally, or by sending it through the post in a prepaid letter addressed to such member at his registered place of address in the register book of the Company.

129. A member whose registered place of address is not in the Colony of New Zealand, shall from time to time notify in writing to the Company some place in the said Colony to be called his address for service, and any notice may be served by the Company upon such member by sending it through the post in a prepaid letter addressed to him at his address for service. Until such notification shall have been given the office of the Company shall be deemed to be the address for service of such member.

130. Any notice required to be given by the Company to the members or any of them, and not expressly provided for by these presents, shall be sufficiently given by advertisement, and any notice required to be, or which may be given by advertisement, shall be advertised once in a newspaper circulating in the district or districts where the Company is carrying on its operations.

131. All notices with respect to shares standing in the names of joint holders, shall be given to whichever of such persons is named first in the Register, and notice so given shall be sufficient notice to all the holders of such shares.

132. Any notice sent by post shall be deemed to have been served at the time when the letter containing the same would be delivered in the ordinary course of post, and in proving such service it shall be sufficient to prove that the letter containing the notice was properly addressed and put into the post-office.

133. Any person who by operation of law, transfer, or other means whatsoever shall become entitled to any share, shall be bound by every notice in respect of such share which previously to Jus name and address being entered in the Register shall be duly given to the person from whom he derives title to such share.

134. Any notice or document delivered or sent by post to or left at the registered address of any member in pursuance of these presents, shall, notwithstanding such member be then deceased, and whether or not the Company have notice of his decease, be deemed to have been duly served in respect of any registered shares, whether held solely or jointly with some other persons by such member until some other persons be registered in his stead as the holder or joint holder thereof, and such service shall for all purposes of these presents be deemed a sufficient service of such notice or document on his or her heirs, executors, or administrators, and all persons (if any) jointly interested with him or her in any such share.

135. Where a given number of days' notice or notice extending over any other period is required to be given, the day of service and the day upon which such notice will expire, shall not be included in such number of days or other period.

Winding Up.

136. In case the Company shall be wound up the surplus assets shall be applied in the first place in repaying

money called up in the winding up; secondly, in repaying *pari passu*, the residue of the paid-up capital; and thirdly, the balance shall be divided among the contributories, *pari passu*, in proportion to the nominal amount of the capital in respect whereof they are contributories. But the provisions contained in this clause shall be without prejudice to the rights of the holders of shares issued under special conditions.

137. If the Company shall be wound up the liquidators whether voluntary or official may, with the sanction of an extraordinary resolution divide among the contributories in specie any part of the assets of the Company, and may with the like sanction vest any part of the assets of the Company in trustees, upon such trusts for the benefit of the contributories as the liquidators with like sanction shall think fit.

138. If at any time the liquidators of the Company shall make any sale or enter into any arrangement pursuant to Section 222 of the Companies Act, 1882, a dissentient member within the meaning of that section shall not have the rights thereby given to him, but instead thereof he may, by notice in writing addressed to the liquidators and left at the office not later than fourteen days after the date of the meeting at which the special resolution authorising such sale or arrangement was passed, require the liquidators to sell the share, or other benefits to which under the said sale or arrangement he would otherwise have been entitled, and to pay the net proceeds over to him, and such sale and payment shall be made accordingly. Such lastmentioned sale may be made in such manner as the liquidators think fife.

Arbitration.

139. Whenever any difference arises between the Company on the one hand and any of the members, their executors, administrators, or assigns on the other hand, touching the true intent or construction or the incidents or consequences of these presents, or of the statute, or touching any tiling then or thereafter done, executed, omitted, or suffered in pursuance of these presents or of the statute, or touching any breach or alleged breach of these presents, or any claim on account of any such breach, or alleged breach, or otherwise, relating to the premises or to these presents, or to the statute, or to any of the affairs of the Company every such difference shall be referred to the decision of an arbitrator to be appointed by the parties in difference, or if they cannot agree upon a single arbitrator, to the decision of two arbitrators, of whom shall be appointed by each of the parties in difference, or an umpire to be appointed by the two arbitrators.

140. The costs of and incident to any such reference shall be in the discretion of the arbitrator, arbitrators, or umpire respectively, who may determine the amount thereof, or direct the same to be taxed as between solicitor and client, or otherwise, and may award by whom and to whom and in what manner the same shall be borne and paid.

141. The submission to arbitration shall be subject to the provisions of the "Supreme Court Practice and Procedure Amendment Act, 1866," or any then subsisting statutory modification thereof and shall be made a rule or order of the Supreme Court of New Zealand upon the application of either party, and such party may instruct counsel to consent thereto for the other parties.

Seal.

142. The Seal of the Company shall contain within a circle the words "THE CO-OPERATIVE LAND SETTLEMENT COMPANY, LIMITED."

Names, Addresses, and Descriptions of Subscribers.

- Robert Stout, Barrister, Dunedin.
- William John Birch, Dairyman, Dunedin.
- John Smalley Pole, Carpenter, Dunedin.
- William Mouat Bolt, Storeman, Dunedin.
- Wm. Thompson, Gentleman, Dunedin.
- James Wright, Farmer, Mosgiel.
- John Wm. Milnes, Accountant, Dunedin.

Dated the twenty-third day of August, 1889.

Witness to the above signatures—

E. S Mantz,

Journalist, "Sans Souci," Selwyn Road,

N. E. Valley.

Front Cover

Reports on the Relation of Dairy Produce of New Zealand to the English Market, Together with Practical Hints on Cheese-Making.

To be obtained Free at any Land Office, and at the Government Stationery Office, Wellington.

By Authority: George Didsbury, Government Printer Wellington 1889

Crown Lands Office, Wellington

1st July, 1889.

THE following report by Professor James Long, of the Royal Agricultural College, Cirencester, England, upon the relation of the dairy-produce of New Zealand to the English market, together with practical hints on cheese-making by Samuel Budgett and Son, of Bristol, England, also of London, Liverpool, New York, and Montreal, is published for general information.

G. F. RICHARDSON,
Minister of Lands.

Dairy Industry in New Zealand.

REPORT BY PROFESSOR JAMES LONG.

London

10th April, 1889.

SIR,—

I have the honour to enclose my report upon the relation of the dairy-produce of New Zealand to the English market. I have endeavoured to point out how it can be more economically made, more perfectly shipped, and more profitably sold in this country. The colonial farmer has to contend against great difficulties, the chief of which are the great length of the time of transit and the consequent risk of deterioration in the quality of the butter and cheese shipped, and Continental, American, and Canadian competition. The difficulties of successful shipment, I believe, will be ultimately overcome, so that New Zealand butter may be landed in London as fine in flavour as the best products of France and Denmark; but the rivalry of these two countries will continue to prevent the receipt of very high prices. The New Zealand climate and herbage, however, render the colony a most formidable antagonist, inasmuch as butter can be produced not only cheaper in the summer but also cheaper in the winter than in a European country. This fact is of great importance, for it tends to place the colonial fewer upon a very close level with the French and Danish farmers as a producer for the English market. With regard to the question of manufacture, I believe it will be found that there is much yet to be learned both in butter and cheese-making. To attain the most profitable results there is no doubt that the farmer will have to farther improve his cattle, and feed them with the utmost care; while the dairyman will see the necessity of using every means which science and practice afford to enable him to extract all the cream from the milk and all the butter from the cream, as well as to make, salt, pack, and ship the butter in the most perfect manner. With regard to cheese the case is not so immediately hopeful. I have been unable to find, either in the various reports with which I have been furnished from different sources, or in the samples of cheese I have yet examined, or in the evidence of gentlemen employed in London in the New Zealand trade, that the highest class of Cheddar cheese is really made in the colony to any extent. To make such cheese and to ship it successfully is vitally important, for success cannot be attained by any other means. I believe that if two or three expert makers were sent to New Zealand with the object of giving lessons in the farmhouses, dairies, and factories, showing by actual demonstration how the work should be done, and at the same time explaining the reason for each process and showing in what particulars old practices are wrong, a great amount of good might be done. This plan has succeeded in Scotland, and many prize-takers owe their entire success to a short course of practical instruction The first point will be to make cheese properly; the second to ascertain the best mode of shipping it with success. I would respectfully suggest that the Government should undertake both matters—the provision of teachers, and a series of simple experiments in the transmission of butter and of cheeses of various ages, packed in different ways, and shipped in rooms at different temperatures, in accordance with the suggestions made in this report. I should be very happy to undertake to obtain the assistance of two or three experts with the

view of meeting consignments of this kind, and of both testing and valuing each sample. Although butter and Cheddar cheese are the staple dairy-produce of the colony, I believe that any stimulus given to subsidiary industries, such as condensed milk, and cheese of the other varieties referred to in the report, will be well rewarded in time. A certain number of makers, possibly few, would be induced to commence, and in such a country they would be the pioneers overcoming difficulties and laying the foundation of other branches of dairying, which would not only relieve the great butter-and Cheddar-producers, but probably net greater profits than are now obtained by the manufacture of those goods. I have also suggested that much might be done, and at a comparatively small cost, by the purchase of stock dairy-cattle in England for the use of the New Zealand fanner, and by the establishment of an experiment-station. The dairy-farmers of the Continent have received immense benefit from the experiment-station. It has solved many a problem and unravelled many a difficult question which had been a source of unceasing loss. If necessary, I will forward plans and descriptions of the best of these stations, which, it may be remarked, are conducted at a cost of merely a few hundred pounds per annum. Lastly, I have made a suggestion which may be found worth the while of business-men of energy and capital to consider Margarine came to England many years ago under the name of butterine. It acquired a reputation, and its sale became enormous. Agitation caused the Government to change the name, although those engaged in the trade declared that the alteration would partially destroy the sale; but it had no effect, for butterine came to stay. Danish shops have opened in all parts of the country. They will increase and thrive because our people must be fed, and no single English county owns a sufficient number of cows to supply its own population with dairy-produce. If Danish why not New Zetland shops? Every argument tends to strengthen the case of direct sale to the consumer, as opposed to the present system, by means of which equally high prices will never be obtained, on account of the more complicated process of sale and the less attractive manner in which the butter is placed before the public. As a practical dairy-farmer, I have confidence in making these suggestions, and 1 conclude them by remarking that I shall be happy to be of service, if that is possible, to any one in the colony who is engaged in the dairy industry.

I have, &c.,

JAMES LONG.
Sir Francis Dillon Bell, K.C.M.G., C.B.,
Agent-General for New Zealand.

Butter-Making.

THE, surest method of making a sample of butter of high quality, and one that will keep, as well as butter can keep under such conditions as those imposed by refrigeration, until its arrival in the English market, is to rigidly carry out a system of washing the fine grains of butter in the churn with pure cold water. The inferior brands of Irish firkin-butter, which I have had opportunities of tasting both in the Cork and London markets, and the generality of Danish butter sent in casks, rapidly acquire a flavour which partially proceeds from the decomposition of the solid matter other than fat which has been left in the butter by an imperfect system of manufacture. It is this matter that it is necessary to remove in the dairy. It will be admitted that, although it is extremely difficult, if, indeed, it is possible, to wash butter clean, and to remove the buttermilk from it when it has been brought into a lump in the churn, yet that when brought in fine grains, which are subsequently hardened with pure cold spring water before uniting together, by far the larger proportion of this buttermilk can be removed. The buttermilk contains two constituents which, if conveyed into the butter, are ultimately certain to destroy its flavour. These are sugar and casein. While the sugar is the primary cause of fermentation and partial decomposition, the casein is responsible for its continuation. Therefore the more sugar and casein, or in other words, the more buttermilk, we remove, the greater chance we give the butter to preserve its sweetness and fine flavour. In some parts of the continent of Europe it is the practice of makers to send their butter to the English market without washing of any kind; and I have frequently been permitted to examine samples of Danish butter from seven to fourteen days old which, coming from some of the finest dairies of the country, have lost the fineness of their quality through the omission of this very necessary process. In some parts of England, however, especially in mining and other industrial districts, strong-flavoured and heavily-salted butters are preferred by the working-classes, who chiefly consume the butters of Denmark. In some of the Midland and Northern counties, where the population is large, there are shops under Danish control, where nothing but Danish butter and margarine are sold, and where very lucrative business is done. It is a common saying among high-class English butter makers that grains of butter should be washed by pouring cold water through the churn until it comes out as clear as it went in The finest mild butter is washed the last time with

brine, but this plan is not suitable for butter required to keep for a considerable period. Nor is one other plan which is frequently adopted more suitable—namely, the salting of the cream. By this system the buttermilk is decreased in value, the bulk of the salt remaining in it; but numerous experiments which I have made have shown than it is possible to obtain a larger percentage of butter by this method than by the system of brining. Butter for transport should be hand-salted, care being taken to use only the finest and purest salt in the market. This salt should be ground, subsequently dried until the whole of the moisture is removed from it, and again passed through a specially-made salt-mill. There is considerable difference between well-salted and badly-salted butter. Under the microscope the former shows an even and consistent grain, the salt being thoroughly dissolved; in the latter, however, the salt, together with portions of other substances which are found in inferior salt, in the form of irregular and badly-distributed grains or crystals, are found in a solid condition. Coarse salt badly worked into butter does not all dissolve, but attracts moisture and gives to butter a mottled appearance which is most objectionable to the buyer.

In an experiment made by a professional man of eminence in order to test what quantity of salt can be used in the preservation of butter to the best advantage, five samples of butter, all from one churning, were respectively salted with ¼oz., ½oz., ¾oz., 1oz., and 1¼oz. of salt per pound. At the end of six months the butters were tested. The best sample was that which had been salted at the rate of ¾oz. to the pound, while the worst sample was that which had been salted at the rate of ¼oz. to the pound, and the worst but one was the sample which had received the largest quantity of salt. This entirely agrees with my own practice.

In addition to careful churning, washing, making-up, and salting, butter-making includes two other proceedings upon which the profits mainly depend. The first is the separation of the cream The three leading methods of creaming are (1) skimming the old-fashioned shallow pan, (2) the deep-setting system, and (3) centrifugal separation. With the last-named the work is always good and constant. Either of the other plans closely approximates in value to the separator when they are perfectly controlled. This, however, can seldom be the case. If we can maintain a temperature of 60° in the dairy throughout the year, shallow pans will answer very well, and will throw up almost all the cream within twenty-four hours; but if the temperature of the dairy in which these vessels are placed is subject to every change in the weather we can seldom hope for the best results. In the heat of summer the milk becomes sour and sometimes coagulated before all the cream has risen, the result being a great loss; whereas in winter, during very cold weather, we do not obtain all the cream, even when the milk has been standing for two or three days, unless it has been poured into the vessels at a temperature of about 95°, and rapidly cooled to 40° or 45°. Under this system, too, to obtain fine flavour, the daily must not only be even in temperature, but perfectly dry, a paid atmosphere, at a moderate temperature, which encourages the reproduction of certain organisms, being fatal to the quality of cream. Again, the deep-setting system, simple enough in its way, can only be controlled where water, never higher than 45°, can be obtained throughout the year, and even then the milk must be poured into the vessels at as near 95° as possible. Numerous experiments have been made at the Agricultural College of Wisconsin—and in some instances I have repeatedly confirmed them, the work being extremely simple—proving that there is a loss of from 10 to 15 per cent, of butter by setting milk which is partially cold in cold water in a dairy which is not lower than 50° in temperature. In practice, dairy-hands are often so careless and so little able to estimate the losses which really occur, and which are almost imperceptible, that it is a far better plan to use the separator under all conditions than to adopt either of the plans which have been referred to unless the butter-maker, who is working for himself, is able to control the system he adopts in the way which has been suggested and to determine that he will leave nothing to chance.

BLENDING.

Of late years a business has arisen which we may call that of "butter-blending." As a guest of the French Dairy-farmers' Association in 1886 I had the advantage of seeing some of the blending establishments in Normandy, and they are both numerous and important. The great bulk of the fine butters coming to London is prepared in these establishments. The business has commenced upon a smaller scale in England and in Ireland, and will probably increase, although the value of the system in England is open to question. The agents of the houses attend the markets and buy the butters in bulk. The purchases are transmitted on the same day to blending-houses, and the following morning they are graded by expert into two or three qualities, as the case may be. The butters belonging to the first quality are blended together upon a circular butter-worker of enormous size, and provided with two powerful fluted rollers. Above the table is a horizontal pipe, in which a number of holes are drilled. As the table revolves with the butter upon it, the tap is turned on by the attendant, and the butter is both salted and coloured by the liquid which flows from the pipe, and which is scattered over the whole mass just as the water from a water-cart is evenly distributed over a street. In this way a uniform colour and degree of saltness is given, so that when the work is finished it is impossible to detect that a mixture

has taken place, however carefully the butter may be examined. As this butter comes from the machine it is weighed in 28lb. lots and packed in baskets, or made up into 2lb. rolls and put up in boxes, which on the same day are sent to the London markets. The finest mild blended butter of Normandy, chiefly made in the County of La Manche, has long since become famous in the south of England. It is generally preferred in hotels and clubs, and by large numbers of private families, to butter of any other class, chiefly, I believe because they have been educated by the merchants who sell it, on account of the difficulty they experienced some years ago in obtaining fine mild home-made butter. This system of blending is of the greatest possible importance to a butter-exporting country, especially as it and it alone, so far as I am able to see, will enable the community of makers to sell a uniform article at all times. There is no reason why New Zealand butter should not obtain a reputation by this means, care being taken, on the part of the makers in the first place and at the blending-house in the second, that the grades are distinct, and that by good judgment each quality is maintained nearly as possible at a uniform point. I am bound to add that I do not believe blended butter can equal the finest farmhouse brands—which are now of very high quality—although very little of such butter is made. Nor can it be expected that by mere manipulation a number of brands of butter—made from cows of different classes fed upon different foods, and managed under different condition—should ever equal a single brand produced from first to last by one skilled person, who is always endeavouring to increase his reputation by the improvement of his wares.

IMPORTANCE OF RIPENESS IN CREAM.

In my remarks upon this branch of the subject of dairying cannot refrain from adding the results which have been obtained Dr. Babcock at the Wisconsin Station. He has shown by a number of valuable tests, which were made to determine the relative value of sweet cream and of sour cream for butter-making, that whereas only 13.48lb. of butter were obtained from 100lb. of sweet cream, 17.11lb. were obtained from 1001b. sour cream. The average time occupied in churning the sweet cream was thirty-two minutes that of churning the sour cream was twenty-nine minutes. According to analyses which were subsequently made, 11.69 per cent. of butter-fat was obtained from the sweet cream, and 11.49 per cent from a mixture of sweet and sour cream. The sweet cream contained a trifle less water and solid matter other than butter than the sour cream contained. It is also shown that an average of 79.79 per cent, of fat was recovered from the sweet cream, while 91.64 per cent, was obtained from the sour cream. These details very conclusively show how great is the loss which occurs when sweet cream is used for butter-making, and, further, that there is no diminution of the loss when sour cream is added to it. Experience has shown those who have much to do with practical dairying that every lot of cream should be ripened before churning. Ripened cream contains lactic acid, and if, as is believed, the lactic acid is the valuable assistant which enables the dairyman to obtain a larger yield of butter, it is evident that the cream must remain a certain time to enable that acid to develop. In an experiment made to test whether the addition of the lactic acid of commerce to cream would have any effect, Dr. Babcock found in three experiments, in which fresh cream, fresh cream with lactic acid added, and ripened cream were respectively churned, that the percentage of butter obtained was 14.85, 17-18, and 18.94 respectively. A gain was therefore effected by using the acid, but not so great as that obtained by the ripening of the cream, which in this instance was, it appears, sourer than that to which the acid had been added. In another series of experiments it was found that there was a gain of 1.95 per cent, of butter by the use of acetic acid, and a gain of 2.34 per cent, by the use of ripened cream, whereas there was a loss of 0.59 per cent, by allowing fresh cream to stand without souring. In other experiments which were made at the Wisconsin Station in 1885 it was shown, with regard to the distribution of fat in milk used in butter-making, that for each 100lb. of fat contained in the milk there were found—

I have frequently urged this point in different parts of England, and have shown that in some cases, by carelessness or want of knowledge in cream-raising or cream-extraction, a third of the butter has been lost, so that by bad ripening of the cream in addition Early one-half the butter-fat which the milk originally contained had passed away in the skim-milk and the buttermilk.

CREAM-PRESERVING.

In the autumn of last year I made an experiment in order to test if it were possible to preserve cream for any length of time. Five half-pints were taken direct from the separator and put into bottles. No. l was scalded to 160°, and a dessert-spoonful of liquid preservative was added. This was one of the preservatives of commerce which is principally composed of boracic acid. It was prepared by adding 3oz. of the powder to one pint of water. No. 2 was simply scalded to 160°. No. 3 was a duplicate of No. 1. No. 4 had the preservative added only, in the same proportion as No. 1. No. 5 was the same as No. 3, but two drops of rennet, mixed with a small quantity of water, were added, to ascertain the effect which coagu lation would have on the retention of the

sweetness. The five bottles, which were carefully fastened down but not hermetically sealed, were placed in cold water, which was maintained at form 48° to 50°, in a cave some 18ft. below the surface of the soil. Sample No. 2 was sour in twenty-four hours. The cream in No. 4 had slightly changed on the 24th August, upon which date the three remaining samples were perfectly sweet. These three samples remained sweet for six weeks, during which time they had been frequently tested Upon the insides of the bottles—for they were not quite filled—mould had grown, and this gradually covered the surface of the cream, but below the mould the cream was still sweet.

TRANSPORT OF CREAM.

There is a plan which, I understand, has been tried in the colony by means of which the cream produced in the country districts is transported to a seaport town for conversion into butter. This appears to me to be a system worthy of extension if it is possible for the cream to reach the town within a measurable time after its extraction from the milk without its temperature being raised too high, and without the expenditure of too much money for tranaport When butter is carried long distances in a warm climate, unless by rail and in cold-chambers, it is liable to be seriously affected by the high temperature to which it is exposed. But there is not the same danger in connection with the transport of cream, which should be thoroughly cooled before despatch, and which, if placed in suitable vessels, would arrive at its destination in a fit condition for churching. In this case the butter could be shipped into the cold-chamber of the vessel immediately it is packed, thus avoiding all risk of deterioration by travelling across the country in slow stages.

BUTTER-FACTORIES.

There are numerous gentlemen in Ireland who take considerable interest in dairy-work. Among these is Mr. G. L. Tottenham, who very kindly furnishes me with the following data with respect to his factory. He says that an average quantity of 1,400 gallons of milk is dealt with in summer (2,000 gallons on Mondays), while in winter the quantity drops to 500 gallons every second day in the week, the dairy there are nine persons engaged, and there are ten recognised centres for the collection of the milk along the various roads for those who do not bring it themselves. One farthing per gallon appears to be charged for the collection, this sum being deducted from the fortnightly account. Mr. Tottenham says that, in order to pay all expenses, interest upon capital, and to provide a percentage for a sinking fund to pay off the original expenditure, it takes from 2¼d. to 2½d. per pound in summer and 3d. to 3¼d. in winter. The separated milk and the buttermilk, to the extent of five-sixths of the quantity brought, go back to the farmers. The sum paid for the cream is at the rate of 8d. for that obtained from twelve quarts of milk, this being the lowest summer price, up to 1s. for the cream from ten quarts, which is the highest winter price. At midsummer a requires the cream from twelve to thirteen quarts to make a pound of butter, this falling in November to from nine and a half to ten quarts. The milk-figures are interesting as showing what is done under a system which can only be compared to the *fruitière* system in Switzerland.

From the manager of a small factory, who deals with 300 gallons of milk per day, three persons being employed, I learn that 6d. per gallon is paid in summer and 8d. in winter. Both cheese and butter are made: the former realised 7d. per pound, and the latter 1s. 5½d. The skim-milk is either made into cheese or retailed in the neighbourhood

In a Dorset factory where 190 gallons per day are received the milk is paid for at the rate of 6d. per gallon in summer and 8d. in winter, and sometimes 7d. during the latter period. The skim-milk is partly sold, the unsold portion being used for pig-feeding.

A Cumberland factory-manager states that he receives from 400 to 500 gallons of milk daily, except when cheese-making is going on, when he receives from 200 to 300 gallons. Twenty gallons of cream per day are also received, together with several hundredweight of butter from farmers who skim their own milk, giving the skim-milk [*unclear:* on] their calves. The farmers who deliver the milk take back one-third in separated milk for their calves. The balance of the skim-milk is sold in the large towns of the North of England. The manager employs a foreman, two juniors, and an engine-man, and his son is also partly engaged in the factory. The price of milk varies from 5d. per gallon for June and in July, 5½d. in August, 6d. in September 6½d. in October, 7d. in November, 7½d. in December and January, 7d. in February, 6½d. in March, 6d. in April, and 5½d. in may Upon the average of the year it takes from 25lb. to 28lb. of milk to produce each pound of butter, and 10lb. to 12lb. for 1lb. of cheese, while for skim-milk cheese from 10lb. to 14lb. of skim-milk are required. The average price paid by the farmer for the skim-milk which he takes home is 2d. per gallon, but a higher price is obtained for that which is sold elsewhere.

One of the best-conducted factories in the country, although a new one, is the Glynde Factory of Viscount Hampden, late Speaker of the House of Commons. The milk received daily is about 600 gallons, but the factory

is being extended in order to provide for the reception of a much larger quantity, the demand for butter and separated milk being greatly on the increase. The staff is composed of a manager, an accountant, a boy-clerk, an engine-driver, two dairymaids, three men, and two boys; but it is evident that much more work could be done without an increase. The milk is unusually rich, as there are some little herds of Jerseys in the neighbourhood. A pound of butter is sometimes obtained from [*unclear:* a] gallons of milk, at other times this reaches 2½ gallons; but there are occasions upon which more milk is required. On one occasion Lord Hampden's Jersey herd was tested, 36 gallons of milk being passed through the separator, 21lb. of butter being made from the cream, and each pound obtained from 6 6/7 quarts of milk. The price of milk varies from month to month: the lowest price during the summer was 7d. per gallon, but lower prices were paid for some surplus milk. Since the 1st September the prices paid have been 7½d. for shorthorns' and 9½d. for Jerseys' milk. The manager believes that a profitable business of this kind can only be conducted upon an immense scale, reducing the items of expenditure both in manufacture and distribution to the lowest point. The price made of the butter produced in this dairy is high, but it is probably owing among other things, to the tasty manner in which everything is done. The butter-paper, for example, in which each pound is wrapped, is prettily printed in gold and colours, with the words "Pure and fresh Glynde butter." On another label are the words "From Viscount Hampden's dairy, Glynde." The labels for the cream-jars are equally attractive.

The labels provided for the packages are in bright colours, and upon them details are printed which act as first-rate advertisements. Circulars are sent out in which the dairy is described and the value of separated milk explained.

One of the most successful butter-factories in Great Britain is that of the Carse of Gowrie, at Dundee, which is under the management of Mr William Smith. Here the average quantity of milk received is 2,000 gallons daily. A large proportion of the skim-milk is sold to the public, but a considerable quantity is used in the bakery instead of water. The manager says that if other persons interested would push the manufacture of bread with skim-milk, there would be more room for butter-making, and for paying 7½d. a gallon for the milk. The company receives 4d. a gallon for all skim-milk that goes into the bread, and about the same price for what is sold to the public, but any surplus, which is necessarily made into cheese only returns 1½d. per gallon. One thousand gallons of milk are separated per day. A portion of the cream is sold, but the remainder is converted into butter, all of which is sold fresh at 1s. 6d. per pound. The cost of separating the cream, making and retailing the butter, is ½d. per pound. Milk, whether sweet or skim, which is converted into cheese, is worked in this way at a cost of ½d. per pound. There are a large number of hands employed, but it would not be fair to charge their wages against the cost of manufacture, as the business is a retail as well as a manufacturing one. The subject of bread-making from skim-milk is of the greatest importance. Mr. Smith sent me three samples—one of bread, and two others of Scotch cakes or scones. Finer samples of bread would be impossible to obtain. The loaves are made with skim-milk, and the scones with buttermilk. On some days there are between three thousand and four thousand of these sold in the town. Moreover, the prices were considerably lower than that of bread of a similar class which is sold in London. The milk used in the loaves is taken direct from the separator while perfectly sweet. Any acidity which has developed in the milk would be likely to spoil the whole batch of bread. Below are the results of two analyses made by Dr. Stephenson McAdam, of Edinburgh, the one of bread made with water, and the other with skim-milk. There is, it will be noticed, less moisture in the skim-milk bread, but considerably more flesh-forming and four times as much fatty matter, thus showing that it is decidedly more nutritious. Independently of its value from this point of view there is no comparison in the delicacy of the two foods; while I can testify from the samples sent to me, which were three days on the road, that not only does the bread keep well, but it is extremely edible when three or four days old.

Private Factories.

Among private dairies, the following, which I have been able to inspect, may be tersely referred to in order to show what can be done by the adoption of the most perfect system of manufacture, the dairy of Colonel Curtis Hayward, near Gloucester, is in charge of a dairymaid who won an important prize at one of the Bath and west of England competitions. The herd of cattle comprises short-horns and Jerseys. The milk is separated every morning in the Laval machine, the cream is carefully ripened for churning, and the whole process is conducted with scrupulous care, skill, and cleanliness. Nothing is given to the cattle which can in any way affect the flavour of the butter, which has been frequently exhibited and awarded prizes. It seldom, if ever, varies in quality or colour, and is made up in the smartest possible form. It has thus obtained some notoriety, and Colonel Hayward is enabled to sell it at an unusually high price. In consequence of the reputation this butter has gained, Colonel Hayward was asked to read a paper on butter-making in the Cork market during the visit of the British Dairy-farmers' Association in 1887.

The dairy of Mr. Christopher Wilson, of Rigmaden Park, Westmoreland, is equally well arranged. The

separator, the churn, and the butter-machine are worked by water-power with the assistance of a turbine. There is also a milk-testing machine in which small samples are subjected to centrifugal force. Mr. Wilson has trained his dairymaid, and is able to turn out a first-rate article in large quantities from the milk of his own shorthorn herd.

Mr. Cecil Molyneux Montgomerie, of East Harling, Norfolk, converts the milk from his own cows and that from some of his tenants into butter. He has the assistance of two persons—a man and a woman who have been well trained, and who do their work thoroughly. The cream, which is obtained from a Laval machine, is ripened in white earthenware jars in a separate apartment, which can be cooled in summer. After churning the butter-grains are placed in the delaiteuse, this machine extracting the moisture from it. It is then made up for despatch to London and Norwich without being placed upon a butter-worker. The motive-power in this dairy is a Stockport gas-engine, which has given every satisfaction. It can be started in a few minutes, and can practically be left to itself.

In the above instances landlords have shown what can be done by a careful study of the subject. The next instance is that of a tenant-farmer living in my own neighbourhood. This gentleman, at his wits' end to know how to farm with profit under present conditions, was induced to turn his attention to the dairy. An apartment was prepared with a good tiled floor and smooth whitewashed walls. Upon one side he arranged a number of Jersey creamers, through which cold water is constantly passing. He obtained good shorthorn cows, and feeds them with considerable care, with the object of obtaining a rich and abundant milk-supply. He learned how to do the work himself before intrusting others either with the process of churning, skimming, or making up his butter. In the course of a few months, by the exercise of some energy in making his produce known, and especially by exhibiting it, he was enabled to reach the highest price in the neighbourhood, and to sell 100lb. a week. This success induced him to commence the sale of the skim-milk, and it is probably true at this moment that the rent of the farm, upon which grain is the principal crop, is being paid by a dairy of very moderate dimensions.

Butter-making is a subject which is not difficult to master. My friend Professor Carroll, when Director of the Minister Institute, where butter-making is largely taught to the peasantry of the South of Ireland, sent a number of exhibits to the dairy-show which was held in Birmingham some years ago. This was before so much work had been done in spreading a knowledge of practical dairying throughout the country. The result was that the Minister School took a large number of the leading prizes. From year to year I have made it my business to ascertain from some of the principal exhibitors at the London Dairy-show what systems they follow, and I find that, as a rule, they all recognise one (the proper) system, although they may vary it in some unimportant points. The champion butter 1887 was made in the dairy of a clergyman in Bucks from the milk his Jersey cows, whose food consisted only of clover-hay, oats, bran, cotton-cake, and grass—all, be it remarked, suitable butter-foods. The butter was washed while in the grain, the salt being added to the cream. The next important prize-taker at that year's show was Mr. Tanner, a Sussex farmer, who milks from forty to fifty cows, which are cross-bred, but strongly marked with the Guernsey breed. These cows get 3lb. of cotton-cake per head per day during the whole year. The butter in question was therefore made from grass and cotton-cake, as the cows were not taken in until November. The same maker took the prize for potted butter at the June show of the Bath and West of England Society, the principal food of the cows at the time having been mangels. This gentleman uses a separator and a butter-worker. Numbers of other instances could be given of farmers as well as of landowners who, by studying butter-making for themselves, have been able to obtain prizes in public, and high prices for all the fine butter they can produce.

Factory and Creamery.

There have always been differences of opinion as to the relative merits of the factory and the creamery systems. My own knowledge of the creamery system extends only to details I have obtained from visits to one or two small creameries in Ireland, but I have from time to time received much important information from the United States, where creamery-work has been very largely conducted. If the cream from each contributor is paid for at the same rate per gallon, it is evident that the owner of inferior cattle, or the man who feeds less liberally than his neighbours, will receive a higher price than he ought to do, and, *per contra*, those who supply the richest cream will receive less than their share. Figures based upon tests made to ascertain the proportions which the different farmers ought to receive have been from time to time published; but, the facts being recognised, it is not worth while to reproduce them. If, however, it is determined to pay each contributor of cream in proportion to its butter-value, the expenses of the dairy are increased on account of the necessity of churning each farmer's cream separately. This is the practice adopted at the creamery at Kenmare, in the South of Ireland. This creamery, which is a plain building, built of wood and covered with corrugated iron, cost some £600. It is managed by a dairymaid who was trained at the Munster Dairy-school. There is also a clerk, an

engineer, and an assistant dairymaid. The farmers, who are in a very small way, reside within a radius of five miles, and received in the year prior to my visit from 11d. to 11½d. per pound for the butter made from their cream. The cream arrives once or twice weekly in various quantities, bad cream being refused. The churns used are of the barrel and Holstein type, and are seven in number, the whole of the power-work being done by steam. The butter is divided into two qualities, the first of which is salted at the rate of 1oz. to the pound. During the cheese season the butter has fallen as low as 6d. per pound, but in 1886 it varied between £4 4s. and £6 16s. per hundredweight. It is evident that in a case of this kind considerable loss may be entailed upon the farmer by the production of inferior cream. It is not surprising that such cream finds its way to Kenmare, for on our journey through the country we were shown into several of the cabins of the small Kerry farmers, in almost all of which the milk was exposed in the living or bed-room, while in one or two cases it was actually set beneath the bed.

Upon one of my visits to the Continent I was invited to stay four-and-twenty hours with M. Baquet, the Maire of a commune near Gisors, Eure. He is a farmer and a purchaser of milk from large numbers of the small occupiers in the neighbourhood. M. Baquet has a first-rate dairy, and he is the inventor of the delaiteuse, the centrifugal machine for the extraction of moisture from butter His dairy is under the management of his sister, and it is well fitted with a Holstein churn, a Laval separator, a delaiteuse, a butter-worker, and a butter-press or mould, all of which are worked by a steam-engine. The milk of the evening is separated early the next morning, after which the morning's milk follows, the separation taking place at 77°. The cream is kept in a large tank until ripe but as it passes out of the machine it is cooled down to 60° by passing over a Lawrence cooler. The butter is brought in grains in the churn and thoroughly washed. It is then dried in the delaiteuse, slightly worked in the butter-worker, hardened for a short time, and then made into kilogrammes and half-kilogrammes in the butter-press, which stamps out the exact weight of the butter, at the same time printing it and moulding it into form. Great pains are taken to remove moisture from the butter. The butter is sent to Paris that which has been moulded being to order, the rest being sent is the lump and sold by auction. M. Baquet pays for the milk in proportion to the prices he obtains for the butter. Upon my proposal the Council of the British Dairy-fanners' Association provided a scholarship for a young man to go to France and learn something of the French system of butter-making; and upon the suggestion of Mr. Jenkins, the lamented Secretary of the Royal Agricultural Society, who was of such great service to me in affording me the means of obtaining information and instruction on the Continent the selected pupil was sent to M. Baquet.

During a visit to M. Byron at Meulan, Seine-et-Oise, who is one of the leviathan butter-and-milk suppliers of Paris, I was shown a battery of six separators, which were supplied from a large vat 5ft. in height, into which the new milk was poured for separation. In front of the separators were two troughs, into one of which the cream, and into the other the milk, flowed, passing away into the tanks. The cream was slightly soured for churning. The churns are the ordinary Normandy barrels, 26in. in diameter, 36in length, and with mouths 10in. wide. Circular but convex butter-workers were also used. The cream is churned at 60° in sum- mer and 63° in winter, the milk being heated for separation to 77° Great pains are taken to provide means for cooling both milk and cream. There is a large tank in which, by the adoption of a steam-power cooling-machine, the water is maintained at 38° in summer. It was about 43° upon my visit. There is also series of tanks, from which cold water is continually flowing. These tanks are level with the ground, and side by side; the water enters by means of a horizontal pipe fixed from end to end and having a slot in its side. As the first tank is kept full it overflows into the second, the second overflowing into the third.

Another important butter-making establishment is situated near Orbec, in the Department of Calvados, but on the borders of Eure. Here a rich and exceedingly clever man has built one of the best and most perfect dairies which it is possible to see. He manufactures Camembert cheese and butter, and in the middle of the day the work in the butter-dairy is completed and the whole place is clean and smart, the butter being packed in numerous receptacles of various sizes waiting despatch. The butter-dairy is divided into two apartments: at the back is the making-room, with the churns, worker, and butter-trough, as commonly used in France; in the front is the separating-room, with its battery of five Lavals, with their intermediate machines, on the further side of the apartment, the entrance is in the corner to the left, while on the other side of the machines, to the right, is a platform upon which stands a vat, into which milk is poured on its delivery by the farmers from whom it is obtained. In order to pass from the separating-room, therefore, a bridge is erected which enables the workmen to pass from the platform right across the belts of the machines. Upon the platform is an ingenious lift which is worked by hydraulic power, and which, necessary, drops the cans of milk into a cellar below, and lifts them up again at will. The whole place is lighted by electricity, the dynamo being fixed in an apartment to the left of the separating-room. The details of the Camembert cheese-making apartments are still more interesting, and the arrangements ingenious. The same plan of manufacture is followed in this as in other dairies of the new type—and it may be added there are two or three types even in the best butter-making departments, such as Calvados, Eure, and Manche, in which the celebrated towns of Isigny and Bayeux are situated. The Isigny makers have the advantage of being able to ship their goods direct to England. The system followed in blending

is referred to elsewhere, but it may be remarked that upon the farms which I have been able to see in this interesting district there is one custom which, although conflicting with modern ideas, demands some notice. It is a system which is very old, and which will not be easily abandoned. The dairy is erected behind the kitchen-fire; a shallow gutter, through which cold water is continually flowing, runs round the apartment when it is possible. In this gutter the milk-vessels are placed. They are of earthenware, and from 15in. to 16in. in height, and conical in shape, the top being much larger in diameter than the bottom. When the cream is believed to have risen in the cold dairy, hot air is passed into it from the warm kitchen, sometimes by an arrangement in the flue. The rapid change causes the cream and the milk to coagulate, and the farmers' wives have shown me how they remove the cream, practically in slices, from the thick curd beneath it. The vessels of curd, when creamed, are taken to the calf-house, and the calves consume the curd with evident relish. The butter made upon this system was extremely good in flavour, although I have not had an opportunity of testing its keeping-qualities. There is much yet to be learnt with regard to the souring of cream and the effect of over-ripeness or acidity in the keeping of butter. I would therefore urge makers, especially those who manufacture for shipment, to make tests for themselves, taking every care that the tests are conducted with precision and that nothing is left to chance. I believe that at the present time it is impossible to lay down any rules, however much a belief may be based upon the result of experiments of this kind. In my own dairy, for example, butter has been made which has been exhibited several months afterwards in a perfectly sweet condition; on other occasions it has been similarly made and kept, and after the lapse of a shorter period has been exhibited, but from some unascertained cause has lost the delicacy of its flavour. The presence of buttermilk, although it be but in minute quantities, undoubtedly leads to decomposition; but it must not be forgotten that if the whole of the buttermilk were removed it would still be possible to spoil the butter by the use of impure water in washing it by means of dirty utensils, a foul atmosphere, inferior salt, or even by storing it in an apartment where it would be subject to contamination.

In the great factory at Berlin under the direction of M. Bolle where 37,000 litres of, milk were daily received at the time of my visit a few years ago, the whole of the cream obtained by separation was soured for the next day's churning. Here 100 litres of milk yielded 3½ kilos, of butter, or about 3½ per cent. In this case it was the practice to sell the butter by retail at three prices. When quite fresh the highest price was charged, but the butter returned was worked up and sold the next day at the second price; when returned a second time it was again worked up and delivered at the third price.

I cannot too strongly impress upon those who are interested the great value of the system which is pursued upon some of the large Danish farms. Having had opportunities of seeing the results they obtain in the way of instruction, I am the more impressed with the value of the course pursued. A herd of cows is, let us assume divided among six or eight young men, who are either paying or working pupils, and who are directed by either the master or the foreman. They feed and milk the cows, an equal number being given to each, and they are induced to strive to produce the best weekly result. Their milk is delivered to the dairymaid, who, with her assistants or pupils in the dairy, separates the milk, prepares the cream for the next day's churning, and keeps her own record. Every person engaged in this work is provided with a printed record-book, in which every detail is set down throughout the entire year. It is obvious that much may be gained by those who set down the results of daily practice. The owner is shown from time to time what quantity of milk is required to make a pound of butter, or what percentage of butter is obtained. I have kept such a record for years, and can therefore appreciate its value. The butter ratio varies between 3 and 6 per cent.; but, as a rule, I find that there is an explanation for every variation. And if it can be shown, as it should be, in columns prepared for the purpose, what system of feeding is being pursued, when cows calve, what the weather is like, and what other influences occur which may affect the quality of milk, the owner of the herd will be in a position to know exactly what he is doing. Such a record should be made up weekly, and any unusual change noted and at once examined into. It would be possible to mention scores of instances in which, in the absence of a record, most unprofitable work has been done, while the owner knew nothing about it at the time.

REFRIGERATION.

In order to test whether a special system of refrigerating butter was necessary during its transport from Denmark to England an important series of experiments was conducted by Professor Fjord, of Copenhagen, during the years 1885-86, and the results are perhaps the most important of any which have hitherto been furnished in connection with this question. That a high temperature during transport is detrimental to the quality of butter is undeniable, but professor Fjord found that there was not a consensus of opinion as to whether the quality and state of preservation of butter is better at a lower temperature than is presented by a good cellar in summer, by an apartment in a vessel which is below the level of the sea, or in Railway-wagons during the night. On the other hand, it was the opinion, as it is still, that butter preserved for some time by refrigeration rapidly

spoils when placed in the hands of the merchant or the consumer under ordinary conditions. The Danes in particular suffered severe losses by refrigerating butter for the English market, but it undoubtedly often happened that butter which had been refrigerated, and which spoiled more rapidly than other butter which had not, was of an inferior quality at the outset. As refrigeration arrests decomposition in butter, it is evident that it is more difficult to judge when refrigerated, hence it is of importance to know, relatively speaking, how a good and an inferior butter keep after removing from the cold-chamber. Mr. Fjord was assisted in Copenhagen by Messrs. Busch, Routzou, and Plum, all experts, who judged the butter from day to day during the experiment. The English houses of Messrs. Faber and Co., of Newcastle, and Messrs Sorenson Brothers, of London (with the latter I am well acquainted) placed their warehouses at Mr. Fjord's service, also inviting three merchants in each town to test the butters during the experiment The principal portion of the work was executed by Mr. Storch, the director, and Mr. Lund, the assistant, in the laboratory of the Institut Agronomique, in Copenhagen—an institution of the greatest value to agriculture, and over which Mr. Storch himself very kindly showed me a few years ago. The butter was furnished by three firms living in Zeeland, Funen, and Falster, and by three factories in Falster and Jutland. The butter itself consisted of ninety-four barrels, each containing about 30lb. The method of manufacture was in no case altered, but the articles represented the exact type of ordinary produce. Each sample was divided into two lots, one being sent in the ordinary way of business, while the other was refrigerated or transported into the cold-room. There were four series of experiments in the six dairies. The first series was in 1885, and the second third, and fourth in 1886. In Denmark the barrels were always sent by express and by night-trains, while the butter sent from Newcastle to London left at three in the afternoon, and arrived at five the next morning. The butter which arrived at the laboratory at Copenhagen was immediately placed either in a cellar about 4ft. below the surface of the soil, or in a cold-room. The boats by which the butter was sent left Copenhagen on Thursday evening, and arrived at Newcastle on Sunday evening. On Monday the barrels were respectively moved to the cellars of Messrs. Faber, and despatched to London. Both in London and Newcastle the samples which had been preserved by ice were always placed by the judges two days before the tests, under the same conditions of temperature to which ordinary consignments are required to be submitted. Now we come to the questions which were posed by Mr. Fjord: "Are the samples of butter preserved by refrigeration of less value, after they have remained two or three clays in an ordinary cellar, than the samples always preserved in the cellar and without refrigeration?" Again, "Is it necessary to admit that the refrigerated samples, which are described as 'good' immediately they are removed from the cold-room, lose their quality rapidly, and more rapidly than those samples which are preserved in the ordinary way?" For judging, the samples of butter were arranged so that the judges were not able to tell their age, where they were produced, or whether they had been preserved by means of ice. Each judge was required to give his opinion alone, and without communication with any one, and both judgment and price were made in accordance with the custom of the country. The classification was as follows: "Excellent quality," "Very good quality," "Good," "Good enough," "Mediocre." The prices are not given in the tables arranged by Mr. Fjord, who gives figures to indicate their proportion of value. The first series of experiments in 1885 was with butter obtained from two farms designated A and B. At each farm three days' butter was churned and divided into two lots. It was then immediately sent to the laboratory at Copenhagen under ordinary conditions, The temperature (Fahr.) of the cellar and of the cold-room was fallows :—

We shall now see the opinion given by the judges at each period. At the first farm, A, the three lots of butter were respectively forty-six, thirty-two, and thirty-nine days old. At the first testing each sample of the refrigerated butter was classed "Very good," and received the maximum number of points (100), while the figures placed against the samples merely kept in the cellar varied between 92.6 and 93.6, and were classed as "Good" only. The second test, a week afterwards, proved the refrigerated butter to be exactly as before, while the other had decreased to an average of 90.8 points, and was considered only as "Good enough." In the first instance the difference in the price of the two samples was 6.5 ore, and in the Second 9.8 ore (100 öre equal to 1s. 1½d.). From the second farm the samples were from thirty-two to thirty-eight days old. The preserved samples of butter in each instance and on each occasion were pronounced "Very good," and received 100 points, while the other samples were classed "Good" in each instance, and received an average of 94½ points at the first and 97.9 points at the second test. The difference in prices between the two samples was less than in Those of the first farm.

The samples refrigerated were found to be as follows :—

The second series of experiments (June and July, 1886) was made with butter furnished by farms C and D, and always in two lots from each churning. The temperature of the cold-room and of the cellar was as follows :—

On farm C the five samples tested varied in age from nineteen to thirty days. The refrigerator-samples at each test were classed as "Very good," and received 100 points, while the ordinary samples received an average of 93½ points on the first and 89.2 points on the second test, each being described as "Good enough;" the

differ- ence in price between the two samples being 5.6 öre on the first and 8.8 öre on the second occasion. In the test of the factory-butter the five samples refrigerated varied in age from eighteen to twenty-nine days; they were classed "Very good," and received 100 points on each occasion, while the other samples were only classed "Good" and received 95 points on the first and 94 points on the second test the difference in the prices ranging from 4.3 to 5 öre per pound. A similar table was also furnished showing the appreciation of each judge—and there were three in this instance. The refrigerated butters were found to be fifty-five times the best and five times equal, but in no instance inferior to the ordinary butters.

The third series, 7th to 13th July, 1886, was conducted in London. The butters were despatched on Wednesday from Denmark, reaching Newcastle on Thursday evening, and going on direct to London. The butters were from the same farm and factory, C and D. They varied from nine to fifteen days old in the case of C, and the London judges gave 100 points to the refrigerated and 93.9 to the other samples, showing a difference of 5.6 öre per pound; while the factory-butter of D of similar age also obtained 100 points for the refrigerated, and only 96½ points for the unpreserved samples. The cooled butter was found by the English judges to be ten times the best, five times equal, and three times inferior.

We come now to the next series, the butter being provided by two factories, E and F. E provided five samples, eleven to twenty days old, and 100 points were given on each occasion to those which had been refrigerated. On the first day it was classed "Very good," while on the second it was found only "Good." The ordinary butter was classed "Good" on the first and "Good enough" on the second test, receiving 94 and 92 points respectively, and showing a loss in price of 5.5 and 6.8 öre per pound. Similar results were obtained in the case of the dairy F. The preserved butter was found by the three judges fifty-seven times better, three times equal, but on no occasion inferior. An experiment upon the butter of the dairy factory E between the 11th and 20th August, 1886, was of a similar nature to those which had preceded it, but in one instance the butter of the 20th which had not been refrigerated was found of superior quality. The three judges, however, found the refrigerated butter twenty-eight times the best, and twice inferior. Dealing with tests made at Copenhagen, Newcastle, and London respective the average difference in the prices upon the first test was 5 öre per pound, and upon the second test 4.8 öre per pound. Another table shows that the refrigerated samples were found—

These figures are the result of fifteen tests, eight of which were first and seven second tests. There were, however, three other tests, in which one judge at Newcastle found these butters four times the best, thirteen times similar, and three times inferior; while one judge in London found them three times the best, three times similar, fad twice inferior. Thus fifteen of the eighteen tests by the judges were favourable to the preserved butter, while the three remaining tests give no decided superiority to one lot over the other. Upon the whole series of experiments the preserved butter received an average of 100 points, while the other received only 94.3 points, and in no instance was this classed as "Very good." Dealing with the difference in value upon the whole series, it appears that upon the first tests there was a difference of 5.3 per cent, and the second tests 6 per cent., while the differences in prices was 5.1 ore per pound on the first test, and 5-5 öre per pound on the second. Professor Fjord states that the experiments show that the butter preserved by refrigeration was superior to that kept in the ordinary manner, and, second, that the preserved butter, after removal from the refrigerator, Sept for a week in an ordinary cellar as well as butter which had not been refrigerated. He concludes that if refrigeration is to be Employed in practice, it would be necessary to provide apartments, not only in the boats, but in the dairies and railway-cars, and he believes also that the system will contribute to the renown of the Danish butter upon the English market. It is pointed out, however, that in the experiments there could be no control over occurrences which have as much, or even more, influence upon butter than age : such as the quality of the milk, the acidification of the cream, and the system of churning. It was always found throughout the experiments that the newest butter was the best. In 1879 M. Fjord, who made many observations with regard to temperature, found that the hold of a ship, even where it was below the level of the sea, was always warmer than either the water or the air. These experiments were repeated in July, 1886, when it was found that the temperature in the hold averaged 47.2°, in the sea 46.4°, and in the air 46.8°, while in the ice-boxes it averaged about 36.8° In a second series of observations made during a voyage from Copenhagen to Newcastle the results were very similar. The above details are condensed from a large number of reports which appeared at intervals, but they show in a practical and conclusive form that there are real and, indeed, substantial advantages to be obtained lithe judicious use of ice in the preservation of butter during its transit across the sea.

FACTORY, CREAMERY, OR BLENDING-HOUSE.

In a country like Great Britain, where circumstances vary very considerably, it may be to the advantage of the fanners of one district to support a creamery, and to those in another to contribute to a milk-factory, which may be either co-operative or proprietary.

It may, similarly, answer the purpose of butter-factors in other parts of the country to conduct a

blending-house, receiving the butter made by the small farmers, grading it, and preparing it for the wholesale market. In some parts of the south of Ireland notably in County Kerry, where the farms are poor and small and far apart from each other, and where the cow is the mainstay of the family, it answers the purpose of the small farmers to skim their milk and to take the cream to the creamery once or twice weekly retaining the skim-milk for their pig or their calf. Where convenience for butter-making is deficient, and where there is an absence of skill in the farmer, this plan is more satisfactory than that of making butter at home and selling it to the dealer. In some of those districts of England where butter can be sold at a good price and where the skim-milk meets with a ready sale, a butter-factory answers very well; but the successes which have been achieved by some of these factories are no guarantee that the system is adapted to all parts of Great Britain alike, or to any other country. In the Midland counties, more especially in Derbyshire, Staffordshire, and Cheshire, cheese-factories have met with a fair share of success in many instances. Factories of this type would seem to be better adapted for colonial work than either the creamery or the blending-house. I am, however, of opinion that it would be possible in a butter-making district to combine a system under which the butter factory and blending-house might work together. Whether a factory is co-operative or proprietary, it is to the interest of the farmer endeavour, by careful breeding and feeding, to improve his milk both in quality and quantity. In some instances with which I am acquainted it is the practice to pay a higher price for milk which reaches a certain standard of quality; on the other hand, milk which fails to reach a lower standard is either paid for at a reduced price or rejected altogether. It would be to the interest of both factory and farmer to establish two such standards. Those who deliver milk should be required to produce it of such quality that it will yield 3¼ per cent, of fat. Should they, however, reach 3¾ they would be entitled to and should receive an extra price upon every gallon delivered. It is quite possible that a combination of so few as two or three factories would be unable to maintain an analyst who would be required to make daily analyses of every farmer's milk; but there is no reason why a young man should not be trained by a competent chemist to perform analyses of milk, which a person of ordinary intelligence would speedily learn to do, and, under such constant practice, do with rapidity and exactness. If, however, some half-a-dozen factories combined to employ a chemist, or if they were under one management, this work would be easy, for his time might be divided between the factories in such a manner that each farmer's milk would be analysed at least twice weekly. There is, however, one other plan of greater simplicity, although it requires some care and expertness. This is the system of testing milk for butter-fat by the use of Marchand's lacto-butyrometer. By this plan, 10 cubic centimetres of milk, measured in a pipette, is poured into a long glass tube, a similar quantity of ether is added, and the mixture is throughly shaken and intimately amalgamated. The operator then adds 10 cubic centimetres of alcohol, and again intimately mixes the whole by shaking. The tube is next corked and placed in a bath of water at 104° Fahr., when a fatty solution will gradually rise to the top. The quantity is measured off upon the graduated scale, and reference to a table furnished with the tubes shows the percentage of fat which the sample of milk contained. When carefully worked this system is enough for all practical purposes. In some instances the creamometer is used to test the value of milk, but I have found this test a misleading one, inasmuch as the apparent yield of cream is not always a guide to the quality of milk. In many instances with which I am acquainted milk which has shown a large percentage of cream by the test-tube or creamometer has contained very little butter-fat, and milk which has shown a small percentage of cream has contained a large percentage of butter. Nor is the lactometer or specific-gravity instrument of much value when used alone, for, as is well known, it is possible to abstract cream from, and add water to, milk without altering its density. When used in conjunction with the creamometer, however, this system of fraud can be detected.

In those districts where the temperature does not fall below 55° at any season of the year cheese-making can be conducted with greater success than where there is a positively cold season. This is chiefly to be accounted for by reason of the fact that during cold weather it is necessary to maintain artificial heat not only in the cheese-making rooms, but in the ripening rooms, and I have found in practice that cheese made during a naturally mild temperature, such as we enjoy in England during the cheese-making season, is better than that made under artificial conditions. With regard to butter, however, although it will be admitted that the flavour of that made upon winter food is somewhat inferior to butter made from cows which have been fed upon grass, yet, although it is necessary to make use of artificial heat for churning in cold weather and for separating the milk to the best advantage, winter butter-making can be conducted as successfully as butter-making in summer. It appears, therefore, that in the warmer districts of New Zealand cheese-making might be profitably conducted throughout the entire year, and that in the colder districts the work might be divided between cheese-making and butter-making. Bearing in mind the fact that better work is done in a small than in a large factory, the manager-expert being able to manipulate the curd and practically to make the cheese himself, I believe it would be found to the interest of the dairy-fanners in cheese-making districts to support factories which receive milk from no more than from four hundred to five hundred cows. If from any cause it might be necessary to support a factory of a larger size I believe it would be found advantageous to divide the milk of such an establishment

into two or more lots, each lot being placed under the control of a separate expert For example if the milk of 1,200 cows were supplied to a particular factory I would prefer to employ three expert makers, providing each with the milk of 400 cows. I believe this plan would prove more successful than the somewhat ordinary practice of employing one manager-expert, who could not possibly deal with so large a quantity of milk himself, and whose assistants practically make the cheese. These men, being deficient in skill and knowledge, cannot turn out an article of such high quality as the manager himself would make if the manipulation were entirely in his hands. It is, however, quite possible that it would be more convenient to the farmers if small factories were erected at convenient centres and yet sufficiently near each other to be in touch, so that the manager of each factory might, by constant communication, be enabled to work upon the same lines, and to manufacture as similar an article as possible. In this way they could combine together, not only for the purpose of saving expenses in various directions, but for obtaining analyses of their milk and inspection of the farms from which it is derived. In butter-making districts such a system would be equally advantageous. Farmers at great distances from each other could scarcely be expected to convey their milk daily to a distant factory; but the establishment of small factories in their midst, and yet in proximity to each other, would enable them to send their milk in many instances twice daily There would be an additional advantage. It is probable that a dozen factories under one management would turn out butters which would vary in quality, and which, in fact, could not be consigned to Great Britain as a uniform article. If, however, a blending-machine were erected at the most central of the group of factories the butter from each establishment might be delivered, blended, and prepared for our markets, where its uniform quality would soon be appreciate There would, however, be one other advantage. Were such a system adopted farmers who prefer to make their own butter would have the opportunity of selling it for blending, whether the quanta were large or small; and I conceive that there is no reason why they should not be induced to adopt this plan, more especially where the distances at which they reside from a factory are too great to enable them to send their milk daily. It must not be forgotten however, that in order to achieve good results under such a system the farmer should be required to make his butter upon the system which is adopted at the factory, and to permit his farm, his cattle and his method of feeding to be included under their system of inspection. Although by no means an advocate of the blending system, there are so many in England who are impressed with the successes which have been achieved in the London market by the French blending-houses that I believe it would be to the advantage of colonial butter-makers to make a serious trial of the system.

Tinned Butter.

There are two other, although minor, features connected with butter-blending which are sufficiently important to find a place in this report. In one of the large blending-houses in Normandy I have been enabled to see something of a system which is carried out to a considerable extent. From this factory, situated at St. Pierre sur Dives, a large quantity of butter is exported to Brazil in hermetically-sealed tin cases. The edge of each case is lined with indiarubber, and when filled it is placed upon a horizontal disc, which revolves with great speed. On either side are two smaller discs, which are suspended from above, and which can be brought at will close to the edges of the tin cases, over which they enclose the lid with great accuracy and rapidity. I learned that this machine cost £60, and that the butter arrives at its destination in first-rate condition. Indeed, I was informed by the proprietor, M. Le Petit, that it would keep for eight months. The boxes of butter which are sent to England are branded in a very simple manner. The iron plaque, upon which the necessary words or figures have been produced in casting, is placed upon a hot plate over a furnace, which is so contrived that the flame rushes up on one side an iron division, heating the plate above.

Jars of Butter. New Zealand Shops in Great Britain.

Again, in Denmark I have noticed that several firms send out carefully-prepared butter in earthenware pots or jars, upon which the name of the dairy or factory is painted. The Danish firm of Sorenson Brothers, of London, is sending out this butter to the retail trade, and, I believe, is achieving good results. The practice is also adopted by a large factory in Brunswick which I had the advantage of inspecting a few years ago. This leads me to make another suggestion, which I believe will be found worthy of the attention not only of the Government of New Zealand, but of the large trading organizations connected with the colony. It is well known that a large number of attractive and successful retail butter-shops have been established in many of the large towns in England. I have seen some of these shops, and have been particularly surprised at the success which they appear to meet with at the hands to the public in such towns as Nottingham and Leicester. There is no reason why the butter-and cheese-makers of the colony should not adopt a similar system. They would possess this advantage: that, whereas the Danes supply butter and margarine, New Zealand produce would consist of butter and cheese, and possibly condensed milk.

An Agent in England.

I am also induced to make a further suggestion upon a point of very great importance to the dairy-farmers of the colony. The very great efforts which have been made during the past three or four years to give a prominent position to British dairy-farming, and to impress upon the public the necessity of insisting upon obtaining produce of the very highest class, has been extremely beneficial, and has caused the authorities of other countries who are interested in our markets to take special means to keep in touch with them, and to obtain every species of information which can be of assistance in increasing their sales, as well as in providing what the British public demand. I would therefore suggest that an agent should be appointed in England who is not only skilled in the manufacture of dairy-produce, but who is acquainted with the markets in different parts of Great Britain, and who could from time to time tender such assistance and advice to farmers, factory-men, and shippers as would prove of systematic and practical advantage.

CONDENSED MILK.

Reference has been made to the manufacture of condensed milk During the past winter I received a sample of New Zealand condensed milk, which, although perfectly wholesome and agreeable to the taste, was certainly not marketable in England. It was solid and gelatinous, instead of being creamy and liquid. I examined the sample side by side with a sample of the best brand made by the Anglo-Swiss Company. The difference in appearance was most striking, and I took photographs from the microscope, and subsequently obtained a drawing by a competent artist.

It will be noticed that in the Anglo-Swiss sample the sugar-crystals are small and regular, whereas in the New Zealand sample they are large and irregular in size. I have on several occasions been enabled to see the system of milk-condensing in some of them factories of Switzerland, and in the year 1887 I went to that country to obtain some information for the benefit of a large company which is interested in New Zealand, and which had in contemplation the establishment of a condensed-milk factory in the colony. The following are the details of cost of the apparatus required (Swiss-made) :—

Copper vacuum of 5,000 litres capacity, for heating up to 75lb. per square inch, with vacuum-meter, thermometer, and glass gauge to show the level of milk within, with safety-valve, three stop valves for condensing water, three air-taps for double bottom, one air-tap for the vacuum apparatus, £340; a copper elbow for the top of the vacuum, £16; a shutting-off register for milk, steam, and water, £24; a vacuum of 300mm. diameter of piston with 480mm. stroke, sixty revolutions per minute, for driving by belt, with fast and-loose pulley, and injection-cock, £168; cast-iron condenser with injection-pipe, £23; two copper pans for preliminary heating of the milk, each of 1,500 litres capacity, for heating to 75lb. per square inch, with double-bottom stop-valves for steam and condensed water, a safety-valve, discharge-valve, and three air-taps, £180; two cans with discharge-tap for filling the tins, £16; the cooling apparatus for forty-seven milk-cans, £160; one hundred cans, £112; copper weighing-pan for reception of the milk, £26; two washing-tables with four lever steam-and water-valves, £48; milk-tin-testing apparatus (4) with air-pump, £76. An engine of twelve-to fifteen-horse power is required for this installation, together with two Cornish boilers, each with 60 square metres of heating-surface. The vacuum-pan of 5,000 litres capacity, the size usually adopted, permits of a daily working of 10,000 to 15,000 litres of milk.

For the manufacture of the tins it is necessary to obtain machinery for stamping out the body, the tops and bottoms, and the centre of the lid, as well as to solder the parts together. In the large factories machinery is also used for box-making. In London prices were quoted to me for ready-made tins at the rate of 7s. 6d. per gross in lots of not less than twenty gross. In order to furnish some idea of the cost of manufacturing condensed milk I have prepared the following figures, which are based upon the price of 6½d. per gallon, the price largely paid at some British factories at the time of my investigations, and upon the then price of sugar, 1¾d. per pound. Fine white sugar added at the rate of 10lb. to 100lb. of milk forms a mixture which is condensed until but from 28lb. to 29lb. remains. Of this, 25lb. is used for sale, the residue, which is practically sediment, being given to pigs, for which it is worth at least 1d. per pound. The milk and sugar at the price quoted would cost 6s. 8½d., or about 3¼d. per tin. If we add to this the labour of preparation, the cost is brought up to 3.58d., practically 4d. per tin. Condensed milk can be bought in the English market at from 4d. to 6½d. per tin, the cheaper brands being in all probability made from milk which has been partially skimmed. We have seen the London prices for tins is 5/8d. apiece. This might probably be reduced to ½d. it they were made in the factory, and if tin were obtainable at English prices. In New Zealand the maker of condensed milk has the advantage of being able to purchase his milk at a much lower price than is possible in England, and, indeed, at a lower price than is now paid to the Swiss farmers. On the other hand, I understand that the cost of sugar is considerably higher than it is in this country. In an interview which I had with the director of the Anglo-Swiss Company I learned that in

America a drawback is allowed by the Government upon tin and sugar, and, as this company has a factory in the United States, they are consequently enabled to produce condensed milk in that country at a cheaper rate than they are able to do either in England or Switzerland. It is possible that the Government of New Zealand might be induced to assist the condensed-milk industry in a similar manner. In such a case there is no reason why it should not become an important feature in connection with the agriculture of the colony. I have ascertained, by making a calculation based upon the actual quantity of condensed milk made in one large factory, and reckoning the milk at 4½d. per gallon, the sugar at 1 1/3d. per pound, the tins at ½d. each, and the residue at 1d. per pound, that each tin could be made at a cost of 2.88d. without the labour. In this calculation the milk is supposed to contain 12.90 per cent, of total solids. The following table shows the proportion of the various constituents which are found in 100lb. of milk and 10lb. of sugar after condensing :—

In another instance, 3lb. of milk of the following quality, used for condensing (3.60 per cent, of fat, 3.75 per cent of casein, 4.75 per cent, of sugar, and 0.80 per cent, of ash), was found to contain 0.365lb. of solids without the cane-sugar. In a sample of condensed milk a 1lb. tin was found to contain—

The soldering-machine costs £15 in London, and I am informed that a smart girl can solder fifteen gross of tins per day. The solder used in the process costs 7½d. per gross of tins. The prices paid for milk at the Aylesbury Condensing Factory were 6½d. for the six summer months, 7½d. for two months, 8½d. for two months, 9½d. for one month, and 10½d. for one month. These prices, I believe, have been recently slightly reduced.

Norwegian Milk.

I find by reference to official Norwegian statistics that the price of condensed milk in Norway has fallen from 0.90 crown (10.65d.) in 1882 to 0.75 crown (9¾d.) in 1886 per kilogramme. Some idea of the quality of Norwegian milk may be obtained from the following figures, which were kindly sent me by Mr. Tobiesen, one of the chief Government officials in agricultural matters. Upon one farm the milk varied in quantity from 10,800 litres in July to 27,100 litres in May. The lowest quantity of milk required to make a pound of butter was 22.59lb. in October, and the highest quantity was 26-20lb. in August. In another case the average ratio was 24.77lb.; in September it took 21.52lb., and in December 26.92lb.

Milk-contract Stipulations.

Whatever line of business is conducted at a factory or creamery, certain stipulations should be made with the farmers; and, if contracts are made for the supply of milk at a given price, it would be convenient that these stipulations should be included in the form of contract. Each contributor of milk should be required to maintain milk of a certain quality, to guarantee its purity and wholesomeness, to undertake that no milk should be sent from cows which have calved within seven days, or from cows which are unwholesome or suffering from any affection of the udder; that he will at once apprise the manager of the factory in case of disease breaking out among his cattle, or among his own family or the families of his employès; that he will supply his milk in absolutely clean utensils; that he will use foods which are approved by the manager; that he will give free admission to any person authorised to inspect his farm or cattle on behalf of the factory; that he will deliver his milk by a certain hour, as may be determined (and in butter-and-cheese factories that he will repurchase the whey or the skim-milk at such a price and in such quantities as may be arranged between himself and the manager); and that he will sell his milk by weight.

Pig-feeding.

There are few factories where the whole of the skim-milk is taken back by the farmers, and, as the manufacture of skim-milk cheese is not a business which can be recommended for extension in the colony, it appears to me to be necessary that a piggery should be established in connection with each factory, and it may ultimately become a question whether it may not be advisable to establish bacon-factories, which are most successful in Ireland, and which are extending in the dairy districts of Denmark and in the north of Germany, whatever may be done in the future, there is little doubt that it will be found most advantageous to employ the best breeds of British pigs, such as the Large and Middle White Yorkshire, the Berkshire, and the Tamworth, for the improvement of the swine of the colony. I have endeavoured to show in "The Book of the Pig" how pigs may be bred and fed with economy, and, as there can be little doubt that for conversion into bacon the half-bred pig is one of the best, if not the best, animals which can be employed, it will be found necessary to select one or more of the pure breeds for the purpose of regular crossing. The whey obtained from a cheese-factory is a valuable food for swine, and in England is estimated to be worth at the rate of £1 per cow per annum. Skim-milk is of much greater value, and in pork-production is probably worth from 1d. to 1¼d. per gallon, in England. Combined with maize it is one of the best foods which can be given to pigs. I must not, however, omit

to mention that the whey which has passed from the cheese-vats usually furnishes a large percentage of butter, which should be extracted as early as possible. If the whey is allowed to become sour before the butter-fat is removed from it, the butter will not be worth so much per pound, hence the necessity of extracting it while the whey is sweet. I have made some experiments in this direction by passing the whey through a centrifugal machine, and the results have been sufficiently good to warrant further and more extended tests being made. It is possible to make whey-butter almost equal in delicacy of flavour to that obtained in the ordinary way.

BUTTER-MAKING COMPETITIONS.

Butter-making competitions have been introduced in connection with agricultural and other shows in different parts of this country, and doubtless they have accomplished very beneficial results. The earlier competitions were somewhat primitive in their character, but of late experience has enabled both judges and committees of management to introduce features which are calculated to achieve more perfect results, and to produce a better impression upon the public who witness them. It is customary to offer prizes, in value from £1 as a third prize to £5 and even £10 as a first prize; silver medals, and in a few instances gold medals, as champion awards, being given in addition. At the larger competitions classes are provided for males and females, each sex competing alone; besides which there are classes in which the winners in the two sections compete together for a champion prize. The committees generally prevent churn-makers or -sellers, or their assistants, from competing; and sometimes the female class is divided, that farmers' wives and their daughters and dairymaids may compete separately. At one time a great deal of skill was not required to gain a prize, nor did the judges demand so high a standard of ability as they do to-day: but, as competitors have increased and shows have extended, those who were among the earlier winners have had to look to their laurels; and, although they have, generally speaking, vastly improved their work, they have frequently been beaten by younger aspirants, who have made a thorough study of the subject, and learned something of the theory as well as of the practice of butter-making. It used to be supposed, and in some instances it is still believed, that all that was required in butter-making was to know how to handle a churn, and to make up butter in elegantly-ornamented or printed rolls or pats. The older hands who are now before the public as expert makers have, however, had to modify their ideas, to learn how to handle the butter-worker, and to conform to the modern requirements of the judges, who will not award them prizes under any other conditions. Competitors who still appear new to these displays, and who produce their tubs of water in which they knead the butter with their hands after it leaves the churn, would, it is needless to say, have no chance of receiving a prize. The first course to pursue in arranging a com- petition is to issue a prize-schedule, in which the conditions are named, together with the prizes offered. Next there is the appointment of a judge, who should be rather an expert in butter-making than, as used to be the case, a butter-seller, who, perhaps excellent as a judge of the quality of butter, may know little or nothing of the process of manufacture. The judge should be able to give hints to competitors after the competition is over, to point out any faults that they may have displayed, and he should also be able to address an audience which has witnessed the exhibition, explaining the causes of the success of the winning competitors, and of the non-success of the others, giving reasons for the good or inferior work which has been done. If the exhibition is in connection with an outdoor show, such as a flower-show, a marquee or wooden building should be erected. If this is square, a circular space may be railed off, so that the public can see equally well from all parts of the building. A portion of the space outside the ring, however, should be enclosed and provided with seats, which can be let to the public at 6d. or 1s. each, this plan frequently bringing in a sum which goes a long way towards the payment of the expenses incurred. In some cases the floor provided is of wood, with half-inch spaces for the water used in churning to pass through; in others, concrete slabs are laid down and cemented, small drains being provided to carry off the water. It is needless to say that the erection should be as complete and perfect as is possible, in accordance with the sum which can be expended upon it.

Competitors are occasionally required to bring their own churns and butter-workers, but this plan has not led to a successful result. It confines competitors to a small area, as the cost and trouble of bringing these large implements from a distance is too great. Application is usually made to one of the large dairy-utensil makers, who lends a number of churns, butter-workers, and other implements, or lets them out at moderate prices. It is important that all the churns should be alike, although in England, where the competitors are numerous, there is no harm in having two popular patterns; for dairymaids are now becoming acquainted with the leading churns, and in such a case they may be allowed to make their selection, or, if preferences arise which cannot be gratified, to draw for choice, Butter-workers are usually of the rectangular shape, there being little or no difference in the patterns made by various firms. Plenty of small utensils, such as beaters, Scotch hands, thermometers, &c., are provided, although competitors are allowed to bring their own if they prefer them. Butter-boards are also necessary, together with plenty of pails, strainers, strainer-cloths, butter-paper, fine salt, butter-tubs, scales and weights, and tables upon which the competitors are to perform the work of making up. If

the season selected for the competition is during the hot weather, ice is provided, not only to test the skill of the dairymaids in its use, but also for the purpose of making a better article. It is always found necessary to provide ample supplies of pure cold water, as well as plenty of hot water, that the churn and other implements may be scalded before and after use. This operation is absolutely necessary. If a separator is used in the dairy for demonstration, the cream is usually provided on the spot, the milk being purchased and passed through the machine; but the cream is not used immediately after separation—it is kept at least one day, even in warm weather, when it is in better condition for churning, and more profitable to churn. If cream is purchased it should be of guaranteed quality in accordance with the price paid, and ripe for churning. If too thick, as may possibly be the case, it may be thinned by the addition of skim-milk. The whole of the cream is usually placed in one large metal vessel, and warmed or cooled, as may be found necessary, to a temperature of from 57° in summer to 62° in winter; this margin being especially wide in order to suit the particular requirements of the competitors, who can alter the temperature at will, and who sometimes prefer to do so. It is a common custom to allow a certain quantity of cream to each competitor. This is usually about two gallons, or, if it is weighed, about 20lb. Sometimes the cream is weighed on a delicately-adjusted machine; in others it is carefully measured. The former is the better plan, as it often happens that the skill of two leading competitors is so similar that the weight of butter obtained decides the position, and this weight may be sensibly affected by a very small quantity of cream-such a quantity, indeed, as is scarcely perceptible when the system of measuring is adopted.

Skimmed or Separated Milk.

In referring to this product of the daily, I quote those portions of my last paper upon "The Utilisation of Skimmed Milk," and of Mr. Stephenson's paper upon the same subject—both of which were read before the Conference of British Dairy-farmers—which more distinctly apply to colonial dairying :—

There is no question more difficult to solve than how to profitably utilise skimmed or separated milk. I do not pretend to indicate any new or extraordinary method, inasmuch as in a previous year I have suggested such means of sale as had not already been adopted—although these suggestions called forth a considerable amount of hypercriticism; but I shall place a few succinct ideas before the Conference in connection with the various channels through which it is possible for skimmed milk to pass.

I believe average skimmed milk, obtained by the best systems of creaming. Contains in 100lb.—

The casein is identical with the casein of new milk, and it is the leading principle in all the best cheeses, including the "Cheddar of the world." It is also equivalent in food-value to the most valuable constituent in the flesh of animals, and is a food absolutely necessary to life. Although butter is regarded as the most valuable constituent of milk, it is not so essential to the life, whether of man or animals, as casein or its albuminoid equivalent, for, as my friend Mr. Lloyd, the chemist to the Association, says, in one of the ablest papers I ever read—"The Value of Cattle Foods," in the "Live-stock Journal Almanack"—"Albuminoids can take the place of carbo-hydrates or fat, because they contain carbon, yet fat and carbo-hydrates, as they do not contain nitrogen, cannot take the place of albuminoids." Casein, then, I do not believe to be sufficiently valued. Albumen, another nitrogenous constituent, is equally valuable, and resembles the albumen of an egg, but it does not enter into the composition of cheese—at all events, of British cheese. The sugar of milk, like the casein, is almost entirely left in the skimmed milk. It can be obtained in crystals by evaporation, and it is composed of carbon, hydrogen, and oxygen, the two latter holding the same relative positions that they hold in pure water. Hence the term applied to it as a carbo-hydrate. Sugar is a warmth-giving food, and it or its equivalent is necessary to healthy life.

Condensed skim-milk is a food worthy of the attention of some energetic capitalist. In a remote dairying district, where skim-milk can be purchased cheaply, this article might be made to sell retail in sixpenny tins of 2lb. weight, and at this price I believe it would prove a formidable rival to the richer brands, although I do not think it would in any way endanger the trade. There are hundreds of thousands of families who value skimmed milk very highly as a food, but who cannot obtain it, and a well-made condensed milk would largely meet their requirements. This reminds me that if a tinned cream, prepared to keep a few weeks, was placed on the market it would be likely to meet with success.

For conversion into cheese, skimmed milk is not sufficiently utilised or understood. An ordinary "Skim Dick" is a thing to be remembered by the dyspeptic. There is, however, no necessity for the manufacture of an article so inferior. A study of cheesemaking—far too uncommon where skim-cheese is made—would enable any person to greatly improve it. I would especially refer to the fact that a capital cheese can be made upon the principle which I have adopted in making Gorgonzola. This system adds an agreeable flavour, whereas the absence of pressure prevents the toughness so disagreeable in skim-cheese. Of soft skim-cheeses I have spoken

sufficiently often; of their profitable nature and their value a food there can be no doubt. Like other soft cheeses, they will keep for months; but the public prefer them fresh, as they dry with age, and, containing no fat, become harsh and strong in flavour.

In estimating the value of skim-milk as a food for animals it will be as well to compare it with hay, which is much better appreciated than almost any other kind of cattle-food. A fair analysis of the constituents of hay is—

Upon this basis, 1 ton of hay and 1 ton of skim-milk respectively contain—

The feeding-constituents of hay, however, are not all digestible. Therefore, deducting the indigestible portion, we have 693lb. remaining as applied to the albuminoids, fat, and carbo-hydrates, and divided respectively into quantities of 113lb., 26lb., and 554lb. Now, basing our calculations upon the value of the albuminoids and fat at 2d., and carbo-hydrates at 1d., per digestible unit, we get the following results :—

I believe hay to be worth this amount per ton when it is composed of good grasses which have been well saved, whereas no one can well dispute the value of the milk, which is arrived at by the same process of reasoning, with this exception : that the whole of the solid constituents of the milk are estimated as digestible, whereas the fibre of the hay and the manurial value of both foods is omitted. Upon this basis skim-milk is worth 1.36d. per gallon. Supposing, however, that in practice the fat of new milk is substituted by oil at the rate of 70lb. to the ton, and costing 5d. per pound, we get what is practically equivalent to new milk, a ton of which, costing upon the above basis £2 14s. 2d., would fatten two strong calves. Here we get some assistance from the centrifugal separator, which will thoroughly mix the two foods for this purpose.

Lastly, skim-milk can scarcely be overestimated as a food for pigs, although it does not return so large a profit in this direction. To utilise it to the best advantage it should be mixed with meals rich in carbon, such as barley-meal and maize, and in conjunction with these foods it produces the richest pork in the world. Experiments both at Rothamsted and in America have shown that a bushel of 60lb. of maize is capable of conversion into 12lb. of pork. It is also equal to 70 gallons of skim-milk. Consequently, as maize can be purchased at £1 a quarter, skim-milk, as compared with it, is worth less than ½d. per gallon; but as, by the same rule, 6 gallons of milk is equal to the manufacture of 1lb. of pork worth 6d., I shall not be accused of extravagance in assigning it a value as a pig-food of 1d. per gallon.

Mr. Stephenson says: "A scientific American farmer, who favours me with occasional communications on dairying subjects, found by careful experiments conducted by himself that 100lb. skim-milk made 6¼lb. of pork, which at 3d. per pound would pay 1.87d. per gallon; or, if the price were 5d. per pound for pork, the skim-milk would be paid for at the rate of 3.12d. per gallon. From this will appear the fallacy of putting any fixed price on skim-milk, irrespective of current fluctuations in the value of the article its consumption is intended to produce, as has very frequently been done, to the great perplexity of those who have attempted a study of the subject."

Other careful feeders in America give it as their opinion that 100lb. of skim-milk, or about 10 gallons by measure, is equal in feeding-value to 60lb. of maize, *when fed together with that grain*, which, at 5s. per 100lb. for the maize, would make the value of the skim-milk to be 3d. per gallon, closely approximating the last estimate.

When fed with grains rich in starch, such as rice, maize, or potatoes. the best and most economical results will be obtained.

Its value for calf-rearing is well known, although its use for that purpose is not always applied as in the interests of economy it might be. Whilst most desirable that the calf should have the mother's milk for some days at the first, we believe that by substituting a small but gradually-increasing quantity of boiled linseed with separated milk, a much greater quantity of butter might be made with increased profit to the producer. When, for instance, butter is selling at 1s. 4d. per pound, one-twelfth of the sum obtainable for the butter expended in linseed will replace the milk-fat removed from the milk to produce the butter; or, in other words, by the addition of about 10oz. of linseed to 1 gallon of separated milk, the fat taken out for butter-making is replaced at one-twelfth the amount realised for the latter. To give the figures: linseed contains about 34 per cent, of oil, and 30 percent, of carbo-hydrates equal to about 15 per cent, of fat—say 50 per cent, in all; so that 10oz. of linseed would contain 5oz. of fat, costing 1¼d. per pound.

A Lean Mutton-chop contains 1lb. contains Skim-milk contains 1 Pint contain Per Cent. Oz. gr. Por Cent. Oz. gr. Water .. .. 75.5 12 38 89.00 .. Fat .. .. 8.6 1 180 0.25 18 .55 Albuminoids .. .. .. 10.5 1 326 .. 2 22½ Casein (analogous to albumen) .. .. .. 4.37 .. 293gr. fat 0 388 Ossein-like substances (bone, &c.) .. 1.9 0 145 .. .. Milk-sugar= to half the quantity of fat .. .. 5.58 1 61 Mineral matter .. .. .. 3.5 0 206 0.80 0 72 100.3 100.00 .. Total solids .. .. .. 24.5 .. .. .. 1lb. Mutton-chop. 1 Pint Skim-milk. Deficiency in Skim-milk Quantity of Oatmeal requirente replace Deficiency. Cost. 1d. Oz gr. Oz. gr. Oz. gr. Oz. Fat .. .. 1 180 0 293 0 367 0.91 Albumen, or casein 1 326 0 388 0 418 5.50

To illustrate the economical aspects of the consumption of skim-milk for food purposes, it may be stated that—

One ounce of rice or white bread contains about 180gr; of fat (reckoned as starch), so that to replace the 311½gr. of fat taken out of whole milk by separation, we only require to add to 1 pint of skimmed milk 1.73oz.—say 1¾oz.—of either of these, or 14oz. to 1 gallon, in order to replace the fat removed for butter-making, which can be done at one-half the cost. In other words, the nutritive value of milk-fat can be replaced by spending in farinacea half the sum realised by the sale of the butter.

Reckoning 5oz. as the yield in butter per gallon of milk, and 1s. 4d. per pound the selling-price, it will be evident that when new milk sells retail at 1s. 4d. the gallon, the skim-milk ought to be worth 11d. per gallon, seeing it only lacks the 5d. worth of milk-fat to make it of equal value to whole milk; and, further, if, as has just been stated, the nutritive value of this milk-fat can be replaced by the expenditure of half that amount in farinaceous foods, then the skimmed milk would thus be worth to the consumer 1s. 1½d. per gallon, or only 2½ less than whole milk.

In comparing the food-value of skimmed milk with that of the lean of meat some interesting facts are brought out.

It is apparent from this statement that the deficiency of albuminoids in skimmed milk, as compared with those contained in the lean of meat, may be made up by the expenditure of 1d. in oatmeal, which at the same time would supply the deficiency in fat five times over.

The total solids in a mutton-chop are slightly more than double those contained in a pint of skimmed milk, so that it would require about a quart of the latter to provide solids equal in quantity to those in a mutton-chop; but this quart of skimmed milk is procurable for 2d. at the most, or one-fifth the cost of the mutton-chop, whole milk supplying the same amount of solids at about one-fourth the cost of flesh-meat.

Cheese.

CHEDDAR.

It is tolerably certain that of the larger varieties of cheese which are most suitable for manufacture and exportation to Great Britain the Cheddar stands first. The next most popular British make is the Cheshire; but if the opinion of large London merchants is entitled to any weight at all—and there can be little doubt that great weight should be attached to it—the market for Cheshire cheese is in no way comparable to that for Cheddar. Opinions differ in England as to the two varieties, but the great majority of the people with whom I have come into contact are consumers of a mild nutty Cheddar, in preference to either the somewhat faulty American Cheddars or to the higher-coloured and stronger-flavoured but delicious cheese made in Cheshire. My investigations lead me to believe that colonial Cheshire cheese would find but a poor market in England. It is, however, a too common practice to describe a pale cheese as a Cheddar, whether it comes from Somerset or Gloucester, Canada or the United States. Cheeses which are similar in size and in colour, but from which the characteristic flavours are absent, are often described as cheaper makes, whereas they are in reality makes which are imperfect, either on account of the want of skill of the maker, or because the milk was partially robbed of its cream during the process of manufacture. A cheese cannot properly be called by the name of Cheddar unless it is of the true type, but the word is made to cover a multitude of failures, and to assist in the sale of cheese in retail shops, although, as may be supposed, it certainly does not impose upon the wholesale buyer. Cheddars are usually pale—*i.e.*, uncoloured; their texture is fine, mellow, and salvy. An expert judge can generally give a fairly-good guess as to the nature of the cheese by the pressure of his thumb and by the entrance of his tasting-iron. In practice, after the withdrawal of this implement he is content to smell the plug of cheese which he has removed, to feel its texture between his fingers, and to examine the back of the iron, which usually gives some indication of the richness or fatness of the cheese, by the presence of a greasy or buttery coating. The perfection of a cheese is not, however, dependent entirely upon either its texture or its flavour, but a combination of both. A hot or strong flavour, and the flavour of toasted cheese, although both too characteristic of the great majority of cheeses in the market, are not what is required. It is necessary that the cheese should be mellow, partially melting upon the tongue, mild, and containing a pronounced taste of the hazel-nut a flavour which is entirely absent in cheeses of second-rate quality. We may, however, have the mildness and the mellowness without the flavour, and we may have an extremely agreeable example of the flavour without the mellowness. This is owing, in a general way, to lack of skill in manufacture as much as to the carelessness of the conditions under which the pressure was given to the cheese in its primitive form, or to the conditions as regards the temperature and humidity of the apartment in which the cheese has been ripened. Even to a practical maker it is somewhat difficult to describe the exact nature of the article required by the British cheese-merchant. I therefore propose that samples, not only of Cheddar, but of other varieties of cheese

the manufacture of which is recommended in the report, should be sent out to New Zealand, in order to convey more accurate information to those who are engaged in the industry, and who will probably be allowed to examine them and to form their own judgment.

If there is one thing more than another which it is important to prevent, it is the practice of skimming milk which is to be made into cheese for export. It is quite impossible to obtain two profits, the one through the medium of butter skimmed from milk which ought only to go into the cheese-vat, and another from the cheese which, intended to be sold as a first-rate article, barely approaches second quality, consequence of its deficiency in butter. Another important feature to remember is that without the most perfect cleanliness, both the cowhouse and the dairy, there can be no perfect flavour in the cheese. Science has pointed out many details during the past few years, chiefly bearing upon the presence of ferments in milk, and of organisms which are especially present in dirty cowhouses and dairies, and which, coming into contact with milk under certain conditions, multiply to an enormous extent and entirely changing nature as a medium for making the highest class of cheese. Investigations by biologists are being conducted in the life-history of these microscopic organisms, and the cheesemaker will, it is to be hoped in the near future be placed in a position to understand them more definitely, and consequently to control the work which they perform—in some cases for good, and in others for the destruction of the milk. He knows, however, that there are dangerous organisms, and that it is to his interest to minimise their number and their influence as much as possible; and he can do this by no better means than the sanitation of his cowhouse on the most approved plans, by giving Battle the purest of water to drink as well as the most wholesome of food, and also by taking care that the dairy and every utensil which is used in connection with the milk should, in the process of regular cleaning, be invariably scalded. Another important factor in the success of a dairy is found in the possession of the most perfect of modern appliances and arrangements both in the cheese-and milk-rooms. For cheese-making I strongly recommend the rectangular vat upon wheels, running upon a tramway. With this vessel the milk can be passed from the outside of the dairy, through a funnel and strainer, directly into it; or it can be carried and poured into the vat in one apartment, the vat being subsequently run along the rail into the other The milk may be cooled with the assistance of cold water, which can be passed within the jacket provided both at the bottom end sides, or it can be heated by the aid of steam or hot water. The Be process can be conducted within the vat, from the cutting of curd to the salting and grinding. The position of properly-constructed ripening-rooms is a matter of importance. These may be situated over the cheese-making room, and whatever temperature is adopted may be communicated to this apartment by the aid of [*unclear:* hot]water pipes, which by surrounding the ripening-room will give it a equable temperature.

With regard to the cost of making Cheddar cheese, it will be possible to append numerous sets of figures derived from different [*unclear:* series], but the mean of the information gleaned from these will probably prove equally useful. I am acquainted with numerous English makers who prefer to make cheese during the summer months, from April to October, in preference to selling their milk and Bring net per gallon of about 10¼lb. There are two or three considerations to be remembered in connection with this decision, by the sale of the milk the whole of the fertilising properties which contains are removed from the farm. There is an expense enabled by the daily conveyance of milk to a railway-station, sometimes miles distant, necessitating the employment of a horse-and-[*unclear:* hot] man, who is often required to undertake the journey both morning and evening. The farmer is required to find his own rail-way-churns; to refrigerate his milk, which requires a constant apply of very cold water in summer; to maintain its quality to the [*unclear:* hiet] of some 12 to 12½ per cent, of solids; to maintain a certain quantity, which necessitates the frequent purchase of cows even then they are expensive; to refrain from sending the milk of newly-[*unclear:* asked] cows until the expiration of a certain day; to take milk back, [*unclear:* to] make allowance for it, when it arrives at its destination partially [*unclear:* ane]; to keep it at home altogether when any members of the herd is attacked with cattle-ailments, or when any of his milkers or his [*unclear:* heily] are attacked with dangerous and communicable diseases. [*unclear:* The] cheese-maker has few troubles of this kind to contend against. It is true that the fertilising properties which remain in the whey are [*unclear:* and] of much value, but there is a feeding property, of great im- portance to the pig-stock of the farm, the whey containing a considerable quantity of sugar, together with some fat and casein or curdy matter. On the other hand, there is the daily labour of cheese-making, which is all-important, and which either occupied the chief part of the time of the farmer's wife or of a competent dairy maid employed at a cost of from £50 to £100 a year, together with 3 assistant, whose duty it is to do the washing-up and rougher work. In dairies of a hundred cows, where two cheeses are made daily the work is usually done by these two persons. Where three to four cheeses are made daily from three to four persons are employed, but in some instances they are also required to assist in milking the cows and in feeding both pigs and cows. The cost of production of cheese is therefore, from this point of view, and from the fact that the cattle producing the milk are fed from the produce of the farm, a comparatively unknown quantity. It is frequently estimated that the larger class of dairy cows cost the farmer in summer 6d. per head per day for the grass they

consume, in addition to the purchased foods, such as cotton-and linseed-cake, which are given them at the rate of from 4lb. to 81lb. per day, not only with the object (and this should be strongly borne in mind) of increasing the flow of milk as well as its richness, but of increasing the saleable value of the animal, and assisting in the maintenance of the fertility of the land—for both cotton-and linseed-cake materially assist in enriching the manure. As regards the of winter-feeding, the amount is often put at from 1s. 1d. to 1s. 5d. per day, inclusive of purchased feeding-stuffs, such as grains (which are not recommended for cheese-making), bran, cake, maize-meal rice-meal, bean-meal, and pea-meal.

These estimates, however, valuable as they are, are not really reliable as indicating the cost of the cow to the farmer, because he grows the principal portion of the food he prices, and in most receives a large profit upon them. Thus it will be seen that where the cheese-maker is a farmer the two businesses are so intimately connected that it is difficult to ascertain what profits are made upon the crops and what upon the cheese. If the crops grown upon the farm are, as it were, sold to the cattle at market-prices, or milk is sold to the dairy in the same way, then we get a tangible answer, but one which is similarly unfair. The person who farmer and cheese-maker undertakes the business because, by combining the two occupations, he expects to succeed, whereas he would be willing to make cheese if he were required to purchase the milk at the price given, nor would he be content to produce milk were required to pay the prices he had himself charged for the food for his cattle. The same may be said with regard to labour. In a good cheese-making family the most important portion of the work is done either by the wife or the daughter, or by the family combined. They practically earn high wages, for they save the payment of wages to a skilled maker and her assistant; hence the profits of business are increased. Now, if a Cheddar cheese-maker can depend upon the sale of his cheese made during the summer months at such a price as £310s. per hundredweight of 112lb., he may almost assume that he is receiving 7½d. per gallon for his milk instead of 5½d. However,—and this is naturally more common,—he receives £3 5s., he yet makes 7d. per gallon, which, in spite of the labour entailed, is far better upon a large farm than the sale of the milk. The quantity of cheese made per gallon of milk is sometimes under 1lb., but it aveages 1lb. during the principal portion of the season, and exceeds it towards the latter end—in proportion, in fact, to the length of time which has elapsed since the cows calved; for as they approach the end of their milking-season they yield milk which contains more solid matter, and which consequently makes more cheese per cent. It is, however, not possible at present even for the most skilled makers to manufacture the very highest type of cheese every season. Such people seldom if ever make an inferior article—they almost invariably sell their produce well; but in some seasons, without any ostensible reason, they fail to reach the same degree of excellence that they have achieved in the previous year, and perhaps fall off to the extent of from 3s. to 5s. per hundredweight. Merchants up to the present have always been willing to give £3 10s., and sometimes as high as £315s., for first-class cheese, such as sells in London and throughout England M from 9d. to 11d. per pound retail, the price varying in accordance with the district and the class of trade which the retailer conducts.

The season may be assumed to commence in April and to end in October. It varies with some makers, who do not commence until May, and cease by the end of November, but I give a sufficient margin.

In the year 1887 the mean temperature, as recorded at the Greenwich Observatory, was, during the six months April to September, inclusive, as follows :—

The degree of humidity, taking the mean saturation at 100, was in April 75, in May 80, in June 72, in July 64, in August 66, and in September 80. These points are all-important to remember in comparison with the mean temperature and humidity of different parts of the islands of New Zealand.

The following figures show the rainfall and mean temperature for the twenty-three years, 1865-88, in the three British districts in which the chief dairy counties are situated:—

The mean temperature for the eleven years 1878-88 varied during the six summer months between 43.9° and 60.1° in the Midland counties, 42.9° and 57.6° in the West of Scotland, and 44.7° and 59.9° ill the south-west of England. The above data are obtained from meteorological reports which were derived from observations made among others, in the dairy counties of Leicester, Derby, Gloucester Devon, Somerset, and Ayrshire.

Although I am of opinion that in skilled hands cheese of almost all varieties can be made in any generally suitable country, assuming that the cattle are good and that the feeding is similar to that adopted in dairying countries, yet, for the guidance of those who prefer to ascertain the exact conditions in which they are placed as compel with the leading English cheese-making counties, I give some details of the acreage, number of animals kept, the nature of the soil, and the extent of grass-cultivation in Somerset, Cheshire, Leicester Bucks, and one or two of the leading dairy-counties of Scotland.

STILTON.

The manufacture of Stilton cheese is at present very closely confined to one district in England, and that

may be described as the county and vicinity of Leicestershire. For some unaccountable reason the dairy-farming public have not taken up the manufacture of Stilton ton cheese, perhaps because of their belief that it requires considerable knowledge, or that there are secrets in the process of it is not possible to obtain possession. Both ideas will certai nly exploded before long; and, as there is undoubtedly a great future before Stilton-cheese making, it is worth the while of those who are interested to make themselves acquainted with the facts of the case. It is true that, compared with Cheddar or Cheshire cheese, there are few, if any, facilities afforded for obtaining a knowledge of the process of manufacture. I have heard of one or two small makers of recognised ability who have communicated their knowledge in return for high fees; but a great many of the makers are themselves somewhat deficient in capacity, if we may judge by the bulk of the cheese placed upon the market, whereas the remainder are extend the trade, which would certainly bring down the remunerative prices.

One of the largest and best makers recently informed me that be thought a more extended knowledge of Stilton-making would be beneficial to himself and other farmers who command a high price; upon it being pointed out that the new generation of students in By-fanning includes persons who have received higher education than those who preceded them, and that, once having learned the principle, they would soon be able to compete on level terms with himself and others of his class, and so place a much larger quantity of cheese in the market, he seemed to understand that extended instruction would possibly bring about a fall in prices. Be that as it may, there is little doubt that the consumption will extend as the manufacture increases, and as the prices approximate more closely to the means of the people at large. But it must not be supposed that there will be any sensible increase in the consumption of inferior Stilton. We have distinct evidence of the fact in connection with the Cotherstone and the Wensleydale—two cheeses made in the north of England, which are somewhat similar in their character to the Stilton, but which are made in a more primitive manner. When good, these cheeses command a high price, but the majority of those made are inferior, and the prices are consequently within the reach of all, yet there is little if any increase in the quantity made. To command a ready sale, a Stilton must, while firm, be mellow in the extreme—more salvy or unctuous, in fact, than the primest Cheddar. The ramifications of the green mould, which makes it so famous, should be extended throughout the whole of the interior, coming as close to the crust as possible; but there should be no concentration of the mould in any one part and at the same time an absence in others. In the case of an over-ripe cheese there is a lack of substance when the mould is thus concentrated, and the delicate flavour is superseded by one which becomes too strong for the palate. It is alone by the exercise of skill in manufacture, and by the use of sound milk, that the proper veined appearance is obtained. It is the custom with many of the most important retail buyers—hotel-keepers and clubs, for instance—to require each cheese sent them to be cut in halves, in order that the veins of the mould may be seen before purchase. We may, however, have the blue veins without quality a cheese made from milk which has been skimmed, but it it is seldom that a cheese of high quality is deficient in mould. The process of ripening in the Stilton is one which should be closely followed by the maker, and he will quickly learn to recognise those odours and flavours which pervade the partially-ripened cheese, and in select specimens for sale or shipment which are tolerably certain to turn out to the best advantage. Good Stiltons midway between the date of manufacture and of fitness for the table are on the road to mellowness. They have an agreeable and somewhat alcoholic smell and a slightly sweet and alcoholic flavour, although both smell and flavour differ in various cheeses, even in those made in the same dairy.

Only by experiments, however, can the maker ascertain the causes of his success as well as the causes of failure; and, recognis- ing them, partially by testing the young cheeses, he will be more able to continue or avoid them in future as he may find it necessary. The ripening of the Stilton cheese depends chiefly upon the temperature, and it can be either hastened or retarded. Some makers introduce air into the cheese by means of holes made with fine skewers to assist the process. It is evident that, if it is possible to judge an unripe cheese with certainty, it can be shipped while it is still free from mould, and while it is heavier in weight than it will ultimately be. This fact is of special importance to the New Zealand maker, who could imitate the practice of many English dairyman and sell his dairy of cheese at an early date, allowing the completion of the ripening process to be performed by the factor or merchant. This plan is quite common; and I have seen large numbers of Stiltons in the cellars of London cheese-merchants which have been bought early and which were being prepared for sale.

It should be stated that so comparatively few are the good Stilton cheeses made in England that some merchants find it necessary to go early into the market to prevent disappointment or the risk of obtaining inferior cheeses later on. The maker gains in the weight of the cheese what he loses in the price, but he effects a lucrative sale, and this is of the greatest importance. The price of white or young cheese ranges from 10d. to 1s. per pound. This is for a really good article. For perfectly-ripened cheeses—sold between November and Christmas as a rule—but later on also for late-made cheeses, it varies between 1s. 1d. and 1s. 3d. per pound, very choice dairies often making more. On the other hand, inferior batches of Stilton sell at from 7d. to 9d. per pound. During the past spring I was invited to address the Leicestershire Agricultural Society, the Chamber of

Agriculture, and the Dairy-farmers' Association at Leicester and subsequently, on account of the success of the meeting, at Melton Mowbray, which is in the very centre of the Stilton district. The chairman, a landowner upon whose property there are Stilton dairies, stated that there were instances of tenants making Stilton cheese, one of whom, for example, always made a first-class article, while another occupying similar land, and upon an adjoining farm invariably made a most inferior article. He was anxious for an explanation of the reason. But this is an instance which may apply to butter-makers and cheese-makers of other descriptions. Failure is undoubtedly owing to want of knowledge and attention to detail, especially in the case of Stilton-cheese making, in which it is essential that a maker should have mastered the principle.

There is no expensive plant required in the manufacture of Stilton cheese. The chief appointments are the rooms in which the working is conducted, provision being made for the control of temperature and of humidity. With regard to the cost of manufacture is perhaps slightly more than in the case of other British cheeses because the Stilton necessitates daily handling for some time after it has been made, and before it is removed to the shelves in the curing room. For Cheddar or Cheshire cheese a few days only elapse between making and taking to this apartment; but this time is multiplied considerably in the case of the Stilton, and when a large number are manufactured daily an extra hand would probably be required over and above the staff necessary to handle a similar quantity of milk in making Cheddar cheese. It is commonly suppressed that Stilton cheese is made from rich milk, to which cream has been added. Whatever may have been done in the past, it is quite a mistake to suppose that this is the case to-day. In the largest Stilton-cheese dairy in the British Islands the milk is delivered from various farms, upon several of which the feeding is not more liberal than upon ordinary milk-producing farms, where milk is despatched for consumption in its primitive state. The milk is of average quality, and such as would be ordinarily given by Shorthorn cattle fed upon foods which are estimated to produce as heavy a yield as possible. Such milk has certainly been delivered during some seasons in large quantities at as low as 5d. per gallon. The Stilton season is more restricted than that in which other cheeses are made—at all events, upon a large scale. The manufacture of large quantities late in the season is not considered so advisable; in fact, there would probably be greater risk, inasmuch as greater sales are made for Christmas consumption. Doubtless, with increased care and the maintenance of temperature in ripening-rooms, the sales would be quite equal and the prices higher after the Christmas season; but the large maker with whom I am acquainted prefers to conclude his work early and to sell out as quickly as possible. Stilton cheese is exported to America and to India, and in small quantities to European countries; but the method of packing and of transport is not yet thoroughly mastered, the trade not being sufficiently great to warrant any special arrangements being made. As to the manufacture of the variety in New Zealand, I have little doubt that it can be conducted quite as easily as in the County of Leicester in England—a district the pastures of which were for a long time supposed to be specially adapted for it, but I have seen Stiltons of high quality made in other counties. It will be seen from the following figures that there is really nothing special in the pastures of Leicestershire unless it be the preponderance of rye-grass. A turf was cut upon the farm of the largest Stilton-cheese maker in the county, Mr. Thos. Nuttall, a farm with which I am very well acquainted. The soil adhering to the turf is described as a rich, stiff brownish clay. The grasses were represented in the following portions, according to Dr. Fream, the botanist to whom the turf was sent:—

In this pasture, as represented by the specimen examined, the gramineous herbage was shown to be 58 per cent., and the leguminous herbage 42 per cent. I feel, however, satisfied that neither the pasture nor the cattle are responsible for the superior propertied of the Stilton, which the same maker manufactures in another county from mixed milk, and which have been made with every success in my dairy in Hertfordshire from cattle of different breeds (Jerseys, Swiss, and Ayrshires), which were fed upon inferior pastures and artificial grasses, such as lucerne, sainfoin, and clover.

There are at least four varieties of mouldy or veined cheeses of the Stilton type which are made in England, and which are frequently found to equal the best Stiltons that are made. These are the Cotherstone, the Wensleydale, and two nameless cheeses which are made respectively in Lancashire and Suffolk. The Cotherstone cheese, which somewhat resembles a Gorgonzola in shape, but which is smaller in size, is made in the neighbourhood of Barnard Castle and Cotherstone, in the north of Yorkshire, and the system adopted in its manufacture is a modification of the Wensleydale process, a description of which is given below. This cheese is not extensively made, but it has been manufactured for generations, and there are families who make it of so high a quality that their cheese equals the Stilton of the best class. The Lancashire cheese, although of better form than the Wensleydale, is also made closely upon that system although there are modifications in the method of salting and bringing which account for the somewhat different result. There is no uniformity in the system generally adopted, consequently it is difficult to obtain a really first-class cheese unless a buyer is acquainted with a farmer who is known to turn out a uniform article. The cheese made in Suffolk is by no means large in quantity, and cheese making is confined to comparatively few people. At the same time I have eaten Suffolk Stilton of such first-rate quality that it must have paid the maker far better than either

butter-making or milk selling—a business which is largely conducted in the county.

Recently visiting Wensleydale, a luxuriant and Swiss-like valley running from east to west in the north of Yorkshire, I not only saw a large number of the cheeses which are famous in that part of the county, many of the inferior makes of which are sold as second-rate Stiltons, but I obtained much valuable information from the makers themselves. Were some system of uniformity adopted by the farmers in this district, and were they induced to manufacture their cheeses upon modern lines, I believe they would make one of the best types of cheese which is placed upon the market, for a good Wensleydale is one of the choicest of known cheeses. It is a type which is as worthy of the attention of colonial makers as Stilton itself. The flesh of the cheese is softer and, if possible, milder than that of Stilton of the highest class, and it is now eaten people who are not as a rule consumers of cheese. It realises a high price, and, on account of the moisture a good cheese contains, a greater weight is obtained per gallon of milk than is possible with I the Cheddar and its kindred varieties.

Wensleydale cheese is made either in the "old" or in the "new" way, and the following is a description of the former : The evening's milk is heated so that when the morning's milk is added the mixture; should be about 100° Fahr. The rennet (home-made) is then mixed in the proportion of one pint to the milk of five cows, and the boiler covered with a wooden lid. The temperature of the room is about 40° Fahr.; but it is important to maintain the temperature of the curd at 100° Fahr., otherwise, instead of feeling "sharp," it will turn pasty and stick in the curd-mill. Some thirty-five minutes after the addition of the rennet the curd is broken up, the process occupying about half an hour. The broken curd is left to stand for three-quarters of an hour, by which time it cools down to 90° Fahr., the whey being then removed. At 82° Fahr. the mass is put into cheese-vats lined with dry cloths, when a light pressure is applied, and after half an hour it will be at 65° Fahr. It is then cut up small, replaced in the vat with a dry cloth, and left to drain for an hour longer, when this treatment is repeated, and another hour is allowed for draining. The curd will then be 55° Fahr., and at this point it is ground in the mill, after which it is placed in vats and pressed for twenty-four hours. A calico bandage is next stretched round it, and it is put into brine for three days, when it is taken out and simply wiped dry with a cloth. One hundred pounds of milk usually produce 12lb. of cheese under this system. In another Instance we found it stated that in summer it required from 10lb. 4oz. to 10lb. 1oz., in September 9lb. 8oz., and in October 8lb. 10oz. of milk to make 1lb. of cheese.

Wensleydale cheeses generally weigh from 10lb. to 15lb., except in the small dairies, where they make flat cheeses of 4lb. and 5lb. weight, if we except one variety, in which the shape is an imitation of "very deep" Stiltons. Most of the dairy-farmers own some eight cows, only a few owning fifteen to twenty; but even the latter make the day's milk into more than one cheese. Wensleydalers coagulate their milk in a "cheese-kettle," which is large in size and made of copper or brass. The new method is a simple and short one, but we doubt whether it would answer for cheeses of large size. The evening's milk, after being heated, is taken off the fire and the morning's milk added to it. The rennet, or "prezzur," as it is called (French *prèsure)*, is made daily or every other day by cutting a few pieces of the stomach of a calf and placing them in cold water for twenty-four hours. When the milk has acquired the desired temperature the rennet is mixed with it, and after three-quarters of an hour the oast (Danish *öst*, cheese), or curd, is fit to be broken up into very small pieces. This is generally done by the hand; others use a breaker made of wire, crossed as in a riddle, circular in shape, and very small. Instead of having a handle, a part of the outer wire rim is drawn out and bent. In breaking by the hand the movement is upwards, but by the breaker it is downwards. The whey is removed by ladling it off, and the curd is then placed in a circular tin, tin. by 4in., with perforated sides and bottom. These tins are left to drain for three hours, when they are reversed and left for another three hours; then the curd is removed to the vat and pressed for twenty-four hours, after which it is kept in brine for three days. The temperature has meanwhile been regulated as follows: Before coagulation, 96° Fahr.; after adding hot whey, 95° Fahr.; when vatting, 66° Fahr. In summer the temperature is kept lower than in autumn. The brine is made by boiling the salt in water; and to be good it should allow an egg to float in it. Some dry salt is placed! on the top of the cheese as it floats in the brine, and this, melting, restores to the brine the strength which the cheese absorbs. As the climate in this district is of a low temperature with much rain, and as the rooms are not heated, the cheese is kept cooler than in any other part of the kingdom. The cheese is kept in the cool-room for seven days, when it is removed upstairs to ripen. At the season when the fogs set in, instead of being kept in the cool-room for a week, the cheeses are placed upon shelves suspended from the kitchen-ceiling.

Testimony of Cheesemakers.

I have frequently expressed the opinion, and have sometimes been adversely criticised for so doing, that better cheese is made upon the farm than in the factory, and that it is extremely difficult, if not! sometimes impossible, to make cheese in the factory equal to that! which has been and can be produced by some of our best farm makers. This opinion is based upon frequent examinations of the! respective cheeses during the past

few years, upon the prices which! they respectively obtain, upon the positions they hold in competitions at dairy-shows, and upon the very decidedly-expressed opinions of practical makers themselves. In order, however, to give greater point to this question, and at the same time to obtain other items of information from a number of our very best makers which cannot fail to prove of value to the cheese-makers of New Zealand, I addressed letters to a number of gentlemen, with some of whom I am acquainted, asking them to give their opinion as to the relative prices for factory-and farm-made cheese respectively, together with the! prices realised, and the quantity made per cow.

Mr. Henry Hole, of Crewkerne, Somerset, a very large maker of Cheddar of first-rate quality, says that he does not think therein always that patience and painstaking in a factory that is found exercised in the manufacture of cheese on the farm. He adds, "I J think that sometimes the curd may be too much hurried in putting into the vat, not allowing sufficient time for curing, although much depends upon the weather. I speak generally, as I readily admit that there is very good cheese made in factories, but prizes usually I go to private makers. There is another matter which to my mind is likely to affect large factories—that is, where so many dairies supply the milk—of the utensils not being always properly cleaned; and, as I know you are well aware, having heard you in your addresses strongly urge the importance of attending to this matter, any neglect in not being very strict would prevent good results. I have made about 30 tons of Cheddar this season, but have made 8s. per hundredweight less than last year. I think the yield would be about 3½cwt. per cow—that is, for the milk for the six months from 1st April to 30th September—for I sell the milk and rear calves during the remaining months. Our cows begin to calve in January, and we try to have them all in by the 1st May, so as to be in full swing when the grass comes."

Mr. John Thorburn, of Stranraer, N.B., a well-known Scotch maker, says that "home-made cheese of good quality should, in my opinion, bring a better price than factory-cheese. For some years I sold my cheese at £3 10s. to £3 13s. per hundredweight, but prices have been lower, owing to dulness of trade. This year, for example, I have had to take as low as £3 per 112lb. Farmers here who have their dairies set get 20 stones of cheese per cow, and 16 stones per quey (heifer). (It should be observed that in Scotland small cows, Kelly of the Aryshire breed, are kept, hence the smaller yield.) Sometimes we manage to obtain 22 and 18 stones respectively."

Mr. Alexander Craig, of Stranraer, says, "I think you are correct in believing that the best farm-made cheese is better, and commands higher prices, than factory-cheese. It is difficult to say how much obtain per 1121b., as the price varies so much. Last season the highest price we were able to make was £3; in the previous year we ¡made up to £3 6s.: in each season we obtained lower prices for the early-made cheeses. At one time we obtained as high as £3 18s. per 112lb."

Mr. R., of Culmore, Stranraer, one of the leaders of the dairy-movement in Wigtonshire, says, "Our cheese has been making for the best dairies from £2 18s. to £3 per hundredweight of 112lb. at the dairy this past season for grass-made cheese. It is the practice for those near a railway-station or a creamery—two of which are within six miles of my farm—to sell the milk—at least, during the winter and spring months; some sell for the whole season. My own method is to sell milk for live or six months, and make cheese the rest of the 1 time. I have not yet been able to make up my produce for last season, the whole not being yet realised, but I will give you the quantities, which are as follows: For eighty-six cows and the heifers (100 head), 358c wt. 2qr. 12lb. of ripe cheese and 15,131 gallons of milk. The following is an abstract for 1887 :—

"We got this year from £3 to £3 5s. per hundredweight for oar grass-cheese, and £2 12s. for our spring make.

"1886, price £2 17s. to £2 18s., grass-cheese.

1885, price £2 19s., grass-cheese.

1884, price £3 4s. to £3 8s., grass-cheese.

1883, sold to creamery at 7d. per gallon.

1882, price £3 to £3 7s.

"A good many farmers in this neighbourhood let their cows to; bowers, who pay their rent in kind: the usual bargain is, for that bower to give 480lb. of ripe cheese for each cow and 384lb. for each heifer, the food given by the "farmer being 7 tons of turnips and swedes to each cow for autumn and winter food, with 140lb. bean meal and the straw of the farm (oat and wheat) for fodder, with from an acre and a quarter to two acres of grass for summer, the bower supplying rennet, colouring, salt, &c., the farmer furnishing all the necessary utensils and milkers, but the latter are paid by the bower."

Mr. D., a large maker of high-class cheese in Cheshire, says: "My average price for 1881, 1882, 1883, would be about £3 12s. per hundred! weight of 120lb., delivered on rail or canal. In 1884 it was £3 15s. The following years prices were on the decline, and last year my average would be about £3 3s. 6d. I have sold my milk during the winter months since 1883. Last year (1888) we made our first cheese on the 2nd April and the last on the 28th October. Our average weight per cow, from fifty-four cows and heifers, some of which had

been in milk from the preceding November, would be from 3½cwt. to 3¾cwt. We prefer 'early ripening,' as we do not have to keep the cheeses for six, or in some instances twelve, months before then attain maturity, to enable them to command a high price. For example, as I have stated, our first cheese was made on the 2nd April, and we sent out ten cheeses on the 30th April. I quite agree with you that better cheese can be made by farmers' wives at home than at a factory, especially where there is every convenience upon the farm. I should prefer that my name is not published, but you are at liberty to refer any one to me privately."

Mr. M., another Cheshire farmer, who also prefers that his name is not used, says that "the cheese which I sold last year averaged about £3 6s. 8d. per 120lb. I have (21st January) eighty cheeses still to sell, and they will make more money. The weight, as nearly as I can tell, will average 4¾cwt. of 120lb. per cow. The cheese of 1887 averaged nearly 5cwt. per cow, and a little over 70s. per 120lb. That was the largest yield I ever made. It depends a great deal upon whether the cows carry their calves for making the large weights of cheese, and also how they are kept, and whether the land is well managed. There are plenty of farmers who do not make more than from 3cwt. to 4cwt. per cow. I have a neighbour who keeps sixty cows and makes an average of 5cwt. per cow."

This is an astonishing yield, but in travelling through the country some years ago with the object of preparing a report upon dairy-farming in Cheshire for the *Manchester Guardian*, I was enabled to see a large number of the best dairies, and I found that those makers who obtain very high returns per cow were the men who were the most liberal feeders, using cake very largely, and supplying plenty of bone-manure upon their grass.

Mr. H., aprize-taker of Wincanton, Somerset, says that "in home dairies the makers of Cheddar realise upon the average about £3 10s. per 112lb. I can never believe that any factory can make : a good cheese as can be made in the home dairy, and for several reasons, which I give as the result of my experience. First, people I who sell their milk are not so particular in milking and in keeping their dairy-utensils clean; second, I believe that the milk is injured in being carried to the factory, which must be a mile or two at least. As regards the quantity I make per cow, I do not keep a strict account, but I believe that they average about 4½cwt. each."

Mr. C., another well-known prize-taking Cheddar-maker, says "You are at liberty to mention my name, but not to publish it. I think you are quite correct in your supposition that home-made cheese realises higher prices than factory-cheese. I know of no factory-cheese which is sold at so high a price as mine. I have sold five tons at £4, and the remainder at £3 12s., per 112lb."

Mr. Mulock, of Malpas, Cheshire, says, "I should say that cheese of the same quality would make the same price, no matter whether it is made at the factory or at home; but, not having had any experience of the factory, I cannot positively say. My cheese for the last three years has averaged a little more, and we make about 4cwt. per cow. The cows are fed with decorticated cotton-cake and 'thirds,' about 4lb. of the mixture being given daily." I presume Mr. Mulock means that this artificial food is given when the cows are upon the pasture, a plan not generally adopted, as it ought to be if a large yield is expected.

Mr. D., one of the best makers in the County of Cheshire, says, "You are quite correct in believing that home-made cheese of the best quality realises a much better price than factory-cheese of the finest quality. The prices I have realised during the past year or two are from £3 5s. to £3 10s. per hundredweight of 120lb. Some-times I make considerably more. The last lot I sold in December at £3 15s., and a previous lot in October at £3 12s. My average per cow would be about 3¾cwt. to 4cwt. In the year 1886 I made 4¼cwt. per cow, which was the largest yield I ever obtained."

Mr. A. Reynolds, who owns a cheese-factory near Blandford, sends some useful information. This gentleman took the £20 prize during the past autumn for old cheese at the Fro me Show, where many of the best cheesemakers generally compete. The factory has been in existence for four years. In 1887 a first prize was obtained at the Royal Agricultural Show, and a fourth prize at Frome in a class of ninety-six competitors, together with a first for "truckles"! and a second for old cheese. The factory was formerly a dairyhouse, and is by no means large, but has been improved to meet modem requirements. In the milk-room there are four cheese-vats, holding from 176 to 200 gallons each. Each vat has a jacket in order that milk may be heated or cooled as may be found necessary, steam being supplied from the boiler near at hand. In the adjoining press-room there are eleven presses of the best make, those with wooden foundations being preferred. Milk is delivered at the factory twice daily—between 6 and 7 in the morning and 6 and 7 in the evening—and an agreement is made between the buyer and the seller. No milk is received from cows which have not calved ten days, and effective moans are taken to prevent the receipt of skimmed milk, of adulterated milk, or of milk which is in any way unclean or unfit for conversion into cheese. In 1888 seventeen private dairies coal tributed to this factory, the average daily receipt being 500 gallons. The price paid, although originally 5d., was 6d. from the 1st July. The best make of cheese is turned out between the second week in April and the 1st of November, while skim-cheese or half-skin cheese and butter are made between November and April. When the milk is received it is strained, weighed, and passed into the vats! the morning's milk is added as soon as it

arrives. The whole is then heated by steam to the proper temperature, when the rennet is added. The mixture is stirred in the usual way and subsequently left to settle for curd. Great attention is paid to the stirring of the curd and the attainment of the proper degree of ripeness. The new cheeses are bandaged on the third day and placed in the ripening apartment, where a proper temperature is maintained. The whey is conveyed into tanks outside the building. The cheese is made by an experienced cheesemaker and his wife, who for many years kept a cheese-dairy of their own, taking prizes as far back as 1861.

Although I have stated my preference for the private dairy over the factory, yet there can be little doubt that where the factory system is in force, or is the system which is best adapted for any particular district, there can be no better plan than that followed by Mr. Reynolds. With the exception of the fact that milk is received from a number of dairies instead of from one, a factory in which 500 gallons daily is worked up into cheese is but an enlarged dairy.

I am indebted to the Hon. Cecil Parker, agent to his Grace the Duke of Westminster, for the following details of the Aldford Cheese factory, near Chester, which I have already had the advantage of visiting. Two persons only are employed at this factory, in 1887 the quantity of cheese made was 30 tons 2cwt. 2qr. 6lb., which sold it an average price of £3 4s. 6d. per 120lb., the Cheshire hundred-weight. The average price of the milk per gallon of 10lb. was 5.806d. 912lb. butter was made, presumably from the whey, which averaged 7.1d. per pound. During the season 194 pigs were fatted; these cost £478 5s., and consumed meal to the value of £172 9s. 5d. They sold for £808 11s. 7d., while their manure realised £5 10s. The total receipts of the year were £2,771, and the total expenditure £1848 16s. 9d., the balance being divided among the members for the 59,459 gallons of milk they contributed. It thus appears that it required 1.07 gallons of milk to make 1lb. of cheese. It is most difficult to maintain a high standard in a factory where there is no provision for payment by quality. I have no doubt that if each contributor were making cheese at his own farm he would have made a larger quantity in proportion to the milk he supplied. The expense included wages in connection with the pigs of £4 17s.; straw and weighing pigs, £9 9s. 7d. The cheesemaker received, including a bonus of 2s. a week, £71 3s. 10d., together with 731b. of butter. A rent was charged against the cheese at the rate of 15s. per ton. Interest upon plant, upon bank account, the secretary's salary, rates, coal, rennet, salt, cheese-cloths, and printing-and cleaning-materials Brought up the balance. The price paid for the milk, nearly 6d. per gallon, was satisfactory for the summer months, and the only point with which fault might be found is with regard to the price of the butter, which, as is common in cheese-making dairies, was probably very inferior. For this reason I have more than once recommended that the fat should be obtained from the whey while it is still sweet, in which case the flavour will be much better. Once, acting as judge at the Chester Dairy-show, I found a sample of whey-butter which has as perfect as that made from good cream. The pigs were fed upon the whey mixed with meal, and they certainly contributed to the success of the undertaking. It will be observed that the gross profit made by feeding pigs was (omitting the manure) £158. Whey is usually valued at £1 per cow. Assuming that 500 gallons of milk represents the average yield of cows from which factory-milk is supplied, it will be found that in this instance the numbers would be 158. In a very well-managed factory which exists at Rochester 90 tons of cheese was made during the past year, and this realised an average price of £3 3s. 10d. per hundredweight of 120lb. The manager was paid at the rate of 3s. 6d. per hundredweight, together with a bonus of 10 per cent, upon all the cheese sold at a price exceeding £3. For this sum he provided labour, coals, salt, and rennet. The milk was supplied from 500 cows, a number which the manager—evidently a thoroughly practical man—considers is quite sufficient for any one man to deal with. It is quite evident that success in a factory will be best achieved when the manager is an expert as a cheesemaker, and when he himself makes the whole of the cheese. The maker in question, we believe, is fully responsible for this work; hence his success. But should the quantity of milk received in a factory be so large that one man cannot possibly deal with it it is evident that difficulties may arise, and that uniformity in quality and make cannot be depended upon. At this factory the farmer is required to pay ¼d. per gallon for four-fifths of the whey obtained from his milk. Whether this practice pays as well as that of pig-feeding, such as I have referred to in the case of the Aldford factory, remains for each factory manager or committee to decide. It depends upon circumstances. There is an entry-fee of 15s. per cow which each farmer is required to pay. He also provides his own milk-cans.

The champion prize at the London Dairy-show in 1888 was won by Mr. R. Frederick, of Drumflower, Dunragit, N.B. The cheeses were very large, beautiful in texture, mild, and extremely nutty—in fact, they were the beau-ideal of what a Cheddar should be. Mr. Frederick informs me that he sets his milk for curd at a temperature of 84°, and he is very particular to see that the milk is ripe before he adds the rennet. The whey is drawn off while almost sweet. In testing the curd to ascertain whether it is fit for vatting he uses a hot iron, and requires the curd to draw out to an inch in length: this denotes that it is sufficiently acid. The cheese is pressed for three days.

Mr. W. J. Hall, a Wiltshire maker, who obtained prizes at the same show, adds the rennet to his milk at 80?. He also is careful that the milk is ripe; but he draws off the whey while still sweet, allowing the curd to become

gradually acid, but, strange to say, during the whole of the past season it was not put into the vat until the morning. The cheese is pressed for four days.

Last year one of the leading prize makers of cheese was Mr. Samuel Major, a Cheshire farmer, who keeps Shorthorns, and who] refrains—a custom not general in his county—from removing any cream from his milk. The rennet is added at 85°, and Mr. Major remarks that unless the milk is ripe for setting the cheese cannot be so good as it ought to be. Here also the whey is drawn while sweet. The acid is subsequently developed, and care is taken that it does not set too quickly. Heat is maintained at about 85° Fahr. throughout the process, and 7oz. of salt is used for every 20lb. of curd between May and July, an extra ounce being given during cooler weather. In this dairy the ripening-room is maintained at 70°.

Another maker, a London medalist, is Mr. Morris Halse, who sets at from 86° to 90°, according to the temperature of the atmosphere. He cuts his curd in sixty minutes. No cream is removed from the milk, which is properly ripened before setting. The salt used is at the rate of 8oz. per 20lb. of curd in summer, and 6oz. in winter. These makers do not add sour whey for scalding as is the case in the Cheddar district.

GORGONZOLA.

The remarks made upon this cheese and its manufacture based upon a very careful and prolonged study of the subject, which was materially assisted by three visits to those districts of Italy where Gorgonzola is made, and where, with the assistance of some good authorities connected with agricultural instruction, I was enabled to learn a great deal about the process, from the milking and feeding of the cattle until the sale and despatch of the cheese to foreign markets. Sufficient, in fact, was learned to enable me to undertake the manufacture of the cheese in my own dairy, and to give demonstrations—one of which was witnessed by the Prince of Wales at the Bath and West of England Society's meeting—at some of the leading agricultural shows in England. There are two or three points of merit about the Gorgonzola cheese : it is popular, its sale is largely increasing in England, it can be sold at a reasonable price and yet pay a good profit to the maker. It does not require much milk to manufacture each pound of cheese as is the case with the Cheddar, it is by no means difficult to make, and neither the process nor the plant are costly. It is a round flat cheese, weighing about 12lb., and measuring 9in. in diameter by 5¼in. in height. It is made from new milk, but not necessarily from the richest milk; indeed, I learned that some of the makers declare their preference for milk of medium rather than that of rich quality—an excess of fat having, in their opinion, a bad effect upon the ripening of the cheese. When cut in halves the Gorgonzola shows the mouldy veins, which are less concentrated, and which ramify through the whole body of the cheese to a greater extent, than is the ease with the Stilton. At the same time there is more waste, because the crust, which is rather thick, is destroyed by the process of colouring; while the cheese itself, to the depth of ½in. from the crust, is of disagreeable flavour and odour, and is somewhat soapy, both from the nature of the curd which surrounds it differing from the curd in the interior and from the fact that the whole of the salting is performed through the crust. A properly-ripened Gorgonzola cheese should be covered with a red mould, this to some extent denoting its perfection; but, this being both difficult to obtain as well as to maintain, it has become the custom of the merchants who ripen the cheeses to colour them with a red colouring-matter before they are despatched to the markets. The cheese which is sent any distance is enveloped in a mat made of fine strips of wood which are sewn or held together with fine thread. In this way the sides are protected. The cheeses are then placed in deep baskets, the diameter of which is just sufficient to enable them to enter, and which generally hold about four.

The principal feature in the manufacture is in the temperature and humidity of the apartments in which the cheeses are made and ripened. The first apartment, in which the curd is obtained and the moulds filled, although necessarily clean and well arranged, need not, however, be so perfect in either respect; but the succeeding apartment, and especially that in which the ripening is conducted, must be as near perfection as possible. I know one large merchant, for example, who purchases numbers of raw white cheeses from the: makers, with the object of perfecting them for market. To this end he has constructed a cave or gallery in the side of a mountain. There are entrances at each end, and at one end is a waterfall, which Was the probable cause of the cave being constructed in the position. A draught is caused, and the humid air is carried through the cave in which the cheeses are placed. This is just what they require. At the same time there must not be too much humidity. If the Gorgonzola can be made in a country like Italy, where the heat excessive, and where it is found necessary to construct caves under-ground (and I have seen several of these large cheese-cellars), it would seem to be possible to make it in such a country as New Zealand, which presents many features calculated to be beneficial to a person engaged in this branch of business. I have, moreover, been able to produce very perfect specimens of the cheese in England; and, further, an American who stayed two months with me was able to return to his own country and to manufacture a large number with success—so much so that specially-arranged apartments have been erected for the manufacture of this and other varieties of cheese the various processes of

which were taught in my own dairy. During the past few years, since Gorgonzola has become so popular in England, larger quantities have been made in Italy, and the prices have consequently fallen. Until within the last few years such a low price as 8½d. per pound was almost unknown. Gorgonzola cheese, however, is seldom sold below this figure, unless it is inferior, but it varies between 7½Jd. and 10d., while in the retail shops it is sold at from 9d. to 1s. 1d. per pound. There are numerous houses in London which import Gorgonzola largely, and I have more than once found that they receive the cheese before the blue mould has developed. When, however, it has commenced, and the conditions under which the cheese is kept are good, it rapidly spreads. It would be difficult to state whether or not makers in a new country could manufacture this cheese of a more even quality than the Italians; although, if they took the matter in hand, they could scarcely man it of less quality. There is every reason to find fault with the system which the Italians adopt—a system which can scarcely fail to cause them considerable loss. I refer to their uncleanliness as dairymen, and to the filthy nature of the cheese apartments and utensils, and, what is quite as bad, of the rennet which I have seen used in a general way in their dairies—it is a material which, in my opinion is unfit to come into contact with milk, and one which is certain to be very destructive to its properties.

Opinions of Agents and Salesmen.

I called at the offices of the New Zealand Loan and Mercantile Company (Limited) in Queen Victoria Street, E.C.. and was favoured with an interview with the chief buyer, who is intimately acquainted with the whole system of the New Zealand trade. My chief object was to ascertain directly from the company whether, from their point of view, the New Zealand shipper suffers any loss by sending his goods through its agency. While, naturally enough, the provision-merchants of London would prefer to receive consignments direct from the colony, there is much to be said for the protection which is afforded by the transmission of produce through a recognised channel which provides absolute safety and some guarantee that it will be sold to the best possible advantage. Although, therefore, it is quite possible that first-rate firms of merchants may be able to treat the shipper as well directly as the agency is able to do indirectly, and perhaps in some cases better, yet the great value of consignments and the delicate nature of the trade suggest the supreme importance of avoiding all risks, and therefore of even paying a small extra increased charge to insure both a fair sale and Eire freedom from loss of the amount which the goods realise. The company's buyer, however, did not for a moment believe that higher prices were obtained, or could be obtained, than those realised through the agency. Although there are firms who hold an opposite opinion, yet, he said, there were others who would not venture to suggest that this was the case. As is well known, the company has offices in all the large towns of New Zealand, while among its Home directors are men of such high position and character as Mr. Mundella, M.P., and Sir James Ferguson, M.P. I notice that in the company's circular for the 3rd November quotations are made of the prices for prime Danish, Normandy, and Friesland butter. It is important to observe—what may possibly be unknown to the colonists and even to those who study such quotations—that they do not represent the selling-prices of these articles in the London markets. London quotations, in a word, are absolutely misleading, and the fact has recently been most fully substantiated in the evidence given by experts before the Royal Commission on Market Tolls. The shop-keeper visiting the markets in the hope of buying at quoted prices will generally be deceived; and, with considerable experience upon this point, I have no hesitation in believing that as quotations, as Mr. Pell has stated, were made by interested salesmen for market purposes in connection with meat, so may they be made in a similar manner both with regard to butter and cheese. Prime Normandy, for example, quoted at £4 18s. to £5 8s., cost, to my personal knowledge, at this date, from £6 to £6 5s., while prime English Cheddar quoted at £2 6s. to £3 6s. cost £3 10s. to £3 15s.

Learning that the great bulk of the dairy-produce of New Zealand had passed through the hands of Messrs. Samuel Page and Son, a very important firm of provision-brokers of Water Lane, E.G., I put a number of questions to this firm, which were very readily answered in the following words:—"We think it will be well to impress upon shippers of New Zealand cheese and butter the following points: viz., That all butter of the same mark should be of uniform quality, and that each package of the same mark should be of the same weight, and made of the same kind of wood, to insure regularity of tares, as some wood absorbs more than others. That if butter be of mottled colour, however good the quality, buyers will only take it at much less money than that which is regular in colour; and colour should be yellow, not red. That Pond's patent boxes should only be used for butter of exceptionally fine quality, as we understand they cost a good deal more than firkins. That butter in rolls should not be shipped here. That firkins should be bound with galvanised-iron hoops, as ordinary iron becomes rusty and looks unsightly. That stencil-plates should always be used to mark the packages, as appearances go a long way, and that the packages should be marked only on the top, and that the words ' Pure butted must appear on each package. That there should be no cloth all round butter, but a muslin cloth sprinkled

with salt on the top only. The butter of fine quality should contain not more than 3 per cent. of salt, but anything of doubtful keeping-quality may be salted 4 or 5 per cent. That the London market cannot have quality too good. That after March it must be expected that prices of New Zealand butter decline very much, because supplies of fresh-made European become plentiful. With reference to cheese, the prin cipal things to bear in mind are that they should be of upright Cheddar shape, 50lb. to 70lb. each in weight, straw-coloured and uniform in colour, not mottled, rich in quality, and clean-flavoured. There should be a space between the staves of the crates and a thin board between each cheese; also a scaleboard or thin veneer of wood at the top and bottom of each cheese. We assume that shippers will before long adopt the American mode of packing cheese singly in light boxes instead of several together in a crate, as they are more easily handled. Having disposed of the bulk of New Zealand cheese and butter from its earliest importation, we have watched with great pleasure the development of the business, and are confident that if shippers continue to improve the quality of their produce very good results will be obtained on this market for the butter from the month of October to March; and there is no reason why the cheese trade should not be carried on all the year round, as the seasonal in well, as was proved by our being able to dispose of 1,800 cases of New Zealand cheese, *ex* "Doric" and "Rimutaka," at £2 10s. to £2 16s., whilst the May and June American offering at the same time were only worth £2 6s. to £2 8s. We strongly recommend that butter be always sent in the refrigerators and cheese in the cool chamber."

I subsequently had an interview with Mr. S. P. Page, a personal friend of my own, and one of the members of the firm, who informed me that the colonists had made rapid strides in the improvement of butter and cheese of late, although much was still to be desired as to uniformity. The cheese arrives in better condition when shipped in cool-chambers, but when shipped with ordinary cargo it is Very often in a melted or collapsed state. It is recommended that the butter be sent in a refrigerator, for, although the cool-chamber keeps it firm in condition, the refrigerator preserves the flavour better. The colonists, said Mr. Page, have every chance of competing with French, Danish, and American produce. Great stress was laid upon the fact that much of the butter comes in a mottled condition, some-times making as great a difference as £2 6s. in a hundredweight in value. The factory or mixing-houses do not therefore appear to have fully understood the practice of blending, which is described in another portion of this report. Mottled butter in the Home market generally caused by bad manufacture and imperfect salting and colouring. Coarse salt badly mixed attracts the moisture which is always to some extent present in butter, and causes a difference in the colour, as compared with the butter-fat surrounding these briny streaks. I put a question to Mr. Page as to whether he did not think that, if perfectly-made butter was shipped in a refrigerator very soon after making, it would not reach this country in as line a condition as could be desired. He replied that a large quantity of the butter had to travel a considerable distance before it reached the port of shipment, and that much time frequently elapsed between the butter leaving the churn and its entrance into the cold-chamber. This undoubtedly is an important factor in the success of New Zea-land butter-makers. If, in a warm climate, a week or ten days is host in this way, it is quite possible that much of the butter may have commenced to change before shipment, and thus first-rate prices are lost. Rapidity of transport is therefore most desirable; and it is well worth while for those engaged in the trade to consider whether it is not possible in particular districts to arrange for despatch on fixed days, so that as great a bulk as possible may reach the port in sufficient time only for shipment. In a country well provided with railways there would be no difficulty, but under present conditions it is impossible to do more than to impress upon interested persons the great necessity of losing as little time as possible, and of taking care to protect consignments from the influence of heat while they are on the way to the steamers. Mr. Page spoke very highly of Pond's boxes, which, however, are necessarily too high-priced for general use; but he also urged that, as wood of the very best kinds suitable for cask-making is largely grown in New Zealand, it might be employed with great success. I asked him whether he preferred that, after heading, brine should be passed into the casks before plugging up. He said that he gave the preference to a thick layer of salt, which should be laid in before the cask was fastened down.

At one time it appears that butter was received in rolls which were wrapped in cloth. These were not found suitable, the natural presence of air contributing largely to spoil the butter for marketing. Mr. Page suggested a temperature of about 37° for butter, inasmuch as if frozen it was less able to keep after arrival; and 43° Fahr. to 47° Fahr. for cheese. Much of the cheese appears to have arrived at times in a crumbly form, so that when the retailers who purchased it cut it up for sale they suffered a considerable loss, and fought shy of a similar article in future. With reference to the question as to whether shipments should be made to merchants or, as under present conditions, to the New Zealand Loan and Mercanttile Agency Company, I learned that it was to the interest of the broker, who receives a commission upon his sales, to obtain as high a price as possible, so that upon this ground the shipper may rest assured! that the best possible is being done in his interest. The produce is not submitted to auction, which according to some experience realises lower prices than when it is exposed upon the quay and sold in the ordinary way to buyers who come to inspect the consignments which are pitched for sale. This is certainly a point of great importance. A shipper consigning to a salesman is unable to make

terms until the goods have been inspected by the firm to whom he ships; and, although in good hands he will probably be treated with fairness, yet it is possible that he may not be, and the experience of English manufacturers and growers in other departments of agricultural commerce gives a great point to this argument.

Mr. Reynolds, of the well-known London firm of merchants, Messrs. Reynolds, Sons, and Co., afforded me considerable information with regard to New Zealand produce. He was most earnest i s his desire to impress upon the producers in the colony the necessity of avoiding the payment of brokerage and other charges to middlemen—that is, to firms and other media through whom both cheese and butter pass on its way to the consumer—but between the producer and the salesman. He stated that in many cases the consignors ship to an organization to whom they look for financial assistance. Between this organization and the merchant comes the broker, who, in his turn, receives a portion of the sum which the goods realise; and yet, to Mr. Reynolds the intervention of broken: appears to be utterly unnecessary. Supposing, for example, that a bill of lading be handed to a firm of merchants of the calibre of the firm of Messrs. Reynolds, there appears from their statement to me to be no reason why the goods should not be in their possession within twenty-four hours after their arrival in dock. Should it be necessary to make advances upon consignments, this firm declare their willingness to make them to the extent of two-thirds of their value; and they not only afforded me evidence of their substantial position, but declared their willingness to do the same to either New Zealand shippers or producers. My object in the questions which I put to this firm was to ascertain from them the readiest manner in which the producer could sell his goods at a maximum obtainable price to the British consumer; to learn, also, their opinion of the market for inferior goods, and to understand the relative position which goods of a superior class from New Zealand would occupy when competing with those from Denmark, from France, and from America. The first point has been practically answered. With regard to the second, Mr. Reynolds admitted that there was always a Be market in England for both butter and cheese of second quality; but he remarked that he was bound to add that the prices for these [goods were so low that they could not possibly pay the producer; and that, in fact, all inferior dairy-produce must be sent out, from whatever country it comes, at a direct loss to the grower, this loss king at times very considerable and always distinct. With regard [to the comparison of colonial goods with those from the countries tamed, the firm think that they would have equally as good a chance as the butter from Denmark and France, and the cheese from America, and that there is no reason, indeed, why they should pit surpass them. New Zealand cheese has constantly been sold as American—that is admitted by the salesmen themselves; while butters, although fine brands have been few, have in some instances been received from the colony in a well-preserved state, having originally been well made, and have realised proportionately high prices. Mr. Reynolds said with considerable force that the difference between good and bad butter arriving from New Zealand was not less than 6d. per pound in the London market, and there was a relatively proportionate difference in the value of cheese. It appears to matter little whence the produce comes, so long as it is sufficiently good to command a price. For example, the chief brands of butter from Normandy are sold as Brittany, whereas real Brittany butter comes to London under the name of Jersey; and I ascertained during a visit to this island in September that there was not a single hundredweight shipped per week to the London market—Eat. in fact, a Jersey-butter trade with England did not exist. As regards cheese, Mr. Reynolds's warehouse was filled with large Entities of both British and American makes, several brands of which I was allowed to inspect and to taste. The Americans were generally of fine quality, clean-flavoured, and admirable in texture and colour—in a word, they were even throughout, whether coloured or pale. Comparing a medium American brand with a brand of New Zealand cheese in the same store, I was informed that the one, although a cheese of a similar character, was worth 14s. per hundredweight more than the other—£2 16s. against £2 2s.

An examination of the two cheeses showed that the New Zealand had been carelessly finished, the texture was coarser, the colour uneven, and the cheese itself, although mild, lacked mellowness. The American sample, on the other hand, was perfect in all these points, its deficiency being only in the delicacy of flavour. Upon pointing this fact out to Mr. Reynolds, I was shown another American sample, which, although somewhat higher-coloured for a particular market, was more perfect in this respect, and perhaps within an ace of being equal to the best English Cheddar in the warehouse, which I valued at £3 10s., the identical price which the firm are paying to the producer. "Here," said Mr. Reynolds, "is a cheese which is in great demand, of which it is not possible to obtain a sufficient quantity. The English farmer can come into my ware house and demand his own price from £3 10s. to £3 15s., and a maker of this class of cheese is always in a position to do this when he has it. If he has delivered it, and is unwilling to take the price we offer, he can threaten us with its removal, which we should desire to avoid, knowing the scarcity of cheese of this quality." These are striking words, and they deserve to be strongly impressed upon the memory of the cheesemaker, in whatever part of the world he may be conducting his business. Mr. Reynolds also recommended that New Zealand farmers should take the Wiltshire loaf-cheese, which in quality is of the Cheddar type, in hand. It does not pay quite so much per hundredweight, but is a marketable variety, and finds ready sale when it is good. With regard to cheese of the Cheshire type, upon which I asked some questions, Mr. Reynolds stated distinctly that its days were over in this country. It

may, perhaps, be as well to remark that this was the view of a London, and not a north-country merchant, for as in the case of butter so it is with cheese : in the London and southern markets of England the consumer prefers mildness and delicacy of flavour; whereas in the north, doubtless owing to the difference in the taste which the mining and other industrial populations have acquired, a stronger flavour is preferred in cheese as saltness is preferred in butter.

Mr. Reynolds, in answering questions with regard to packages, and the mode of transit of dairy-produce, was strongly of opinion that butter of the highest quality, if properly shipped in a cold chamber, would reach the London market in good condition, and that it would retain that condition sufficiently long to permit of its being sold at its full value; but it would be of no use to attempt to export butters which are not really of the first class. The idea of blending various qualities is out of the question; and there is much to be said with regard to the method of packing. It is scarcely necessary to condemn the casks or firkins which are used in the Irish market. At Cork butters are delivered to the authorities in tubs or firkins. These are occasionally opened by the inspector, with the assistance of an ingenious machine which lifts off the head of the cask and spreads out the staves, while leaving them in such a condition that they may be fastened up again almost in an instant. I have witnessed this operation, which enables the testers and the inspector to ascertain whether the butter has been mixed, and whether, in fact, it is thoroughly genuine; but it vividly illustrates the fact that the sides of the mass left standing for inspection are pressed into close contact with the wood, which is not always of a nature suitable for the purpose. To remove all possibility of deterioration Mr. Reynolds recommends that, as in some samples which he showed me, firkins should be lined with grease-proof paper. It is necessary to add that this work should be skilfully performed, to prevent the possible enclosure of air within the cask. With regard to the transit of cheese in cold-chambers, this firm, like myself, believes that if the cheese is in a sufficiently ripe, saleable, sound condition when shipped into the cold-chambers it will arrive in a similar condition in this country.

In affording me this information Mr. Reynolds said that he and his brother, who were the proprietors, were men of business. They believed their business was the largest in London, they had plenty of energy, and their object was to buy the best goods in the cheapest market, and to sell in the dearest. These facts, which are sufficiently patent in a firm of this kind, were nevertheless stated openly, and I have sufficient knowledge of their business extent and qualifications to know that they are in a position to deal largely in the dairy-produce of the colony.

Messrs. Thomas Nesbitt and Co., provision agents, of Hibernia Chambers, London Bridge, S.E., in speaking of the uniformity of New Zealand butter and cheese, state that both articles have been most irregular in quality, and that, although some of the arrivals were very fine, the majority were inferior. The condition upon arrival was good upon the whole, but there have been instances of damages incurred when the goods were slipped outside the cool-chambers, although the cheese-packages were good. This firm recommends Pond's patent cases for the finest qualities of butter, and kegs bound with galvanised-iron, weighing about 60lb. net, for the other qualities. Messrs. Nesbitt believe that with care and attention on the part of the colonists the prospect for competition with Continental and American produce is favourable; but they add that nothing but cool-chambers are suitable for the transit of provisions from New Zealand.

Messrs. Wheeler, Bennet, and Co., of Tooley Street, London, S.E., who are actual selling-agents for New Zealand produce, and mho inform me that they are able to handle any quantity, desire to call special attention to one feature of the trade. They state that winder present conditions the colonial farmers hand their produce either to a bank or a financial firm, who in their turn consign it to some firm in London which is entirely a stranger to the trade. Again, this firm in their turn hands over the goods to brokers or agents like ourselves for direct sale." Messrs. Wheeler, Bennet, and Co. contend that the two heavy commissions entailed by this process ought to be saved. The general rule of this firm is stated to be as follows: An advance of 75 per cent, of value against production of the bill of and the balance upon completion of the sale with "account sales"' The film furnish me with the names of four of the principal banks to whom they refer their customers.

In answer to some questions put with regard to New Zealand produce, Messrs. Wheeler, Bennet, and Co. state: "Of the two articles sent to us—butter and cheese—the former did not show the uniformity in quality and make of the latter, and great improvement is needed in this respect. The bulk of the shipments more or less showed sighs of not having been marketed quick enough. They were of a good, sound, tough texture, but not carefully cured, and when marketed here opened rank and stale. The bulk of the cheese turned out favourably and met a ready sale, showing a uniformity in make so far as each factory was individually concerned. If mean could be taken to retard too-quick ripening, it would, we think, be beneficial and enhance the value. The packages have generally stood the voyage and knocking about well. Until some great change can be made in the butter, it would not have any material effect on Danish or French goods. The length of time *en route* is a great detriment to it, as we now require a mild butter for the best trade. No matter however sound and tough the texture, if any excess of salt shows itself we cannot work it for best goods, and if not sufficiently salted to stand

the time occupied from the period of making until it is marketed here it arrives stale and rank. As regards American butter, it has superseded it in the lower qualities, but the finest American butter does not come to England in any quantity. New Zealand cheese has considerably interfered with the sale of American and Canadian, both for finest and lower-priced goods whether this can last ss not time alone will show. Should any large make there show itself it must be consumed, and low prices alone will do this. The trade are not confined to any particular make, bull look out for the best value."

Butter must be shipped in the cool-chambers, but we are not satisfied on this point as regards cheese; certainly it should not be placed in a chamber at the same low temperature as the butter, yet it must not travel openly in the hot hold passing through the tropics.

Mr. W. H. Hart (successor to Mr. James Watson, M.P.), of Birmingham, states that he has only had two or three shipments A cheese, which came to hand over-ripe and full-flavoured. Although rich in quality, they had to be sold at low prices. Mr. Hart believes that if the cheese were shipped while new it would "cure and ripen" on the journey, and arrive in good saleable condition, meeting with a ready sale. He is of opinion that butter is too perishable an article to bring such a long distance, especially as, after being in a refrigerator for some time, it becomes strong on exposure to the air.

Mr. W. A. Watkins, of Birmingham, has not imported New Zealand produce, but the samples of cheese which have been sent to him from London were good, both in quality and condition.

In order to ascertain the opinions of a firm experienced in the Continental cheese-trade, and to ascertain their views upon the subject, as connected with a possible introduction of the system of manufacture of certain varieties of cheese in New Zealand for that English market, I called upon Messrs. Crowson, of West Smithfield E.C., who have a large trade in Gorgonzola, Parmesan, and Gruyere, and a still larger trade in the leading soft cheeses of France, which I understand they sometimes sell at the rate of a thousand dozen per week. I was informed that the wholesale price of Gorgonzola has, during the past few years, fallen from 11d. to 7½d., and that moderately good cheese now advertised to the trade at 8½d. is being purchased at 7½d.; "but," said the member of the firm," it is not a first-rate article, and we would gladly, even at the present time, pay 11d. per pound for really choice cheese, which is most difficult to obtain." Messrs. Crowson express the opinion that, in order to meet the price, which has fallen just as the demand has increased, the Italians use milk which has been partially deprived of its cream. Although not acquainted with the colony, Messrs. Crowson believe that this cheese could be made in New Zealand, but they do not appear to be satisfied as to whether it would travel so far as Great Britain. That point, however, would soon be settled by a test-case. I asked a question whether a market would be found in England for cheese of this variety, and was surprised to hear an expression of opinion that it could be sold in any quantity if it were good and cheap; and it must be remembered that the very lowest price named, 7½d. per pound, is much higher than the present type of colonial cheese is making in England. In the ordinary nature of things, however, we must be prepared for a further fall in Gorgonzola, just as English cheesemakers must be prepared for a fall in Stilton when it is made in the colonies for shipment to this country. Where Messrs. Crowson were able to sell a hundred Gorgonzolas five years ago, they now sell from two to three thousand, and it is by no means an uncommon Recurrence for them to sell a thousand in a single day. This firm, it must be remembered, supply retail shops, sending out their vans I daily throughout London to call upon provisioners and deliver goods at their doors.

With reference to Gruyère, it is a somewhat remarkable fact that, although much comes from a district where the Gorgonzola is made, this cheese can be sold in England at a lower price. Competition is undoubtedly the cause. The very best Gruyère costs the retailer 8d. per pound wholesale; but, again, this is much better than colonial price, while it pays the Swiss farmer well for his milk. Gruyère is a cheese which, as it becomes better known to the large body of the public, will command an enormous sale if it can be brought within their reach. The absence of quality in the Gruyère is chiefly owing to the poverty of the milk; yet the Swiss, like the French in the mountainous districts surrounding Switzerland, are, as a class, first-rate makers. The consumption of Gruyère has already extended in London very largely, the sale being at least five times as great as it liras a few years ago. With regard to Parmesan, which was exhibited during the past summer at the Italian Exhibition, where it was intended to give away large quantities of prime cheese as tasting-samples, there is a greater margin for profit than upon either of the varieties already mentioned. There are two reasons accounting for this. The cheese is made of milk partially skimmed—sometimes, indeed, wholly skimmed—while the price of a good sample, on account of its rarity, is always very high. At this moment a firm like Messrs.

Crowson sell high-class Parmesan at 1s. a pound, paying the exporters 11¼d.; but these are for cheeses which are three years old, hence something has to be added to the cost of manufacture in the shape of interest upon the money invested, and for depreciation in weight. I believe that the Parmesan merchants, such as those with whom I have become acquainted in Milan and Parma, are among the largest cheese-factors in the world. In one store, or series of cellars, I was shown ten thousand old cheeses, the majority of which weighed over 100lb. each, many being of considerably greater weight. This represented a very large sum, but the business realises

great profits for the factors. At one time Messrs. Crowson used to sell no more than a hundred of these cheeses in a year, but now they get through the same number in from two to three months. The public will not buy either Parmesan or Gruyère unless it is good; and of the former cheese in particular it may be said that there is a greater distinction between a good and a bad sample than is the case with any other variety of cheese with which I am acquainted.

Education in Dairy-Work.

There are three methods of educating those who desire to learn dairy-work, which are adopted in Great Britain. The first is the employment of an itinerant teacher, who is paid a sum of money for his services during the six summer months, together with certain expenses. His duty is to go from farm to farm giving demonstrations in the dairy attached to each, actually making cheeses or assisting the farmers to do so, at the same time giving them full details not only of the process which he recommends, but the reason for it. When difficulties arise, or have arisen, he is able to afford assistance and to give such advice and aid as will enable them to make cheese of higher quality. The success of this system has been marked, especially in the south-west of Scotland, where so many of the Cheddar-makers farm, and where the London Dairy-show champion! of 1888 resides. The quality of the Scotch cheeses made under the instructions of the teachers who have been employed in their dairy districts fully disposes of the oft-repeated assertions that high-class Cheddar cannot be made out of the County of Somerset. I was asked by the chairman of one of the large Scotch societies to recommend a competent teacher for the summer of 1868, but was unable to do so. Ultimately, I believe, a Canadian was engaged at a fee of £200 for the six months, in addition to travelling and other expenses. Dairy-schools such as those in the County of Cheshire (the one at Worleston and the other near Tarporley) afford other means of instruction; but in order to obtain the advantages they afford it is necessary to reside either at the schools or in the immediate neighbourhood. The Worleston School was started by a number of Cheshire men, with Mr. Rigby at their head. Its head-quarters are situated in a farmhouse the property of Colonel Cotton, M.P., no of the rooms having been adapted to the requirements of cheese find butter-making, although in a somewhat primitive manner, yet they answer their purpose. The best implements and appliances are used, and for a certain period during the year cheese is made every day.

During the first year the manager was Mr. Willis, a member of an old cheese-making family, who has now started a school of his own. In the past year he was succeeded by Mr. Siddorn, son of a famous cheesemaker near Tarporley, who, like one of the Willis family, took a very valuable champion prize some years ago. Butter-making is taught by Miss Connell, formerly a pupil at the Minister Dairy-school in the south of Ireland. Forty people passed through the school during the first year, remaining for periods of from one to seven weeks. On one occasion, when acting as judge with Professor Carroll, of Dublin, I remember one of Miss Connell's pupils beating her in the butter-making competition, thus testifying to the valuable nature of the teaching she had received. Here the pupils assist in making both the butter and cheese. I confess to feeling some doubt whether more than three or four pupils should be accepted at a practical school of this kind at one time. In one or two of the Swiss Schools three pupils at the most are taken, and these are required to May for a given period. The principle is asserted that a pupil must to through the daily routine of work, and it is claimed that he cannot do this if he is one of several, for all of whom work could not be pro-vided. If a pupil is engaged in making a cheese every day under the direction of an expert teacher he has every chance of becoming expert himself; but if he remains at a school for a week or two only, and during that time only one of several pupils, he has little chance of becoming skilled in making an article which requires some expertness as well as the exercise of considerable judgment. A large quantity of cheese and butter is made at the Cheshire school. In 1887, for example, the milk used amounted to 38,000 gallons; nearly 13 tons of cheese and 2,582lb. of butter being made, together with 350lb. of whey-butter. The pupils paid £95 in fees, and cost £30 15s. for board, whereas the expenses, including salaries, amounted to £232. This school has now received a grant of £150 from the Government. The school which is conducted by Mr. Willis is worked upon a similar basis. Although I have had the advantage of seeing the Worleston school I have not seen that conducted by Mr. Willis, the maker who at the recent Cheshire Show was awarded a gold medal for his fine pitch of cheese. It is evident that in cases of this I kind pupils, most of whom are young people, receive considerable benefit, and are prepared to go into their dairies at home or to take Stations, and thus assist others in the work. The custom at the French dairy-schools, which are now becoming numerous, and which are assisted by Government, is to take young people for a certain time. The pupils remain for a term, and pay very small fees, as they chiefly belong to the poorer classes. They attend lectures every day, and assist in the manufacture of both butter and cheese; but from what I have personally seen (one of my own family having been through a course at one of these institutions) they do not appear to be sufficiently prepared either to start for themselves or to take responsible situations

unless they remain at the school for at least a year.

Another system of teaching has recently been started by the British Dairy-farmers' Association at their Institute at Aylesbury. In this case a convenient country house, to which the dairy is attached, is occupied by a matron, who is practically in charge of the female pupils, who sleep and board upon the premises; male pupils, although they also take their meals at the Institute, lodging outside. The house is neatly but usefully furnished. There is a convenient lecture-, reading-, or writing-room. The dairy, a plain but substantial building, is divided into four apartments—one for the setting of milk and separation of cream, a second for churning and washing up, the other two being for cheese-making while overhead is an apartment adapted for the ripening of the cheese. A very large garden and a small paddock are attached, and upon a large dairy-farm near at hand conveniences are afforded for outside study and experiment. Moderate fees are charged for instruction, while the fees for board and lodging are calculated upon the basis of cost. The manager of this institute, a pupil of my own, was awarded the diploma of the association for his knowledge of the "science and practice of dairying and dairy-farming." Lectures are announced to be given from time to time by scientific and practical men upon various dairy-subjects. At this institute it is possible for the pupils to learn to make several of the most important dairy products, such as Cheddar, Cheshire, Stilton, Gorgonzola, French, and cream cheeses.

There is another system of teaching which has recently been adopted with some success by the Bath and West of England Society. A building is engaged in a selected town for a week or two, dairy implements are provided, together with milk or cream, and butter-making is daily conducted by two dairymaids who have been engaged for the purpose. Visitors are allowed to watch the process, and pupils are invited to learn. This may be described as a migratory "school; but were such a plan adopted in New Zealand it would be necessary that the teachers should possess higher attainments, being not only able to make butter, but to thoroughly explain the reasons for each process and to advise any practical farmer who has any difficulty to overcome.
Working-dairies are now becoming general in many agricultural districts. For some years they have been provided at the Royal Agricultural Society, the Bath and West of England, the Manchester and Liverpool, and other meetings, At the Bath and West of England meetings I have myself been engaged for four successive years in giving lectures during the exhibition, as well as in giving demonstrations in the manufacture of cheese. At the Manchester and Liverpool Exhibition, at the Somerset Society's meeting, at the Cheshire Dairy-show, as well as at the London Dairy- show, and on many less important occasions, I have also given demonstrations and lectured upon practical dairy-subjects; and it is my experience that the cheese-making as well as the butter-making farmers are interested in this work, for not only do they ask numerous questions in public, but they follow up their demand for information in private, both verbally and by letter. Being very strongly of opinion that the very best cheese and butter are made upon the farm, and not in the factory, in the ordinary sense of that word, believe that it will be to the interest of New Zealand farmers to embrace every opportunity of receiving instruction and of obtaining information which is afforded them, rather than to leave the matter in the hands of managers of factories, who, while undoubtedly doing everything in their power to succeed, are not, I submit, able to control the quality and the condition of milk received in bulk, as it is from numerous farms, so well as the producer, who is able to deal with it immediately it comes from the cow. Upon the farm the milk is produced from cows which are probably of a similar character, which are all fed alike, and which are managed with every care. This milk is not subject to the shakings of a journey, and a loss of temperature and the necessity of being reheated; and I believe that in good hands it would always make a better cheese than milk which is the mixed produce of a number of farms, obtained from cattle of all kinds, which have been fed under various conditions.

Among Continental dairy-schools, I may point to one which I have fully described in an article upon education in dairy-farming in the 20th volume of the "Transactions of the Highland Agricultural Society of Scotland," and which was prepared at the request of the Committee. This school is at Reggio, in Emilia, and is attended I by young men who desire to learn the science and practice of dairy-farming. They not only work in the dairy, in the cowhouse, and I in the piggery, but they are taught the elements of physics and chemistry, and obtain practice in the use of instruments of milk control and analysis. Each day four hours and a half are devoted to theoretical study. Pupils who board and lodge in the school pay £16 yearly, and every pupil who had taken his diploma had obtained employment when he desired it up to the time of my visit. The school is chiefly supported by the Government. It is provided with Shorthorn, Dutch, Swiss, and native dairy-cattle, and with English and native pigs. The four leading varieties of cheese of the country are made in the four seasons of the year, and butter is also regularly made; a student, therefore, who passes through the school, which is most practically arranged, can, if he chooses, obtain a thorough knowledge of the manufacture of the leading articles of Italian dairy-produce. Professor Zanelli, the director, considers that to be successful a dairy-school should be provided with cattle, more especially as these largely contribute to maintain communication Between the school and the farmers throughout the district.

Although much has been done in connection with dairy educa- tion, we have all much to learn; and there

are not only problems of the utmost importance which need solution, but in most countries there is a great need for an establishment to which dairymen and dairy-farmers can apply for the elucidation of difficult questions, for analysis, and for advice. One of the most important stations of this kind is at Kiel, in North Germany. This station receives a grant from the German Government of £375 per annum. It deals with a large quantity of milk daily, some of which is purchased (that from twenty cows), and the remainder (from ten cows), the property of the station. The officials are endeavouring in a most laudable manner to encourage the manufacture of cheese, which in consequence of the establishment of factories had almost gone out of existence. Instruction is given to pupils of various grades. Those who are advanced are allowed to do work in the laboratory under the chemist, and are occasionally sent to country dairies. There is a course for the instruction of farmers, who can attend for fourteen days, or a month if possible. The experiments which have been conducted were very numerous in the past year. They dealt with the manufacture of cheese and butter, the value of cattle-foods, and the changes which milk undergoes in freezing. The officials also conducted 350 experiments upon milk produced under different systems of feeding, together with nearly a thousand experiments in connection with the composition of milk. In addition, numbers of analyses and experiments were made with samples of milk, butter, rennet, whey, milk-sugar, and condensed milk, which were sent to the station. The experiments in connection with the cattle, however, were the most important of all. Records were kept by the officials through out the year in connection with the dairy, with the temperature and specific gravity of milk; while the accounts which were kept afford comparisons between some of the leading systems of cream-raising and butter-making, as well as of the manufacture of various kinds of cheese.

The experiment-station at Lodi, in Italy, maintained by the Italian Government, works upon a somewhat similar basis. There is a director and two assistants, all of whom are scientific men, with a practical cheesemaker. Here instruction is given to adults in the science and practice of dairying, and experiments are made upon milk, butter, and cheese somewhat similar to those which are made at the Kiel station.

There are several experiment-stations in America, but there are two or three which devote a considerable amount of attention to dairying subjects. One of these is the Agricultural Experiment Station in connection with the University of "Wisconsin. The director is Professor Henry, and the chief chemist Dr. Babcock both men who have done splendid work in the dairy interest. In a his last report Professor Henry says that he has now five thousand applications for the annual edition of five thousand copies of the "Proceedings" of the year, and hopes that ten thousand will be granted in future; and yet there are thirteen thousand copies of the report bound together with the reports of other societies. In the last report, for example, there are papers of the greatest value detailing experiments which were made upon ensilage *versus* maize-fodder for the production of milk and butter; upon a number of churning-tests—the results of which throw considerable light upon the profits of butter-making; upon the amount of fat in creamery-butter; on a new method of determining fat in milk; on the effect on their milk and butter of dishorning milch-cows; together with notes on ensilage, and some experiments in feeding pigs upon skim-milk and other foods. Such experimental work is of the highest value to the dairy-farmer, and no report ever more clearly showed the value of a dairy experiment-station. Similar work has been done at the station at Geneva, New York, under the direction of Dr. Sturtevant and his successor. Such a station for New Zealand would Squire the assistance of a chemist experienced in connection with dairy-science, an assistant chemist, also a scientific man and an able practical dairyman. It would be necessary to fit up a laboratory, adapting it to the work of dairy-investigation, and to equip a Email dairy where experiments could be made in cheese-making, in team-raising, and in butter-making. It would also be necessary to provide some means by which the officials could have access to dairy-cattle, which, if possible, should during important experiments be fed under their direction.

Improvement of Dairy-Cattle.

What special steps have been taken by New Zealand dairy-farmers to improve their cattle I do not know, but, inasmuch as the great dairy-competitions in England have conclusively shown that there are milking-cows of the highest type belonging to all the Hading breeds, and that it is possible, by careful selection, to obtain not only deep but rich milkers, I am of opinion that the Government of the colony could do no greater service to the agricultural community than to purchase a small number of carefully-selected animals of the Dairy Shorthorn and the Ayrshire breeds, for the purpose of improving the milking-properties of New Zealand cattle. There are numbers of landowners and farmers, both in England and Scotland, who possess herds of cows, many of which yield, in the case of the Shorthorn, from 700 to 1,000 gallons per head, and in the case of the Ayrshire from 700 to 900 gallons per head per annum. As, however, there is no herd-book for dairy-cattle, by the aid of which a purchaser would be able to select bulls with milking pedigrees, I would suggest that a few of the heaviest milking-cows obtainable should be purchased for the purpose of breeding bulls for use in the colony. If a dozen

bulls were selected—and I believe considerable difficulty would be experienced in obtaining bulls which were known to be bred from milkers of the very highest type—the colonists would not receive the same guarantee of the milking-properties of the strain which each bull would represent as would be the case if bulls intended for their use were bred directly from the very finest milking-cows which could be selected and sent out to the colony for breeding. A score of males and females of the two milking-races to which reference has been made would virtually form a Government breeding-herd, which might be attached to the agricultural college or to an experiment-station, and they might become the nucleus of a greatly-improved race of cattle. Many cows have been exhibited at the London dairy-shows which have exceeded a yield of 60lb., or about 6 gallons, of milk daily, although under circumstances which must have diminished their yield. During nine years eighty-eight Shorthorns have competed at the London shows for milking-prizes. They have averaged 12.87 per cent, of solids and 3.71 per cent, of fat. In 1887 the average of fifteen cows was 13.18 per cent, of solids and 3.89 per cent, of fat. In the same year seven of these, cows and heifers, exceeded 4 per cent, of fat. One cow gave 4.5 per cent, in the morning and 4.9 per cent, in the evening another gave 4.4 per cent, in the morning and 5 per cent, in the evening; a third cow gave 5½ per cent, both morning and evening; and a heifer gave 6 per cent, at each milking, her yield of milk on the same day being 43.2lb.; and yet farmers are content to goon making 3 per cent, of butter from their milk. Of the sixteen Short-horns which competed for the milking-prizes in October, 1888, none averaged less than 3 per cent, of fat, whereas twelve gave over 4 per cent, at one or both milkings, nine gave over 4½ per cent., and four over 5 per cent. Most of these were heavy milking-cattle, and of the greatest value for the improvement of colonial stock. On one occasion I selected eight animals from some twenty head of Dairy Shorthorns which had been collected for the purpose by a dealer, six of which were cows of about five years of age, and two heifers. They had been fed solely upon hay for a few days, and had recently calved. The following statement shows the quantity of milk which they gave during two and a half days' test, showing that 18½lb. of their milk made lib. of butter:—

The milk averaged 5.3 per cent, of butter-fat, as ascertained by the churn. The milk was passed through a separator, and the beam properly ripened and subsequently churned at 60°. These cows originally came from different farms. On this occasion I made no test in order to ascertain the quality of the milk. Every cow which was selected for purchase, in addition to others, was milked clean upon the dealer's farm before a bargain was made, and in the end those were selected which gave the largest quantity of milk. The cows had not been stocked, as my visit on that particular day was not expected.

From time to time records of various herds have appeared in the "Agricultural Gazette," showing the average yields of herds of dairy-cows from year to year; and those who have followed the question will have thoroughly understood how these herds have been formed, and that it is possible, by adopting a similar plan, to achieve similar Cults in the Colony of New Zealand. Like many other persons who have followed the simple plan which has been referred to, I have been enabled to purchase Ayrshires from Scotch breeders who have allowed me to take their best cattle and to see them milked before purchase. To a great extent, therefore, it depends upon the enterprise of colonial farmers whether they are enabled to materially Reprove the yield and quality of the milk, but they can be largely Biped by the Government, which would be able to achieve such results as the farmers themselves could scarcely hope to attain. The breed of the cow, however, is not all that the farmer requires, for to arrive at the best results I believe he will find it necessary to pay closer attention to the system of feeding, to which reference is made in this report. If it can be shown in practice that by the assistance of artificial food a greater money-return can be made—whether as regards quantity or quality of milk it matters little—then it will be to the interest of the farmer to commence artificial feeding, more especially as he reaps considerable benefit from the extra value the manure; the manure made from such a food as cotton-cake being very high in value, if it is not, indeed, as much in value as one-half the first cost of the cake.

The Leading British Dairy-Counties.

It has been frequently stated that clay-lands predominate in England; and perhaps it is quite as well for British agriculture, as, unless they are unusually stiff and almost unworkable, they are generally able to produce larger crops than soils of a lighter character, Clays, however, do not predominate in the chief dairy-districts to which reference is made in this report. The County of" Somerset is, as regards acreage and the number of dairy-cattle it owns, the most important dairy-county in Groat Britain. There were in Somerset in 1887 110,000 cows and heifers, in milk and in calf. The county is hilly, although the hills do not reach a higher elevation than from 700ft. to 800ft. The cattle are chiefly Devons, bred for milking purposes, and not of the feeding-type exhibited at such large meeting as Smithfield and Birmingham. They graze principally in the marshes and valleys lying between the hills, which are chiefly upon the new red sandstone, although in some instances the magnesia limestone is found rising to the surface.

Cheshire is the next in importance as a dairy-county. The cultivated portion of Cheshire is chiefly composed of a sandy or clayey loam, but there is a range of high lands which are composed of sandstone. The climate, like that of Somerset, is moist: the meadows, especially those near the rivers, are often flooded, and drought seldom lasts for any length of time. About two-thuds of the cultivated land in the county is above mediocrity in quality. The arable land is much smaller in extent than the pasture, in which the poa and fescue grasses are very prominent. The drainage upon Cheshire farms is generally good.

Leicestershire may be taken as a typical dairy-county of the Midlands, this being the home of the Stilton-cheese industry. The formation is partly oolite and lias, but the principal part of the best grazing-land of the county rests upon the new red sandstone. Lei-cestershire, like Cheshire and Somerset, is chiefly composed of grass land.

Buckinghamshire is referred toon account of its fame as a butter producing county, although its reputation for butter is gradually decreasing, the principal part of the milk produced in the Vale Aylesbury being sent to the Anglo-Swiss milk-condensing factory.

Buckinghamshire is nearly half arable, the north and east divisions of the county being composed of poor and chalky soils. Good land is found upon clay, sandstone, and limestone respectively. The Vale is a particularly fertile grass country. The cattle are chiefly grade Shorthorns of a good type.

Ayrshire, a famous Scotch dairying-county, is very hilly, rising sometimes to nearly 2,000ft. The county forms a natural basin. Nearly half the acreage is clay, and about one-fifth of the county is a light sandy soil, and the remainder moorland. Distributed amongst this, however, are some fertile loams. The climate is a moist one.

Wigtonshire is one of the most important dairy-counties in the United Kingdom. It is hilly, but the climate is mild, and more than half the cultivated acreage is pasture. Although chiefly composed of moorland there is plenty of good loam.

SOILS, ROOTS AND GRASSES.

The farmers of Great Britain are commencing to recognise that abundant pastures are not absolutely essential to successful dairying. In arable districts, where grass forms but a small percentage of the acreage, milk is in many instances produced to a much larger extent than formerly, and butter and cheese are being made with the assistance of artificial grasses, which are laid down for short periods only. I believe it can be shown—and I append the copies of two papers which I have prepared upon the subject, one contributed to the "Journal of the Royal Agricultural Society," and the ether read before the Conference of the British Dairy-farmers' Association at their Norwich meeting in May, 1888—that milk can be reduced more extensively and more cheaply with the aid of arable cultivation than solely by means of pasture or meadow-land. The question, however, as regards the Colony of New Zealand does not bear upon arable cultivation, except in an inferior degree. The comparative extent and cheapness of grass-land, together with the greater cost of labour, present the whole subject under an aspect at once more economical and more concise than it can ever be regarded by the British farmer. There may, however, be instances in which arable cultivation is necessary, especially upon soils of a light nature. In such cases it will be worth the while of the farmer to consider whether crops suitable for dairy-cattle should not be grown. He has a number from which to select, and among these are some oil the highest possible value as milk-producing foods. The mangel, for example, is always worthy of consideration in a climate similar to that of the southern portion of Great Britain. It is a food essentially adapted for cattle, producing the sweetest of butter, and it is always of great value towards the end of the winter, when other succulent foods are either scarce or altogether absent. The turnip, which is grown more extensively and more successfully in the north of England, and which, on account of its large yield and succulent character, is widely used for cattle, cannot be so strongly recommended, imparting as it sometimes does when it is liberally used a pronounced flavour to butter which depreciates its quality and character. Carrots, although little used in England for milking-cows, are extensively used in the butter-producing districts of Normandy, especially on the lighter soils, where the yield it large, the results obtained being very considerable. The parsnip, another admirable milk-producing food, is very highly prized by the Jersey farmers, who glow them upon land for which they pay from £7 to £10 an acre in rent. Potatoes are also used in many districts for cows, and are either steamed or pulped; being much richer in feeding-matter than either the turnip or the mangel, a much smaller quantity is necessary. Of gorse, or furze, I am unable to speak from experience. It has been strongly recommended by practical men in Ireland, where it is cut in its young state, and bruised by passing through a masticator. Lucerne may be strongly recommended; it may be seeded down with a grass-crop, upon a deep stiff loam containing lime. Two heavy crops may be cut during the first year after sowing, and four crops the second year. Being very bulky, lucerne probably yields twice as much food as meadow-or pasture-grasses, and, what is perhaps of greater importance, it produces that food during drought, when almost every other crop fails. There is no plant with which I am acquainted which can be grown more profitably upon deep soils that have been

drained, that are dry and contain lime, and that are situated in districts where the climate is similar to that of the south of England. The roots of lucerne penetrate to a great depth, and the crop itself is of special feeding-value, the plant remaining upon the soil in a profitable condition for several years. Almost as much can be said for sainfoin, which requires a soil containing still more lime than lucerne. This plant provides at least two heavy crops yearly for three or four years when it is grown upon a suitable soil, and is under good cultivation and I have found it to be a first-rate milk-producer. Both plants are suitable for mixing with ordinary grass-seeds for laying down meadows, although they will not remain many years. The ryegrasses are also considered of great value to dairy-husbandry; the Italian rye-grass, although only a temporary grass, will grow upon almost any kind of soil, especially if it is humid and rich, and it may be sown alone, or with other grasses, providing a cut in the first year under suitable conditions. Perennial rye-grass, however, is generally found superior to Italian, especially upon heavy-clay land, although it thrives upon almost any soils which are not water-logged, excepting it be sand or gravel. It provides an abundance of rich herbage, it is greatly appreciated by cows, and is one of the heaviest croppers among known grasses. There have been differences of opinion among experts in England in the past, but there is little doubt that farmers prefer rye-grass to almost any other variety, remembering, as they do, its hardy nature, its heavy-cropping properties, and its rich-feeding value. Among the remaining leading meadow-or pasture-grasses are timothy, or cat's-tail, which grows freely upon almost all soils, except sand or gravel, and which is a heavy and hardy cropper, suitable alike for temporary and permanent cultivation. This is one of the most popular of known grasses, and the seed is especially cheap; if, however, it is too often sown it has a tendency to die out. Cocksfoot grass, again, is popular as a meadow-grass, especially when grown upon moist stiff soils. Like timothy, it arrives at its full growth during its second year. Its habit being bunchy, it is not so suitable for growing alone. This is one of the best varieties for growing under trees. Among the remainder of the grasses suitable for dairy-cattle are foxtail, which is an early grass, producing an abundant second crop upon rich heavy well-drained soils; and meadow-fescue, which is also a good cropper, upon deep moist soils, providing late herbage and good hay. Of the clovers suitable for meadows or pastures the perennial red, or cow-grass, and alsike are strongly recommended. It should be remembered that there is a great distinction, which is not generally recognised to its full, between the meadow and the pasture; and, although in some parts of New Zealand—where, I understand, I the cattle are able to graze throughout the entire year—it may not be of immediate practical importance, yet where farmers are in the habit of laying down new grass-lands it is worth bearing in mind. As the meadow is usually intended for the provision of a crop of hay, It is essential that the grasses of which it consists should as nearly as possible be selected from among those varieties which mature at one time. In the pastures, however, it is essential to success that there should be a good herbage throughout the year. In this case, therefore, grasses should be sown that vary as widely as possible in the period in which they ripen.

ENSILAGE.—MAIZE.

The question of silage as a food for stock in New Zealand is one which may not, perhaps, be of great importance; but, arguing from the value which many farmers attach to ensilage-making in England, and in such districts in France as Touraine—where I have had the advantage of seeing the system as conducted by some of the most famous Frenchmen, among whom were M. Goffart, who is practically the father of the European system; by M. Lecouteux, the famous0 Professor of Rural Economy at the Paris Institute; and M. Cottu,! the French gold medallist—I believe that in those districts of the colony where the winter is most severe ensilage will be found of the greatest value in the production of milk. I should hesitate to refer to this subject did my experience not enable me to pass an opinion upon it.

I have also seen this ensilage-system conducted with great success in connection with dairying in Holland, and I had the advantage of acting as one of the judges for the Royal Agricultural Society of England in awarding the valuable prizes which were offered in 1886 for the best silo and the best silage-stack in England and Wales. These awards were made after inspections extending over a number of weeks. I annex a copy of the judges' report, which will be found of interest to those who are desirous of studying the experience of those practical men who competed for the prizes. I have also acted as judge for the Ensilage Society at their Smithfield competition and have succeeded in making sweet silage for my own stock. I believe that silage which has been made from good grass, clover, or vetches to be especially valuable for dairy-cattle, when it is what is termed "sweet," in which condition it is as fragrant as hay. Whether or not sour silage is detrimental as a food for milk-production has not, I believe, yet been absolutely determined, but it is certain that its odour is absorbed by milk, and that therefore it is objectionable on this account. Maize-silage, for example, is unfit for milk-production in this condition, the large proportion of water contains causing it to be most difficult to preserve; but as a grew food, if I may judge from a short experience of four years, in each of which I have grown a small acreage for my own cattle, I believe it to be one of the best milk-producing foods, not only

promoting a large yield, but exceptionally sweet butter.

DRY FOODS.

A few remarks may be necessary with reference to the selection of artificial or dry foods suitable for dairy-cattle and milk-production. It is quite possible that the majority of the New Zealand farmers have not yet found it necessary to use any other foods than those they grow; hut as the dairy-system extends, as cattle of a higher class are introduced, and as greater efforts are made to obtain larger yields of milk, or milk of higher quality, there will in all probability be farmers who will from time to time adopt either British or American ideas, and prepare their rations accordingly. In some parts of England there are farmers who use nothing but hay during the winter, although hay is perhaps the dearest of all foods in this country; in other districts there are practical men who use none, their rations consisting chiefly of straw-chaff, roots, cake, and meal mixed together, in some instances with grains obtained fresh from the brewery or preserved in pits made for the purpose. In Holland, where hay is unusually cheap, some of the more intelligent farmers lave introduced rape-cake with beneficial results. In France I have seen similarly small farmers use cakes made from chestnuts and [from pumpkin-seed.

Without, however, making any special recommendation to the farmers of the colony to use the foods common in Great Britain—which they would probably be unwise to do, where, from the abundance of grass, such foods are unnecessary—I will simply mention pose which are of chief importance, and which not only have an influence upon milk-production, but, from their manurial value, upon the growth of the grass itself, supposing the cattle to be fed upon it while they are consuming artificial food, or their manure distributed over it when, as is common in England, they are housed in winter, For milk-production perhaps decorticated cotton-seed cake and meal stand at the head, on account of their low price and their high manurial properties. The price may be put roundly at £6 10s. a ton, while linseed cake, also highly prized, costs £1 more. Linseed itself, which much appreciated by milk-producers, is also used with great advantage, especially when it is steamed in water and the resulting oily mass mixed with chaff, roots, and meal. Linseed costs about £2 8s the quarter of eight bushels; bran, costing £5 a ton, is also extensively used; oats, upon which many farmers place great reliance, as they are one of the best milk-producing foods, are by many practical men considered to be the reverse of economical when they cost 18s. to £1 per quarter; while peas and beans ground into meal He highly appreciated and extensively used by those who produce milk for the London market as well as for butter-making. Maize-meal is favoured in the north of England, especially when maize costs from £1 to £1 3s. per quarter, while brewers' grains are extensively purchased in almost all districts; and so far as I have been able to ascertain from actual experience they have no ill effect upon the favour or character of the butter. Among French farmers, how-ever, I have found a deeply-seated dislike to both grains and distillery-refuse in cheese-making districts, and the same antipathy is quite as strong as to the use of barley-meal. I add the following rations, some of which are examples of those adopted on English dairy-farms. The first is that quoted by Mr. Dudley Miller, an American Seeder of Dutch cattle, showing the food given to a very famous cow which yielded an unprecedented quantity of milk in a single year. This ration consisted of (per day)—

The next ration is that used by a very large and well-known milk-producer in Kent. This gentleman keeps 150 cows upon a very small acreage, and upon my visit to his farm they were all in fine condition. His winter feeding was as follows :—

Another ration used in a butter-dairy with considerable success for small cattle, principally Jerseys, was—

(Grass during the day.)

In this case the bran, grains, and linseed were, later in the season, replaced by cotton-cake, pea-meal, and maize-meal. A third ration, also for small cattle, is as follows:—

In the two latter instances the dry matter varied from 20lb. to 21lb., the flesh-forming and heat-and-fat-forming matters being properly balanced. In many instances English farmers give as much as 56lb. of mangels daily, in others as much as 25lb. of hay; but the best feeders, as a rule, make it a practice to give liberal quantities of cake, bran, or meal. Good grass is food which is well balanced by nature, not only for the sustenance of cattle, but for the economical provision of milk. There are probably no other foods which are so well balanced. Experiments which have been conducted by chemists in England, Germany, and America have demonstrated that a ration, to be economical, should contain a certain proportion of those constituents of food which provide for the heat of the body as well as its maintenance, and for the manufacture of the milk or the meat which it is necessary to produce to obtain a profit. These constituents, which are all found in grass in their required proportions, may be provided by the mixture of such foods as have already been, named in their proper ratio, chemical data being supplied in order to show how each is composed. Perhaps the ablest discussion of this scientific and yet really practical system of feeding is that written by F.J. Lloyd, F.C.S., the Consulting Chemist to the British Dairy-farmers' Association, in the "Live Stock Journal Almanack" of Christmas, 1886,

and since extended in the new edition of Mr. I James Macdonald's "Stephen's Book of the Farm."

Conclusion.

In summing up the various points which have been raised in this report it may be suggested—with reference to the factory-system, which it seems probable will be largely extended throughout the post suitable parts of the colony, and more especially upon the west coast of the North Island—that no steps should be taken to [establish a business unless sufficient capital can be commanded; unless sufficient milk can be obtained and guaranteed throughout the whole of the year; and unless the milk can be maintained, not only of high quality, but perfectly sound and pure. To this end I refer to the suggestions which have been made with reference to milk-control. Without a thoroughly experienced manager in each factory success cannot be expected, and without skilled workmen it is impossible for a manager to achieve satisfactory results. Whatever lines it is determined to follow they should have already proved successful, and if there be any determination to experiment in a new direction the experiment which it is possible might be most desirable should be conducted upon a small scale. Money should not be needlessly expended in plant or buildings—the former should I be absolutely efficient, substantial, and the best in the market, but unnecessarily extensive it should not be. With regard to the factory I itself, I believe that in spite of the vast sums which have been spent in the erection of factories upon the Continent of Europe there is no necessity for anything more than plain and inexpensive buildings in the Colony of New Zealand, providing they are large enough for the work which has to be done within them, and sufficiently efficient and substantial to last without continual attention and repair. I have seen water-power used with very great effect, and at an exceedingly light cost. If this can be adopted I would certainly use the modern turbine in preference to steam power, on account of its economy. An established factory ought, I believe, to work continuously, but it is noticeable in some of the reports on factory-work in New Zealand that there are instances where factories are shut up for six months in the year. In some districts it appears, from reports which have been furnished to me, that the prices paid for milk varies from 2d. to 3d. per imperial gallon. If the recommendations which have been made by Mr. MacCullum are considered, and if a system if adopted which will enable a combination of factories to turn out butter of high and uniform quality and colour—which should invariably be a rich primrose, and lightly salted, and a pale cheese made upon the Cheddar principle, and reaching this country in good condition—I can see no reason why, when the system of transport is perfected and the freights are reduced to a reasonable figure, the farmers should not receive 25 per cent, more than these prices. I notice that it has been declared by a colonial authority in dairy-matters that if 1s. a pound can be obtained for New Zealand butter: in the English market the problem is solved. Assuming that it takes what might be termed a maximum quantity (three gallons of milk) to make a pound of butter, and that the milk is purchased today at 2½d. a gallon, we have a margin of 4½d. to provide for the cost of manufacture, the freight to England, the market-charges, and the interest to the shareholders; these combined charges should be much more than provided for by this sum of money. I believe, however, that if the farmers select their cattle well, and feed them, well, and that if the very best system of separating milk and of ripening cream is adopted, a pound of butter will be obtained from 2½ gallons of milk, and that the value of the butter, more especially that which arrives between the months of September and March, will sell at an enhanced price. But, setting aside these points, it is certain that the prices paid for the milk to the farmers and the interest paid to the shareholders will be considerably affected by the system of utilising the skim-milk, which is now being sold wholesale in London in the winter season at 4d. per imperial gallon. I include extracts from two papers upon the value of skim-milk, both of which were prepared and read by request at conferences of the British Dairy-farmers' Association.

There is one point in the admirable advice given by Mr. MacCullum which I think it necessary to mention. I believe he recommends much too high a temperature for the cool-chambers both for butter and cheese, and further, that the Danish experimento details of which are included in this report, will prove this to be the case. I have dealt with some of the questions connected with the butter-and-cheese industry of New Zealand which affect the New Zealand producer at the present moment in only an inferior degree, but I am of opinion that whatever the advantages or disadvantages may be he will find these questions have an important bearing upon the work which he is following, and that it will pay him in the end to devote to them some little study. I cannot deny that it is extremely difficult for a person who, from experience and perhaps from inclination, looks at the great dairy question from the European standpoint to grasp the situation of the New Zealand farmer, and the advantages which he enjoys from his herbage and his climate, to furnish him with suggestions or advice bearing only upon the conditions of to-day in a country so many thousands of miles away. But, as I have found that the perfected conditions of British dairy-farming are applicable to such a country as Italy, where they enable the Italian farmer to do much better work, I venture to speak at length upon some of these features, in the hope of

their being of service to the factory-men and the farmers of New Zealand.
JAMES LONG.

Continuation of Professor James Long's Report of 10TH April, 1889.

QUALITY OF BUTTER AS DETERMINED BY ITS COMPOSITION.

In making their awards at English dairy-shows it is now the custom among judges to test butter for moisture. They require the samples to be dry, and as free from foreign solid matter as possible. Various authorities, practical and scientific, have suggested limits showing that good butter should not contain more than from 12 to 20 per cent, of moisture, from 0.2 to 0.5 per cent, of curdy matter, and from 2.5 to 4.5 of salt—the actual butter-fat not being less than from 75 to 83 per cent.

Let us see from the actual experience of a large number of analyses what the actual composition of butter is.

Dr. James Bell, Principal of the Somerset House Laboratory, has given details of over 100 analyses, from which it may be found that

There were only two samples in which the butter-fat reached 90 per cent., several samples containing but little moisture showing a high percentage of salt. Of 113 samples only thirty-five contained less than 12 per cent, other than butter-fat.

The percentage of curd varied between 0.11 and 5.32

The percentage of salt varied between 0.40 and 15.00

The largest quantity of water in any sample was 19.12.

Among chemists, Hassall, Fleischman, and Wanklyn have stated that in salt butters the amount of moisture should not exceed 12 per cent., although a large margin is given for fresh butters, for which some authorities permit from 18 to 20 per cent, of water. In the competition for the diplomas of the British Dairy-farmers' Association, the practical portion of which was conducted at my dairy in May, 1888, the competitors, all skilled hands, made first-rate butter I which was composed as follows :—

In the previous years the moistures in the butters made by other competitors varied between 12.8 and 14.7; but it must be remembered that the samples in each year were made by bribing, and were almost devoid of salt.

Dr. Clark, chemist to the New York State Dairy Department, basing his figures upon results which he has obtained in his laboratory, places the limits as follows:—

- Fat, 83 to 85 per cent.
- Curd, 1 to 3 per cent.
- Water, 8 to 10 per cent.
- Salts, 3 to 5 per cent.

The constituents of Italian butters vary considerably, the following samples being taken from the best butter-making districts;:—

The average of 123 samples, these being chiefly Continental (European) butters, quoted by Dr. Clark, gives—

Nine samples obtained by Major Alvord from the Chicago Cattle Show of 1855, and analysed at the New York Agricultural Experiment Station, gave the following results:—

These were all first-prize butters, and made from fine Dutch, Jersey, and Shorthorn cattle. A tenth sample made from Hereford cattle, which was also a prize sample, contained 14.69 per cent, of water.

In an experiment made at the Wisconsin experiment-station, under Professor Henry, where such splendid work has been done, nine samples made from sweet, sour, and mixed creams gave an average of—

These figures suggest what is believed to be the case—that sweet ream butter contains less water than butter made from sour cream. I would suggest, as a subject worthy of thorough investigation, that, should facilities be afforded for practical tests in New Zealand, an attempt be made to ascertain how the dairyman may be able to insure his obtaining the maximum of butter from his milk. I have repeatedly found in churning both milk and cream that, although ripe (or sour) cream or milk will yield a much larger quantity of ¡fetter than sweet or partially-ripe cream or milk, yet that if sweet and ripe cream are mixed together, and churned immediately, there is still a loss, while in churning two lots of cream of the same degree of ripeness the recovery of butter in the churn varies sometimes as much as 5 per cent. In churning sweet cream Dr. Babcock recovered 80 per cent, of the butter the cream contained; but in churning sour cream, although he recovered

91½ per cent., his three churnings varied between 88? and 96 per cent. It is evident that, if by one process the buttermaker only obtains 79 per cent., while by other he can obtain 90 per cent., every attention should be given to that process which gives him an extra 17 per cent, of latter.

An average obtained from the analysis of fifteen samples of American creamery-butter shows—

Colonial makers cannot be too careful in removing moisture from their butter and sending it in as dry a form as possible to the English market, for in this condition it will return a higher price, retaining it freshness, and being of higher quality. At some future time it is possible that a standard may be adopted below which the fat in latter must not fall, just as is the case at this moment with regard to milk. Milk-standards, however, especially in England, are proverbially low, and it is reserved for America to raise them, as Masmchusetts has done, to 13 per cent., below which the total solids must not fall.

Fortunately or unfortunately for cheesemakers, it is not so easy to formulate a standard of quality by analysis, but that full-milk cheese should contain a certain percentage of fat there can be no doubt. If we take water as a basis we find that it is of no value whatever, even when the age of the cheese is given, whereas, if fat is taken, it may happen that one cheese containing less fat than mother may be more valuable to the consumer, not only because it is better made, but because it is younger and mellower, and sometime because, containing more moisture, it is more agreeable to the Palate

A good Cheddar contains, according to age,—

An average of seven samples of American full-milk factory cheese gives—

Although the Americans are of opinion that the numerous analyses which they have obtained will enable them to formulate a standard for cheese, I believe that such a standard will not be appreciated by the public, and will not be of much assistance to that maker whose goods pass through the hands of expert salesmen, in is true that, if a full-milk cheese were entitled to a State brand, makers would be induced to make richer cheese, which might enable them to obtain higher prices; but it must not be supposed that this richness would be of much avail without a corresponding improvement in the manufacture.

I may add a remark to the effect that in an English cheese factory the whey has shown a return of £1 per cent, per annum when fed to pigs.

COMPARATIVE ANALYSES OF CONDENSED MILK.

It will be found valuable to manufacturers of condensed milk if some details are given showing the actual composition of concerned milk as it has been found by analyses in different countries.

—Water. Fat. Albuminoids. Milk-and Cane-sugar. Ash. Italian milk (Milan) sent to England 22.69 10.45 14.84 49.9 2.11 Norwegian .. .. 24.94 9.50 15.36 m. 15.63 c. 32.14 2.43 Anglo-Swiss (Aylesbury Branch) 25.10 11.73 15.17 m. 16.24 c. 29.46 2.3 Anglo-Swiss (made in Switzerland) 24 to 25 9.5 to 10.5 11.5 to 12.5 m. 11 to 13 c. 39.40 2 London Show, competing samples, 1880 21.68 to 24.53 6.22 to 10 7.43 to 9.44 56.98 to 58.6 2. 09 to 2.23 Anglo-Swiss (American) .. 29.46 8.11 10.22 50.41 1.80 (Swiss) .. 25.51 8.51 10.71 53.27 2 Eagle brand (American).. 27.30 6 10.77 44.47 1.86 Alderney Co. (American) 30.05 10 .08 12.04 46.01 1.89 New York Granulated Co. 55.43 13.16 14.04 14.84 2.53

The New York State Commissioner gives several sets of analyses of condensed milk in his report for 1886. These vary in composition as follows (set 1) :—

Whitout addition of cane-sugar.

With addition of cane-sugar.

Water. Fat. Albuminoids. Sugar. Ash. Milk. Cane. Average of fourteen Swiss samples 26.02 9.39 11.03 11.21 41.32 2.03 Thun (Swiss) .. 30.86 12.55 14.41 10.31 29.76 2.52 Nistle .. .. 24.75 11.53 12.67 11.19 37.69 2.17 Average of twenty-five British, Swiss, American, Italian, Austrian, German and Norwegian samples 25.43 10.78 12.15 13.48 35.89 2.27 Minimum 15.45 5.96 8.2 10.11 .. 1.42 Maximum 30.08 17.01 18.86 17.77 2.27

There is no doubt that there are brands in the market which are made from partially-skimmed milk; and it is difficult to suggest, now that prices are so low, how a high standard can be properly maintained, except in a country where milk is cheap, and where facilities are offered for an extension of the condensed-milk industry.

RENNET

The system of manufacture and management of rennet will be throughly understood by the majority of expert chesse-makers; but there two points of importance which may not be so well known, but which deserve the closest attention and study. At the London Exhibition of 1886 prizes were offered for the best samples of rennet, and there were six competitors. The awards were made by the Society's chemist after careful analysis and experiment. One sample was found to be spiced, and another to be turbid and swarming with ferment-growth other than rennet—a by no means uncommon occurrence in home-made samples. I believe it is

not yet known positively what the basis of rennet-action actually is, although the late Professor Arnold stated in a most definite manner that rennet contains a living germ, which grows and multiplies, and which constitutes its active agency. He claimed to have proved this by filtration, after which the rennet became inert, and by counting the number and size of the germs, which corresponded with the strength of the liquid. This assertion has been combated, and cannot be accepted as a true solution of the question. The samples referred to above were of the following strength :—

- No. 1. Full wood's Liquid : one part by volume coagulates 8,000 parts of milk.
- No. 2. Blumenthal Powder: one part by weight coagulates 73,780; parts of milk.
- No. 3. Hansen's Tablets: one part by weight coagulates 173,640 parts of milk.
- No. 4. Hansen's Extract: one part by volume coagulates 9,400 parts of milk.
- No. 5. Hall's Liquid : one part by volume coagulates 1,000 parts of milk.
- No. 6. Van Hassclt's Dutch Liquid: one part by volume coagulates 12,500 parts of milk.

No. 5 was a home-made rennet of which 16oz. were required to coagulate 100 gallons of milk, while only 1oz. 2dr. were required of No. 6. It was then pointed out by the judge that, as cheese-makers do not measure with extreme accuracy, they might give 2dr. more or less, in which case the result would be that the curd would come in thirty-two minutes in the one instance, or in forty-eight minutes in the other, in place of forty minutes, at which all the above samples were estimated to coagulate milk at 85° Fahr. This is suggestive of the fact that the stronger the rennet the greater care should be exercised in its use, and the greater the liability to err. For this reason water is generally added with extreme care, to minimise the liability to err in point of time of coagulation. The judge remarked that in his experiments he found weak extracts of rennet were more difficult to keep than strong extracts. At the same time, he believes that the strong extracts fail in use not because they are strong, but because cheese-makers are not sufficiently accurate and careful in their use, and next because manufacturers do not definitely state their power upon milk at a given temperature. I can thoroughly indorse these remarks, having some hundreds of records of the use of rennet of different makes, the majority of which do not correspond in the results they show with the very loose statements of their power which are printed by the makers. Blum en that's powder, which I have repeatedly used and found to be of high value, was shown by the chemist to weigh 0.555 gramme, or about 8½ grains per carefully measured spoonful, the spoon being furnished with the box of rennet A spoonful is said by the makers to be sufficient to coagulate 100lb of milk at 95° Fahr., but it actually coagulates 961b. This was a good result; and, as the powder is dissolved in water, one spoonful per 10oz., it can be regulated with the greatest nicety. The same cannot be said of the tablets, which are now known wherever cheese-making is conducted; for, from their great strength and defined form, they cannot be so well controlled, and in fact they coagulated in the competition considerably more milk than they were stated to do. They are very convenient in the hands of a thoroughly-competent man, who is practised in their use; although, when dissolved, the solution from the large tablets would be far stronger than that obtained by the use of the powder, unless they were broken up and weighed upon a chemical balance with the greatest accuracy. The cost of the powder and of the tablets are in practice found to be very similar. The powder was selected for the Society's prize.

When a calculation is made to test the strength of a particular rennet, more especially on the Continent, where the litre is used, a standard of 1 in 10,000 is adopted : that is, one part of rennet is sufficiently powerful to coagulate 10,000 parts of milk at 95° in forty minutes, the French system of weights and measures enabling the experimenter to adopt this method with little trouble. Upon the basis of these figures, my friend Dr. Jacopo Rava, of the Scale Stazione Experimentale at Lodi, in Italy, has constructed an algebraical formula, which gives the golden number of 40,000 as a key to ascertain the strength of a rennet, the quantity of milk which can be coagulated, the quantity of rennet which must be used, and the time it will be employed under certain given conditions. These formulæ I have carefully worked out and amplified, and I believe they will be found to be of considerable service in the cheese-making industry. First, in order to find the strength of a given sample of rennet, the number of litres of milk to be used (a gallon is about 4½ litres) must be multiplied by 40,000, and the result divided by the number of centimètres of rennet and the minutes occupied in coagulation. Thus, supposing 48 gallons (216 litres) of milk is coagulated in sixty minutes by the use of 18 cubic centimètres of rennet, we can ascertain the strength of this rennet as follows :—

$(40{,}000 \times 216) \div (18 \times 60) = 8{,}000.$

In order to ascertain how much milk can be converted into curd with a given quantity of rennet of a known quantity, and in a fixed time, it is necessary to multiply together the quantity of rennet by the time to be occupied in coagulation and by the strength of the rennet, and afterwards to divide the sum obtained by 40,000. Let us suppose that we wish to ascertain how much milk can be coagulated in sixty minutes with 18 centimètres of rennet of a strength of 8,000. We get the following formula :—

$(18 \times 60 \times 8{,}000) \div 40{,}000 = 216$ litres, or 48 gallons.

When it is necessary to ascertain the quantity of rennet necessary for a given quantity of milk, the number

40,000 is multiplied by the number of litres of milk, and the result divided by the sum obtained by multiplying the number of minutes the curd is setting and the strength of the rennet. Thus,—

(40,000 x 216) ÷ (60 x 8,000) = 18 cubic centimètres.

To find the time which would be employed in coagulating a given quantity of milk with a given quantity of rennet of known strength, it is necessary to multiply the number of litres of milk (4½ to the gallon) by 40,000, and to divide the result by the strength of the rennet multiplied by the number of centimètres. Thus,—

(216 x 40,000) ÷ (8,000 x 18) = 60 minutes.

It must not be forgotten that in every case the temperature of the milk is alike 95° Fahr., but there is no greater difficulty in constructing similar formulae suitable to other temperatures now that the principle is shown. With regard to powdered rennet, a graining must be accurately weighed, and dissolved in 100 times its weigh. Each cubic centimètre of the solution must be multiplied by 10 to give the equivalent starting-point of the liquid rennet. Thus, taking Dr. Blumenthal's rennet of a strength of 78,780, which for simplicity's sake may be called 80,000, we have a rennet ten times as strong as that named above. The formula will therefore be as follows :—

(40,000 x 216) (80,000 x 60) = 1.8 cubic centimètres.

This multiplied by 10 = 18 cubic centimètres, the quantity necessary to use under the same circumstances as in the above case.

DAIRY CONFERENCES.

In the year 1884 Dr. Bond, M.D., F.R.S.E., of Gloucester, an enthusiastic and sound friend of dairying, organised the first conference which was held in England, and the success was so marked that the subject was brought before the council of the British Dairy farmers' Association, with the result that it was determined to hold annual conferences in different parts of the United Kingdom. As one who assisted in the establishment of this branch of dairy educational work, and who has attended every conference yet held I have been struck with the extraordinary success which it has achieved. The first conference was held in Cheshire, the dairy farmers of the county taking up the matter with great enthusiasm, although at head-quarters the movement was watched with some suspicion as to the results, many authorities who should have assisted evidently waiting until success had been assured. Then was, however, no doubt about it from the first; and in the following year I was authorised to invite four foreign authorities to attend the conference : Professor Arnold from America, Professor Lézé from France, Dr. Fleischman from Germany, and Professor Fjord from Denmark. The two former gentlemen came, and largely contributed to the information which was given to the dairy-farmers assembled in Derbyshire, where many were hospitably entertained by Lord Vernon. In the following year the association was invited to Ireland, and meetings were held in Dublin, Killamey, and Cork. In 1888 the eastern counties of Suffolk and Norfolk were selected, the meetings being held at Ipswich, Bury St. Edmunds, Framlingham Norwich, and Sandringham. During this visit the conference party, to the number of several hundreds, was entertained by H.R.H. the Prince of Wales, by the President the Marquis of Bristol, by the Duke and Duchess of Hamilton, Mr. J. J. Colman, M.P., Captain Berners, and the Corporations of Bury and Norwich. The plan of operations is as follows: A sub-committee is formed from the council of the association, which arranges the scheme of the tour and addresses, in concert with a local committee. Members from all parts of the country assemble at a given town, staying at the different hotels. The first meeting is held in the town-hall, or in some other public building, where an address of welcome is given by a leading local gentleman and responded to by the president, after which a paper is read upon a dairy subject, this being followed by discussion. The party then adjourns either to lunch or to visit some factory, farm, herd, or dairy, after which a second paper is read, followed by another discussion. The three or four days allotted are thus filled up by a succession of addresses, discussions, and inspections of the best farms and dairies in the county. Everything goes like clockwork; carriages and breaks being provided when necessary in large numbers, and, when travelling by train, saloon ears are provided, so that the whole party travels together at reduced fares. The conference has hitherto left behind it distinct marks of its work, and many persons are induced either to take up dairying, or to improve it if they have hitherto followed no thorough system. More butter and cheese are produced, the cattle are more cheaply fed, and greater profits are made. I believe such a system, however simply it may be carried out, would prove of the greatest possible benefit in a dairy country. Dr. Bond is this year organizing some conferences on behalf of the Bath and West of England Society, which are to be held in May at Gloucester, where the society is establishing another dairy-school. I am asked to open one of these conferences with a paper on "How to sell butter and beat the foreigner." I would call the attention of colonial farmers to the extraordinary work being done in America in this direction. Several hundred conferences called "Farmers' Institutes" are held in Wisconsin every year, and other States are following the example thus set. It is, however, the dairy leaders who are foremost in the work.

NEW IMPLEMENTS.

Since the introduction of the separator there have been few really new implements introduced for dairy work which are of any value. I have had the advantage of inspecting the exhibits at all the leading British agricultural and dairy shows for many years, and have on some occasions acted as judge in the implement classes, and have also paid visits to the national German, Danish, Italian Swiss, and French shows, but I can refer to nothing which I haw seen at any of these, other than what is known, which would be worthy of the attention of colonial dairymen. In England there have been a few improvements. Bradford and Co., of Manchester, now manufacture a hundred-gallon factory churn. It is an end-over-end barrel provided with a diaphragm or movable dasher It is a well-made valuable churn, calculated to do first-class work and costs forty guineas. A centrifugal pump for raising milk, either from a vat or from the separator in factory work, is also worthy of notice. It will lift to a height of 16ft., and is sent out at a small cost by the Dairy Supply Company, of London. There is also a simple and inexpensive pump or milk-raiser for delivering milk to an upper floor of a factory, made by Evans, of Birmingham. This I saw in use at the Otley factory, where it was much appreciated. Another lift is made by Hindley, the manufacturer of dairy steam engines. In this case, a churn holding 8 barn gallons (17 imperial gallons) is lifted to any height, the particular height being arranged in erection. It is then tipped, pouring the whole of the milk into the vat or receptacle above, when it is run down and refilled, or replaced by a full churn. The two leading separators, the Laval and the Danish, have been improved, both doing more work at lees cost. As I write I receive a circular describing a further improvement in the Danish machine, by means of which a much larger quantity of milk is skimmed per hour. In both machines there is greater capacity for obtaining thick cream and for working at high speed with greater safety. The Victoria machine, of British make, not long introduced, is also worthy of notice, both on account of price and capacity. It has one important advantage not possessed by the other separators : the drum having no bottom, it empties itself when, on account of the diminished speed as it runs down, the vertical column of milk falls and passes out of the machine. An improvement has been made by Gray, of Stranraer, the maker of cheese appliances. Wedges are placed beneath the feet of the cheese-vat to maintain its horizontal position when necessary. A new arched cylinder strainer is also provided, and there are four taps placed in different positions, so that the heat may be more easily regulated and the jacket filled to a particular height. The vat has only one pair of wheels, and these are in the centre; the grinding-mill fits across, and slides along its sides. The cost is £12, with knives and strainers complete, the size being adapted to a large farm. It is also made in factory sizes.

EXPERIMENTING-STATIONS.

I beg to call the attention of the dairying community to those portions of my annexed reports which describe the experiment stations and dairy-schools in different countries—the great majority of which are maintained at a very trifling cost, more especially the first-class station at Kiel, in Germany, which receives £375 from the Government; the new station at Fribourg, in Switzerland, costing £300 a year; and Lodi, in Italy, which costs £536 per annum, the building, an old barracks, being lent by the Government. Here three chemists and a cheesemaker are maintained, and the scientific work done is of a high order. In England dairy-schools are largely Increasing in number, but the majority are connected with butter-Inking alone—cheesemaking is taught in very few instances, and I believe there is only one school, the British Dairy Institute, at Aylesbury, at which it is possible to learn how to make more than one variety of cheese. This institute has received a grant of £100 from the Government. It costs about £350 a year, the receipts being in the form of subscriptions, of which the British Dairy-farmers' Association contribute £100, and fees from pupils, the produce made probably paying for the milk used.

I also beg to call attention to the following Danish dairy-school records, the principle of which cannot fail to prove valuable to colonial factory-managers and farmers. I extract it from my report on education on account of its special usefulness.

Comparison of the different years' dairy yield (taken from the 1st October to the 30th September, 1885-86) :—

(1.) During the last few years about thirty-five calves have been fattened per annum.

(2.) Separators have been used for the last four Years.

The profits per cow in 1882 were £17 2s. 9d.; in 1883, £15 19s. 5d.; and in 1884, £15 17s. 9d.

BUTTER.

As it appeared under the microscope. (See page 8.) Butter properly salted. Butter badly salted.

CONDENSED MILK.

As it appeared under the microscope. (Sec page 30.) Anglo-Swiss Condensed Milk. New Zealand Condensed Milk.

Practical Hints on Cheese-Making.

BY SAMUEL BUDGFTT AND SON, OF BRISTOL, ENGLAND; ALSO OF LONDON, LIVERPOOL, NEW YORK, AND MONTREAL.

AT the request of Sir Dillon Bell, the Agent-General for New Zealand, we have put as concisely as possible some of the essentials for making a good Cheddar-system cheese. Our firm has had over Seventy years' experience in the cheese-and-butter trade, first dealing largely in cheese actually made in the Cheddar Valley, and also in the many varieties of western, Continental, and home produce. At the present time our agents buy in all the leading American and Canadian markets, and we have branches and representatives throughout the United Kingdom selling dairy-produce from all parts of the globe.

SAMUEL BUDGETT AND SON,

Bristol, England, also of London, Liverpool, New York, and Montreal, Importers of Dairy-produce, Exporters of Cheese-and Butter-making Apparatus, and Supplies.

To put a good cheese on the English market each of the following sections require special attention: First, the pasture, cows, and milk; second, making and maturing the cheese; third, the shipment. We deal with each stage in detail as far as possible.

This pamphlet is not a theoretical treatise, nor does it pretend to give any new or startling information, but merely a statement of facts, and the best methods derived from our experience in the making and selling of cheese, space not admitting of our giving the why and wherefore of each point.

The Pasture.

One great reason why our home-made cheese has a world-wide reputation is owing to the fine pasture. The meadows have been laid down for years, and consist of the finest grades of strong sound grass which experience and time can produce, free from artificial manuring and from all rank herbs which would flavour the milk; and in these pastures neither sheep, pigs, or poultry feed.

In Wisconsin, and elsewhere in the United States of America, many of the dairy-cattle feed on pastures formerly covered with thick forests. The timber is now cleared, and only the stumps left, but the rank herbs remain, and the cheese of the district has a her by flavour, which damages the sale.

In one of our prize English dairies, whose cheese we took every year, we noticed last season a peculiar flavour about some days' make, and consequent depreciation in value. The dairymaid declared the cheese was made exactly as in previous seasons; and it was only after careful examination we discovered that a flock of sheep had been running in some of the fields, and the days the cows were on this land the milk was tainted; when the cows were elsewhere the milk was all right.

In pasture we include water, and it is impossible to lay too much stress on the necessity of an ample supply of fresh clear water, as in nine cases out of ten bad milk and pin-holey curd can be traced to a defect in the water-supply.

Last year we paid a premium for a particular Canadian factory of specially-good reputation; but on arrival of the cheese in England it was off flavour, and some scarcely fit for food. Neither the maker nor our men had noticed anything when they were shipped, but after considerable personal investigation on the farms in Canada we found that owing to the severe drought the cattle had been drinking stale bad water.

Even before the milk is drawn it may be affected, for should the supply of water run short in hot weather, and the cows have to go any distance for it, the milk will assuredly be injuriously affected.

Breed of Cattle.

The breed of cattle is too debatable a point to enter into, but it is a well-established fact that it costs no more to keep a good milked than a poor one.

For cheese-making the breed is immaterial if the cows are carefully selected, and the poor milkers constantly weeded out.

In Canada the average quantity of milk per cow in the season is 3,000lb., whilst in Denmark it is 6,000lb.; and a dairy-cow should not be considered satisfactory until it gives 5,000lb. of milk.

To feed a cow well and regularly at all times is more important than the breed. There is an old saying, "Feed a cow on pea-straw and you will get a pea-straw profit."

In selecting a dairy-cow look to the following points : She should have a highly-developed nervous organization; see to the brain, She should have a broad muzzle, broad nostril, with fair distance between the nose and eyes, and a clean-cut face like a racehorse; a large full eye, eyes wide apart and prominent; strong junction of spine and brain-spine, showing full and strong from neck to tail; shoulder fairly pointed, backbone rising at the crops, the clime-back of the shoulder points lean, back strong across the middle, points of the hips prominent; loin wide, broad, thin; generally loosely built, ham thin, and hollows prominent, pelvis broad and open, abdominal muscles strong and full, retreating brisket.

Remember it is a milker and not a beefy cow you want: in the latter all her works are posthumous. It is too common a failing to look upon a Jersey as a villa cow; the dairyman has his eyes ever set upon the beef to come out of the cow in the end, no matter what it may cost to get at it.

Notes on Feeding.

In a severe drought, when no rain has fallen for many weeks, it has been found that more milk is required to the pound of cheese—say, 13lb. instead of 10lb. The cows shrink in the solids of the milk, showing a certain amount of succulence is required in the grass to keep the right amount of solids in the milk. Bran is the best remedy. About two to four quarts daily should be given in summer.

The food should be moistened with hot water—not made wet—twenty-four hours before feeding.

It is found that on a sandy loam red-clover as feed has a tendency to make a dry cheese, whilst white-clover has the reverse. Of course turnips and suchlike taint milk.

The cow should be kept up and fed regularly when dry, and never allowed to get out of condition.

A cow should have Jib. of salt daily, and granulated is altogether better than lump. This acts as a preservative in the first instance, and also helps to keep up the full flow of milk. Numerous tests prove conclusively that salt has a direct effect on the yield of milk.

The Milk.

Cows should be milked as nearly as possible at the same hour morning and evening. Treat the cows kindly, and be as quiet as possible; do not get them excited. For these reasons a woman is the best milker. A cow, like a human being, has idiosyncrasies, and the milker must study them.

Before milking sponge the teats and udders, and thoroughly wash the hands. In some dairies it is the rule to wash the hands after milking two cows. Never dip the fingers into or moisten them with the milk. Currycomb the cow daily.

Milk into tin pails, and scald them thoroughly after use. Strain the milk through three thicknesses of butter-cloth, and immediately tool and aerate it. A good and simple apparatus for this purpose is made of two tins, one above the other. The bottom pail is the cooler, for holding the cold water or ice; the pail on top is the milk reservoir, with a strainer inside. This pail should contain about 5 gallons of milk and have a pressed concave bottom, with small holes 1/16 in. around the outer edge and ¾in. apart. The holes act as a distributer, and the milk passes over the outside of the lower pail in a thin sheet, and falls into a circular trough a few inches in size attached to the base of the cooler or lower tin, and out of a spout into the milk-can. Neglect to aerate the milk will increase the quantity of milk required to make a pound of cheese.

Where the milk is delivered for cheese-making only once daily the evening's milk should be kept in a tin thoroughly protected from rain, odours, &c., at a temperature of 55° to 60°, though if well aerated it may go to 65° or even 70°. The milk must be absolutely sweet—a whole batch of cheese will be spoiled by a small quantity of stale or tainted milk. It should be kept a certain time at a certain temperature to have it matured, so as to begin the cheese-making process properly.

We have merely indicated the points to be looked at, and now come to the making, presuming that the milk is fresh, and without: taints from the causes we have hinted.

Every utensil must be absolutely sweet and clean; all pails, milk-cans, receiving-cans, faucets, and spouts, and all implements used, must be thoroughly scalded with water (not merely hot) daily, and directly after use.

Impure water, the smallest particle of stale milk clinging to any utensil, or milk exposed to any odours, either one of these will cause an open and tainted curd.

Making.

There are many systems in vogue for making cheese, and no system can be absolutely relied on without the cheesemakers' brain and experience. The different kinds and varieties of cheese are produced by certain organisms, and depend on the quantity of acid developed and moulds obtained by special ferments. We only describe the Cheddar system, and the main conditions to be considered are the temperature and consistency of the milk.

What is wanted is a cheese containing a small percentage of moisture, which will cut smooth, solid, and firm, and have a sweet nutty flavour, and every cheese of a uniform character and size. This is the profitable kind of cheese, always saleable. When the market is glutted it is with inferior stock which is rapidly depredating.

What we have to say in the making applies equally to cheese made by an individual fanner, or in a factory; but we say without hesitation that the latter system is best if there is a sufficient supply of milk within a convenient distance, being more economical and more easily supervised.

The cheese-factory should have an outside trough for the whey, a small shed for the boiler, an engine, and a deep cool-well. Just inside the wide door at the end of the building stand the scales, on the top of which is a large tin can, holding probably 75 gallons. The milk is measured by the pound, and as each team drives up with its cans the milk is emptied into the great can, weighed, and the number of pounds put down opposite the owner's number. A tin ladder or gutter connects the receiving-can with the vats holding 600 gallons each.

There are several stages in the making : First, adding the rennet to the milk; second, the curd thickens so that it can be cut; third, the highest point of heat; fourth, drawing the whey and stirring the curd; fifth, grinding the curd; sixth, mixing in the salt; seventh, hooping and pressing.

We presume, then, that all the necessary implements and utensils are ready, thoroughly scalded, and perfectly sweet and clean, and that good milk is in the vat. The double-lined vats, heated by hot water (not steam) with mechanical stirrers, enable the cheese-maker to keep the process more regular and uniform. The exact quantity of rennet and salt to be used, and exact time and method of dealing with every stage, requires experience, but close attention to our hints will show what to aim for.

THE RENNET.

The rennet must be of the finest quality. Professor Robinson, of the Agricultural College, Guelph, the great authority in Canada, entirely condemns the use of ordinary home-made rennet; and every one who has used the preparations of liquid rennet and rennetine-powder knows how much more satisfactory the result is.

Before adding the rennet carefully examine the milk to see in what condition it is, and work accordingly. The milk should then be brought to a temperature of, say, 80° to 84°, stir in the rennet for about five minutes, and then leave it still.

It is very important to mix the proper quantity of rennet with the milk, and of a given strength—say, 3oz. to 5oz. to 1,000lb. of milk, or one teaspoonful to 8 gallons; when using such extracts as Blumen-thal's 8oz. is too much. The latest invention is rennetine-powder, which gives results as far ahead of those obtained by liquid extract of rennet as the difference between the latter and ordinary unprepared veils.

Dilute the rennet in the proportions of about 15oz. to 20oz. to a pail of water, say, 3 gallons. The quantity of rennet to be used depends on the quality and condition of the milk, the pasturage, and the season of the year. If the milk is over-ripe or acid, more rennet must be used to hasten the coagulation of the milk. The curd should thicken in ten or fifteen minutes. The milk from cows on poor pasturage requires more rennet than from strong pasturage. In the early part of the season, say, one-third more rennet is required than at other times. Discretion and experience is required, but an excess of rennet ripens the cheese too quickly, and it soon goes off in quality.

The first action of the rennet is to coagulate the curd; the second: to expel the moisture. At this point the milk is a pulpy mass uniform in thickness, and creamy in colour. At all times vat-covers are indispensable, to preserve uniform temperature whilst the milk thickens, and throughout the whole process. The making-room must also be kept to one uniform and regular temperature, as bitten flavoured cheese is usually the consequence of a chill.

2. CUTTING THE CURD.

Here, again, the time depends on the season of the year and condition of the milk; but in about thirty minutes in spring, or forty-five to fifty minutes any other season, or when the milk is acid, the curd should be

ready for cutting, the temperature being about 80° to 84°. A thermometer is necessary.

A large knife, having six blades set horizontally and about 18in. long, is taken through and through and up and down the mass. This causes the curd to sink to the bottom and the whey to rise.

No rule can be laid down as to the size of the pieces which should be cut, but it should not be cut very fine or very coarse. If the milk is good the curd may be cut rather coarse. Cut as coarse as circumstances will allow, and assist the escape of moisture by handling the curd thoroughly.

It is best to have two sets of knives, one for the summer, the blades set at 3/8in. apart; and the other set at 5/8in. for other times, and when the milk is in perfect condition. It is best to cut horizontally first, then every part of the curd is cut into slices about ¼in. thick,; and after cutting perpendicularly leaves blocks about ½in. to ¾in.

The curd must immediately be stirred, first very gently and thoroughly, for, say, fifteen minutes, until the curd is healed over. Much care must be exercised, as rough stirring destroys the curd and sends it into the whey. Afterwards stir with considerable roughness; it is better to have it over-than under-stirred.

THIRD STAGE.

Begin heating slowly, and gradually increasing as the whey clears, up to 98°, neither more nor less. Test with a thermometer continue stirring. Here the mechanical stirrers are most useful, or a simple implement for manual use may be made—a long handle with a cross-head, this head having several long teeth broad and thin at the bottom, gradually narrowing at the top. Push down one side of the vat and pull back the other : this gives a boiling-motion to the milk and a uniform heat to the curd. Stir sufficiently rapidly to keep the curd on the surface of the whey.

Never let the curds settle on each other, or allow lumps to form while heating. A proper system of agitation is most important; all particles of the curd must be kept moving, the proper movement being from the bottom upwards, going down one side but not the other.

When the temperature is up to 98° stir gently now and then for about fifteen to twenty minutes.

4. DRAWING THE WHEY.

For this a strainer and siphon are used. The whey is passed down a gutter in the floor, and out into a trough in the yard some distance away. The whey is then used for feeding pigs and young stock.

A very important part of the process is to ascertain the precise condition of the curd before the whey is removed, and it is absolutely necessary to test carefully. Drawing the whey early, and stirring the curd thoroughly, gives a keeping quality to the cheese.

The simplest method of testing is to heat an iron, squeeze up a lamp of curd, press lightly against the hot iron, and when fine hairs can be drawn the acid is about to develop.

It is very desirable to have the whey removed from the curd before the acid develops; therefore draw the whey sweet, and if the curd is soft, draw the whey earlier than you would otherwise. The best results are usually got when the bulk of the whey is drawn as early as possible, for if it is left it augments any trace of taint should there be such. If the milk is sour or old the whey must be drawn before any acidity develops; but if the milk is tainted, or the curd open, more acidity must be developed, until hairs ¼ in. long can be drawn on the hot iron.

After removal of the whey the curd should be kept at a tempera-tore of 94° or over. Stir well with hands five or six times, then pack slim all over the vat. Cut into fairly-large pieces, and turn them over every fifteen minutes; use the thermometer, and keep heat regular. The length of time between setting the milk and draw-pig the whey depends on the condition of the milk and the temperature. The curd should be hand-stirred, and not allowed to pack into lumps, until it feels firm, shotty, and squeaks between the teeth. If the milk is old or acid it may be a question of minutes; or if the milk is very fresh time is about five hours we may say. About five to six hours is average with properly-matured curd. With the curd at a low temperature, the fermentation takes longer. The temperature must be carefully watched at every point, and only a reliable thermometer, which has been tested, used. The more acid the cheese the quicker it ripens, and the old adage is only too true with regard to cheese, "Soon ripe, soon rotten."

This completes the process of expelling the whey, and the amount of moisture should be reduced from about 87° to 35° at the highest heat, and only 40° when the whey has been drawn. The curd should now be firm and solid. Unless the moisture is properly expelled the cheese will not keep or mature, so as to command a high price.

5. GRINDING THE CURD.

A curd-mill is indispensable. We will describe a simple form A mill for this operation: It is a circular disc,

having an iron rim. In the disc are four slits, with large teeth like a saw, and four cross-knives, with sharp cutting edge attached. This disc is fed by a hopper, and turned either by manual or mechanical power, when it cuts the curd into small pieces or thin strips, which are usually ¼in thick and 1in. wide. The curd should now be at a temperature of about 95°, and the grinding commenced directly the curd will draw hairs ½in. long on the hot iron, or in spring Jin. Be sure to have nil free whey. Grind only once if there are no pin-holes; but if the curd is open and porous it must be put through the mill twice. Keep the curd warm—say, from 90° to 94°—to develop the lactic acid, and kill the organisms which cause the holes.

6. MIXING THE SALT.

This process should be commenced in three-quarters of an hour after grinding in the early season, or in a hour and a half later on in the season or if the milk is not right, and in about two hours in the fall.

Air and stir the curd before salting for about half an hour, and again before putting it in the hoops. Salt, about 2½lb. to 1,0001b. of milk, going by measure and not by weight; stir it in thoroughly and uniformly, then air for an hour in the fall: and with tainted milk or porous curd salt more heavily. Be careful to use only the best salt—any impurity will be deleterious to the cheese. Have the salt dry. A coarse sieve is the best distributer of the salt.

Too little salt spoils the cheese altogether, whilst too much merely delays the ripening. Salting well gives the keeping quality.

The first action of salt on the curd is to harden the outside; soon penetrates the whole, making it mellow and yielding. In the third stage the curd is hard and unyielding; the curd should be put in the hoops before this stage, say, in fifteen or twenty minutes after salting. Half an hour is a safe time, beyond which the curd should never be left.

BANDAGES.

In England strong linen bandages with ties and caps are used and removed when the cheese is fully matured; but in America they use a seamless closely-woven tube of linen the diameter of the cheese, and the cheese is made in it, so the tube forms the outside of the cheese. This tube is cut off in proper lengths and slipped over a wide hoop the depth and width of the cheese. The hoop is filled with the required weight of curd, and the hoop removed, leaving the bandage round the curd in the form of a cheese, and ready for the press.

The cheese should be made to weigh from 65lb. to 70lb., or even up to 80lb.; they should stand up square, the length being more than the diameter.

7. HOOPING AND PRESSING.

The hooping and pressing should be done in, say, thirty minutes after salting, but in spring rather sooner; or with tainted milk and open porous curd about two hours. Put the curd in the hoops not too warm. The hoops, press-boards, cap-cloths, &c., must be scrupulously clean, and thoroughly scalded every other day. Put on the pressure very gently at first, taking care it is applied evenly and squarely; gradually increase at intervals of about twenty-five minutes, and put the whole pressure on by evening; then leave until the morning.

To make a good sound mealy cheese, rather more than 10lb. of milk to the pound of cheese are required. This gives the flakiness and keeping quality which makes the value of cheese.

The maker must aim to make the best quality of cheese out of the milk; the quantity is a secondary question. The cheese should be of uniform size and quality, so that fifty can be sold on the one as sample. The cheese should be turned in the press in the morning before going to the curing-room.

To give a finished appearance to the cheese, and a good smooth hard and perfect rind, it is very necessary to trim off the rough edges in the press, lay down the bandage, carefully wash off any soiled roots, &c., before putting in the curing-room. All cheese should be finished of a symmetrical shape, and kept in the presses until the rinds are smooth, and the corners free from any projecting edges or Boulders.

RIND.

The cheese should be capped, the cloth pressed and left on the cheese for at least two weeks in the curing-room.

CURING.

Grease but little, using pure-flavoured whey oil, and hand-rub often, turning the cheese daily. Keep the

room at an even temperature of 65° to 70°; the richer the cheese the lower should be the temperature. The curing-room should have double windows and doors, with closed shutters, to secure an even temperature; good ventilation must also be provided. Box the cheese when cured—say, three to four weeks old. Well grease the cheese before boxing; the scale-boards will then adhere to the tops and prevent mites King into the rinds.

SHIPPING.

Assuming the cheese is properly cured, and in perfect condition, is has now to be marketed. Many a perfect cheese has been spoiled by want of care in shipping. A perfect rind is the first essential.

PACKAGES.

The package in the first place makes a favourable or unfavourable impression on the buyer, and directly influences the sale of the goods. Therefore see that the boxes are neat in appearance; strong, to stand rough handling; the cover-band on the head thick, and able to resist considerable knocking about, the covers fitting well; the boxes of straight-grained wood, uniform in size and weight, shaved down to fit on the top of the cheese, and to fit nicely, that the cheese is neither loose nor jammed in. See the cheese carefully handled when shipping—that the packages are in good order, and the cheese protected from damp, heat, or cold, and stowed tight in the steamer, away from the engines or any cargo of a liquid nature or with a strong odour.

If each point herein mentioned is carefully attended to, the cheese must command the top market-price.

Further particulars as to the best rennet, colouring, and salt to be used, and the latest improvements in the necessary implements, will be furnished on application.

By Authority : GEORGE DIDSBURY, Government Printer, Wellington—1889.

Government Publications for Sale.

Printing and Stationery Department,
Wellington, 1st July, 1889.

All publications enumerated in the following list are now on sale at the Government Stationery Department, Wel-Mton, and will be forwarded, post free, to any address (im with an order. Remittances should accompany Uders, and should be addressed to "The Government Winter, Wellington."

Geo. Didsbury,
Government Printer.

List of Government Publications for Sale.

Polynesian Mythology and Ancient Traditional History of the New Zealand Race. By Sir GEORGE GREY, K.G.B. Illustrated. Royal 8vo., cloth. 5s.

Ancient History of the Maori. By JOHN WHITE. Demy 8vo., cloth 7s. 6d. per vol. Vols. 1, 2, 3, 4, and 5 now ready.

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Manufacture of Cheese, Butter, and Bacon in New Zealand. With drawings, plans, and estimates of factories. Demy 8vo. 2s.

A Miners' Guide. By HENRY A. GORDON, Inspecting Engineer, Mines Department, N.Z., &c. Numerous plates. Royal 8vo., cloth. 5s. [This book is written with the object of placing within easy reach of those who wish to qualify themselves as mine managers in New Zealand such information as is required to pass the examinations prescribed in the Mining and Coal Mines Acts, 1886.]

[Handbook of New Zealand Mines. With maps and illustrations. I Demy 8vo., 500 pp., cloth. 5s.

Reports on the Mining Industries of New Zealand, 1887. With I drawings. Fcp. folio, cloth. 2s. 6d.

Reports on the Mining Industries of New Zealand, 1888. With drawings. Fcp. folio, boards. 2s. 6d.

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Front Cover

New Zealand Secondary Schools Conference
(Nelson, 1888. Christchurch, 1889)
Christchurch: WHITCOMBE AND TOMBS LIMITED.
11547

NEW ZEALAND

Secondary Schools Conference

January 9th, 1888 (Nelson).
President.
MR. A. L. HALKETT-DAWSON, M.A. (Timaru High School).
Secretary and Treasurer.
MR. W. WALTON, B.A. (Akaroa High School.)
January 2nd, 1889 (Christchurch).
President.
MR. C. F. BOURNE, M.A. (Auckland College and Grammar School.)
Secretary and Treasurer.
MR. W. WALTON, B.A. (Akaroa High School.)

Constitution of Conference.

That the name should be the Secondary Schools Conference.

That no voting by proxy be allowed; that no one be allowed 10 vote except a Principal of a Secondary School, or his accredited representative, such representative to be a member of his staff.

That assistants in Secondary Schools be allowed to attend the Conference, and take part in the deliberations, without voting.

That the subscription of such schools as join the Secondary Schools Conference be one guinea per annum.

That the Conference be not constituted unless seven voting members assemble, and that a quorum for any sitting be five.

That the Standing Orders of the Convocation of the University of New Zealand be adopted as the Standing Orders of this Conference.

The following is the list of Secondary Schools recognised by this Conference:—

- Auckland College and Grammar School
- Thames High School
- New Plymouth High School
- Wanganui Endowed School
- Wellington College
- Wellington Girls' High School
- Napier Boys' High School
- Napier Girls' High School
- Nelson College
- Nelson Girls' College
- Christ's College Grammar School
- Christchurch Boys' High School
- Christchurch Girls' High School
- Rangiora High School
- Akaroa High School
- Ashburton High School
- Timaru High School
- Waitaki High School
- Otago Boys' High School
- Otago Girls' High School
- Southland High School
- Waitaki Girls' High School

Secondary Schools and the University.

1888.—1. That it is desirable that the heads of Secondary Schools be represented in the Senate of the New Zealand University.

1888.—2. That this Conference respectfully requests that no changed affecting the work of Secondary Schools be made by the Senate without prior consultation with the Principals of Secondary Schools throughout the colony.

1888.—3. That this Conference is of opinion that the fee charged to matriculated students under the University statute, "Term and Lectures," is excessive, and would therefore respectfully request the Senate to reduce it to two guineas for the examination, provided only three subjects are taken, and half a guinea additional for each extra subject.

Entrance Examinations.

1889.—4. That the entrance examination begin on the second Monday in November.

1888,—5. That the Senate of the New Zealand University be respectfully requested to give every encouragement to High Schools by cheapening and localising the Matriculation and Junior Scholarship Examinations so that they may be used to test the work of the ordinary Fifth and Sixth Forms.

1889.—6. That the University of New Zealand be again memorialised, to reduce the fee for matriculation to one guinea.

1888.—7. That in the Matriculation Examination for Arts and Medicine, the subject of Mechanics should be more clearly defined.

1888.—8. That in the University Entrance Examinations the subject under the head of Mathematics should be more clearly defined.

1889.—9. That the amount of Euclid and Algebra for matriculation be increased, and the degree of proficiency necessary for a pass in the other subjects be raised.

1889.—10. That Latin be again placed on the list of compulsory subjects for matriculation.

1888.—11. That it is desirable that no teacher engaged in teaching candidates should examine for scholarship or entrance examination.

1888-9.—12. That it is desirable that each examination paper in the entrance examination of the University of New Zealand should be approved by at least two Examiners in each subject.

1888.—13. That the Conference desires to call attention to the inequitableness of the present system of marking by examiners for the Junior University Scholarships, as practically undue preponderance is given to Science and Modern Languages over Latin and Mathematics in the interruption of the marking instructions.

1888.—14. That certificates be granted to all candidates who in the Junior University Scholarship Examination shall be "deemed to have passed with credit" (see Calendar, University New Zealand, 1888, page 29, § 5), and the subjects in which he has satisfied the Examiners be endorsed on the certificate with some sign appended if he has won distinction in any such subject.

1889.—15. That the certificates to be issued to candidates for Junior Scholarships 'who may be deemed to have passed with credit,' should be accepted for (1) D certificate:(2) senior Civil service; (3) law preliminary (solicitors): and (4) medical preliminary; if the subjects endorsed on these certificates include those prescribed for the particular examination.

1889.—16. That it is desirable that the number of junior University scholarships be increased.

1889.—17. That these scholarships be divided into two divisions, the object of one, A, being to promote special excellence in certain subjects, or pairs of subjects, and that of the other, B, being to encourage general proficiency all school subjects as at present.

1889.—18. That junior scholarships under division A be awarded hereafter in accordance with the following plan:—That all candidates be required to pass for matriculation; and (b) That the scholarships be awarded for excellence in the following subjects and groups of subjects with scholarships assigned in the following proportion:—

- Latin with Greek, or
- Latin with English, and either French or German Four Scholarships.
- Mathematics, with Chemistry or one branch of Physical Science (as defined in the New Zealand Calendar under the heading of Junior Scholarships)—Two Scholarship.
- Mathematics, with one branch of Natural Science defined as above—Two Scholarships.

Management of Secondary School.

1888.—19. That this Conference is of opinion that the management of all Secondary Schools should be by Boards of Governors, and not, as is at present the case in some instances, by the Education Board of the district.

1889.—20. That this Conference, believing that the difficulties which have arisen between Boards of Governors and Principals of Secondary Schools have been largely due the to want of a definite understanding as to their respective powers and functions, resolves—

- That the Minister of Education be requested to draw up and submit to the Legislature an Act to define the relations between Boards of Governors and Principals of Secondary Schools.

- That in such Act the following would be essential points:—
  ¶That all internal discipline, including the suspension or expulsion of pupils, choice of books and methods, and organization of the school shall be in the hands of the Principal, but that if he suspend or expel any pupil he shall report the fact to the Hoard forthwith.
  ¶That Assistants shall not be appointed or dismissed and that no change shall be made in their status without the recommendation of the Principal.
  ¶That the Principal shall be consulted when alteration to school buildings and grounds and other matters immediately affecting the welfare of the School are under consideration.
  ¶That all School servants shall be under the immediate control of the Principal.

Secondary and Primary Schools.

1888—21. That it is desirable that more liberal provision be made to give secondary education to the more promising pupils of Elementary and Primary schools, such as, for example, giving free or assisted education to all pupils who, under the age of 12, have passed a Fifth Standard examination with credit, or who, under the age of 13, have passed a Sixth Standard examination with credit, or an equivalent Entrance Examination.

1888—22. That free education for four years at Secondary Schools should be given to some of the candidates at the scholarship examinations held by the District Boards of Education, who, failing to win scholarships, obtain at least half the total of possible marks,

1889—23 That, in the opinion of this Conference, the time has arrived when a High School training, followed by a pass at matriculation, should be required of every applicant for a position as a pupil teacher.

District Scholarships.

1889—24

- That in the opinion of this Conference it is desirable that regulations should be laid down by the central authority as to the disposal of the sums of money placed in the hands of Boards of Education for the purpose of maintaining scholarships.
- That these regulations should embody conditions such as to ensure that the scholarships shall serve to carry on pupils from the primary schools until they are able to compete for the Junior University scholarships.
- That the essential points are: (1) That the scholarships should be divided into two classes, Senior and Junior: (2) That the examination for Senior scholarships should include the subjects usually taught in Secondary Schools: (3) That the period covered by a Junior and a Senior scholarship together should not be less than five years.

1888-9.—25. That it is desirable that every holder of an Education Board's Scholarship should be required to attend some properly constituted Secondary School during the whole tenure of the Scholarship, as recommended by the Royal Commission on Secondary Education of 1879.

1889.—26. That it is desirable that Education Board Scholarships be awarded on the results of one examination to be hell throughout the colony in order to secure the following ends:—

- Satisfactory results in the way of comparing the different districts with one another.
- Economical examination secured by printing one set of papers only.

President-elect for next meeting of Conference:
MR. J. HARKNESS, M.A. (Waitaki Boys' High School).
Secretary and Treasurer:
MR. W. WALTON, B.A. (Akaroa High School).
Standing Committee:
MESSRS. HARKNESS, BOURNE, BEVAN-BROWN, AND WALTON.

The School of Engineering.
Report of Chairman,
Read at a Meeting of the Board of Governors of the Canterbury College,
On the 28th October, 1889.
Christchurch: PRINTED AT THE "LYTTELTON TIMES" OFFICE, GLOUCESTER STREET 1889.

The School of Engineering.

REPORT OF CHAIRMAN, READ AT A MEETING OF THE BOARD OF GOVERNORS OF THE CANTERBURY COLLEGE,

ON THE 28TH OCTOBER, 1889.

MEMORANDUM FOR THE BOARD OF GOVERNORS OF CANTERBURY COLLEGE.

In accordance with the wishes of the Board, as expressed in the following resolution:—"That with a view of furnishing the Board with information at present required for the School of Engineering, the Chairman be requested to visit Melbourne and Sydney at an early date, and inspect the various Technical schools at those places; also, to enquire into matters connected with the Melbourne and Sydney Universities," passed by that body at a meeting held on August 23 last, I left Christchurch on August 26 for Sydney, where I arrived on Sept. 2. I placed myself in communication with the Department of Public Instruction at Sydney, and delivered the letters which the Minister of Education of this Colony had been good enough to forward to me. The Minister of Public Instruction caused me to be supplied with letters to the authorities of the University, and directed that every facility should be afforded to me by the department under his control to enable me to carry out the purpose of my visit. It is hardly necessary for me to mention in detail the steps which I took with that object. The authorities of the University very kindly gave me all the information I required. I left Sydney for Melbourne on Sept. 17, and reached there on the following day. I presented the letters I had received from the Education Department of New Zealand to the Minister of Public Instruction of Victoria, with the result that Dr Pearson at once put me in the way of obtaining the information I wanted, and at the same time supplied me with letters to the officials of the University, who were good enough to afford me the assistance I wanted. I left Melbourne on the 25th Sept., and reached Lyttelton on the 3rd Oct. I give below the substance of the result of my enquiries at the Universities of Sydney and Melbourne on the subjects upon which the Board desired information:—

School of Engineering.

NEW SOUTH WALES.

The first appointment made was to a lectureship in the year 1882, with a salary of £350 a year as assistant to the Professor of Physics. The salary was afterwards raised to £500 a year, and subsequently a chair was founded with a like salary and half fees. The salary is to be increased to £900 a year without fees and the chair is to be placed on the Challis endowment.

The Professor gives lectures on (*a*) Applied Mechanics, (*b*) Civil and Mechanical Engineering, (*c*) Surveying and (*d*) Drawing. There is also a lecturer on Architecture and Building Construction who delivers forty lectures a year at a salary of £100 per annum with fees. This gentleman is an architect in practice. The staff of the department of Engineering now consists of a Professor of Engineering at a salary of £900 without fees; a Lecturer in Architecture at a salary of £100 with fees; a Mechanical Instructor at a salary of £200 with fees; an attendant at a salary of £109 4s. It is proposed that the lecturer on architecture and building construction should tor the future deliver sixty lectures a year at a cost of £150 per annum, with fees; also, to relieve the Professor of the subject of surveying, and to appoint a lecturer who would deliver the same number of lectures as the lecturer on architecture. In both cases private practice would of course be allowed. The Professor is in the habit of taking the students on Satuzdays, when there are no lectures, to see any important engineering works in progress near the city, and any new machinery, such as that of the different men-of-war and large steamers that visit Sydney. The department possesses a testing machine that cost about £660; a steam engine, eight horse-power, a number of lathes, drilling and planing machines that cost about £600; models of mechanical motion and models of pumps, turbines, &c. that cost about £1000.

The testing machine has been particularly useful; the iron, concrete, &c., to be used in large Government and Municipal contracts, being almost always tested at the University. A fee for each test is charged by the University, of which the Professor, who does the actual testing, receives three-fourths. A large number of tests of Australian timber have been made for the Mines Department of New South Wales without charge, and the results are recorded in a work printed by the Government. The cost of that portion of the buildings now in use by the Department of Engineering was about £1500, and the accommodation provided consists of a lecture room, private room, drawing room for students, machine room, workshop and boiler room. The sum of £1500 would cover the cost of special foundations for the machine room. The remainder of the building is in the occupation of the Professor of Biology. The entire cost of the building, which is built of brick with a slate roof, was about £3000.

Students.

There are now five regular students attending the classes. Since the establishment of the school (1882), eleven students have graduated in engineering.

SCHOOL OF ENGINEERING, VICTORIA.

The School of Engineering was opened in 1861. A lecturer on civil engineering was appointed at a salary of £300 per annum and fees. It was not till November, 1882, that a Professorship was created—twenty-one years after the school had been established. The staff now consists of (1) a Professor, who teaches in (*a*) Advanced Surveying, (*b*) Applied Mechanics, (*c*) Civil Engineering; (*d*) Architecture, and receives a salary of £900 per annum without fees. (2.) A lecturer on surveying, levelling and mensuration, who is paid a salary of £200 a year, and lectures two hours a week during term time, and also takes his students in field work on Saturday afternoons for four hours. This appointment is made from year to year, and the lecturer practises his profession of an engineer. (3) A skilled assistant who receives £150 a year. The lecturer in surveying, &c., was only appointed in 1888, and previous to that date the work he now does was performed by the Professor. The authorities of the University recently waited upon the Government to bring under its notice the necessity for a grant being made by the Government to provide, *inter alia*, the funds to appoint three additional lecturers in this department—A lecturer in mechanical engineering, £250; a lecturer in architecture, £250; a lecturer in hydraulic engineering, £250. No buildings were specially erected for the School of Engineering. In all about £2000 has been spent in machinery, models, diagrams and surveying instruments. Of this sum the testing machine cost about £750, the surveying instruments £300, and the balance £950 was expended in the purchase of a cement tester, lathes, other machinery, models and diagrams. The plant, as it exists it present, is complete. Up to within the last two years the department had no testing machine with the exception of a small wooden one which cost quite a nominal sum. For years after the School had been opened the plant consisted only of about £100 worth of surveying apparatus, but the physical laboratory was well equipped. After the School had been in existence for, say, ten years, about another £100 was expended in the purchase of wooden sectional models. About three years back a grant of £1600 was made, out of which the testing machine was bought and some German models by Schroder. There are no workshops attached to the school, which is one of purely civil engineering.

Students.

For a number of years about five students have completed their course annually, and with few exceptions have followed their professions as civil engineers.

NEW SOUTH WALKS.

Professors.

The tenure of the office of Professor in this University is one of good behaviour, and the salary attached to the office is at present (except in one instance) £900 per annum, and half fees. The Senate of the University has determined that in future appointments the remuneration shall be confined to a salary without any propertion of the fees. The Senate have decided to found four new Chairs:—The Challis Chair of Logic and Mental Philosophy, the Challis Chair of History, the Challis Chair of Law, and the Challis Chair of Anatomy. In the case of the Chairs of Logic and Mental Philosophy and History, the salary is fixed at £800 a year, and in the other two cases at £900 a year, but without fees. Of the eight Professors not holding office under the University, one of them, the Professor of Engineering receives a salary of £500 a year and half fees, but the salary is to be increased to £900 without fees, and placed on the Challis endowment.

"I append a return laid on the table of the Legislative Assembly by the Minister of Public Instruction, showing the total amount of lecture and examination fees received by each of the professors and lecturers during the year 1888.

Ann. Salary Lect. Fees Exam. Fees Total. £ s. d. £ s. d. £ s. d. £ s. d. Professor of Classics ... ... 900 0 0 393 15 0 129 5 0 523 0 0 Mod. Literature ... 900 0 0 229 8 6 160 1 2 389 9 8 Mathematics ... ... 900 0 0 320 15 6 206 3 2 526 18 8 Physics ... ... 900 0 0 135 9 0 14 10 0 149 19 0 Chemistry ... ... 900 0 0 290 5 0 13 10 0 303 15 0 Natural History 900 0 0 137 11 0 162 8 2 299 19 2 Anatomy and Physiology 900 0 0 386 15 0 5 5 0 392 0 0 Engineering ... ... 500 0 0 58 6 6 30 9 0 88 14 6 Lecturer in Classics ... ... 350 0 0 ... ... 22 5 0 22 5 0

Mathematics ... ... 350 0 0 ... ... 87 16 0 87 16 0 Logic, &c. ... ... 350 0 0 21 0 0 86 16 0 107 16 0 French and German ... 500 0 0 ... ... 34 6 0 34 6 0 Architecture ... ... 100 0 0 47 5 0 ... ... 47 5 0 Evening Lecturer in Classics ... 400 0 0 79 10 9 180 14 2 260 4 11 Mathematics ... ... 400 0 0 71 8 0 87 16 0 159 4 0 French and German ... 200 0 0 34 2 9 ... ... 34 2 9 Demonstrator in Chemistry ... 350 0 0 ... ... 104 2 0 104 2 0 Physics ... ... 350 0 0 27 11 3 6 2 0 33 13 3 Anatomy ... ... 350 0 0 ... ... 10 1 0 10 1 0 Physiology ... ... 350 0 0 ... ... Lecturer in Biology ... ... 500 0 0 43 1 0 6 6 0 49 6 0 Surgery ... ... 300 0 0 130 4 0 ... ... 130 4 0 Materia Medica ... 200 0 0 94 10 0 ... ... 94 10 0 Pathology ... ... 300 0 0 151 4 0 ... ... 151 4 0 Medical Jurispudence and Public Health ... 100 0 0 56 14 0 ... ... 56 14 0 Clinical Medicine ... 100 0 0 31 10 0 ... ... 31 10 0 Clinical Surgery ... 100 0 0 16 16 0 ... ... 16 16 0 ... ... 16 16 0 ... . 16 16 0 Midwifery ... ... 200 0 0 50 8 0 ... ... 50 8 0 Medicine ... ... 200 0 0 50 8 0 ... ... 50 8 0 Psychological Medicine 50 0 0. 34 13 0 ... ... 34 18 0

I attach a copy of the terms and conditions under which the new Professorships are to be held:—

UNIVERSITY OF SYDNEY.

Challis Chair of Law.—1. The Professor of Law will be required to give instruction in the following subjects, viz., jurisprudence, Soman law, constitutional law, international law, and (if required) to exercise a general supervision over the teaching in the Department of Law in the University. 2. The Professor of Law will be required to give such instruction and to conduct such University examinations as the Senate may from time to time direct. 3. The salary of the Professor of Law is at the rate of £900 per annum. 4. The Professor of Law will not be entitled to any participation in the lecture fees. The tenure of office is during good behaviour but if the Professor shall become incapacitated for performing the duties of his office the Senate shall be at liberty to dispense with his services, or to appoint a substitute *pro tempore*, who shall be paid from the Professor's emoluments. 6. The Professor shall have no claim to any retiring allowance. 7. The Professor will not be allowed to engage in private tuition, nor in any profession or business; except with the consent of the Senate, nor to enter either Houses of Parliament. 8. The salary of the office will commence from the 1st day of March, 1890, when the Professor will be expected to enter upon his duties, or from the date of arrival in Sydney if later. 9. If the Professor appointed should come from Europe he will be allowed the sum of £100 for his expenses.

VICTORIA.

Professors.

The Professors in this Colony hold their office under the same conditions—viz., that of good behaviour. The salary of the office is as follows: £750 a year, with an allowance of £100 a year if a house is not provided. After five years' service the salary is raised to £900 a year; after ten years' service the salary is raised to £1050 a year; after twenty years' service the salary is raised to £1200 a year. The fees of the students are the property of the University.

NEW SOUTH WALKS.

Lecturers.

The Lecturers hold their appointments subject to six months' notice. The return given above shows the salaries paid to the different Lecturers on the various subjects. In some cases the Lecturers receive the fees, and in some other cases they do not do so. Lecturers who are assistants to the Professors and demonstrators give the whole of their time to University work, and do not receive any remuneration beyond their salary. The Lecturers in the Medical School, who are medical men practising their profession, receive full fees at present, but the Senate has resolved that for the future they shall receive half fees only. In other cases, as for instance the Lecturer in Architecture, the Lecturers are paid a lump sum for a certain number of lectures, are allowed private practice, and receive the fees.

VICTORIA.

Lecturers.

The lecturers in the Melbourne University are appointed subject to one year's notice. A salary Of £250 per

annum is paid to the various lecturers, with the following exceptions:—The Classical Lecturer receives £400 per annum; the Lecturer in Surveying, £200 per annum; the Lecturer in Mining, £150 per annum; but in no instance are the Lecturers allowed to retain their fees, nor do they receive any other remuneration or allowance beyond their salary. Permission is given them to practise their respective professions, but not to coach University students in their own subjects. The Lecturers are reappointed from year to year as a matter of course unless for good cause. Two or three of the Lecturers have held their respective appointments for over a quarter of a century.

I trust the Board will not think it out of place if I make a few remarks upon the subject which it will shortly be called upon to consider; the question of what action should be taken for the maintenance of the School of Engineering which was established by the Board in April, 1887, and also for carrying out one of the purposes for which the endowment for a School of Technical Science and other educational purposes contemplated by the Canterbury Museum and Library Ordinance, 1870, was made. In order that the Board may have the whole matter before it, I think it would be well to set out the syllabus of lectures which has been adopted by the College as the course of instruction to be given in this department

"Civil Engineering.

"Surveying—First Year—Elementary mensuration, calculation of areas of plane and curved surfaces, and contents of solids with plane and curved surfaces. Field Work—Exercises in chaining on level and hilly ground, and in setting out simple figures without any angular instruments. Second Year—Division of earth's surface by meridians and parallels. United States and New Zealand systems of survey, traversing with chain and theodolite, principles of levelling, methods of keeping field books, calculation of areas by latitude and departure, exercises in plotting surveys and map drawing. Field Work—Use of theodolite, sextant and level. Third Year—Minor triangulation, topographical surveying, Telemetry and use of plane table, river and marine surveying, exercises in drawing maps and sections. Field work—Surveying and levelling, and keeping notes of work done. Fourth Year—Geodetic survey, primary triangulations, meridional circuits, setting out Crown Lands, engineering surveys: calculation of altitudes from barometer observations, gauging of rivers, measurement of earthwork, exercises on plotting, toposrraghical and engineering surveys. Field work—Exercises in topographical and engineering surveving.

"Building Construction—First Year—Nil. Second Year—General principles in relation to materials, foundations, walls, beams, arches, floors, and roofs. Elementary architectural drawing. Third Year-Bridge construction in timber, stone and iron; iron roof construction; constructive details in carpentry, joinery and masonry; principles of constructive design. Fourth Year—Working drawing, specification, contracts, taking out quantities and preparing estimates, conduct and supervision of work.

"Principles of Civil Engineering—First year nil. Second year—General principle of laying out roads, railways, navigable canals, and channels for drainage and irrigation. Third year—Road and railway construction, methods of working steep grades. Ruck system, horizontal driving wheels and central rail, cable traction details of canal construction, river conservation and improvement, ship canals, harbour works, lighthouses. Fourth year—Arrangement of railway stations, street tramways worked by horses, steam motors or underground cables, electric railways, water supply, warming and lighting, sewerage and surface drainage, transmission of power for manufacturing purposes, telegraphs.

"Mechanical Engineering.

"I. The Steam Engine (Elements)—Early forms of steam engines, improvements of Watt; heat, nature of, conversion of work into: experiments of Bumford, Davy and Joule; expansion of gases; expansion of steam, superheating, the steam jacket, the compound engine: various types of stationary engines, various types of boilers, the marine steam engine, the screw popeller, the locomotive engine.

"II. Steam Engine (advanced.)—Third Year.—Heat Engines, the steam engine viewed under a knowledge of the doctrine of heat: theory of the expansion of steam and the compound engine: action of the crank, diagrams of twisting moments, inertia of the moving parts; valve gears geometrically considered; general properties and proportions of details; proportions of steam boilers; hot air, gas, and other engines.

"III. Applied Mechanics and Elements of Mechanism.—Force, matter, measurement of velocity, laws of motion, motion of falling bodies, energy, inertia, work and friction, parallelogram of forces, centre of gravity, the mechanical powers, equilibrium and pressure of fluids. Equilibrium and pressure of gases, pumps, the hydraulic press and hydraulic cranes, motion in one plane, circular motion, the conversion of motion, the teeth of wheels, use of wheels in trains, aggregate motion, link work, Paucellier's straight line motion, parallel motion, miscellaneous contrivances.

"IV. Strength of Materials—Tensile stress, compressive stress, shearing stress, transverse stress, torsional stress, elastic limit, elastic strength, strain, absolute strength, modulus of elasticity, permanent set, riveted joints, strength of pillars, pillars under transverse stress, chains, beams, girders, roofs, wrinkling strains, impact, collapse of tubes, deflection of beams, fatigue of materials, factor of safety.

"V. Practical Geometry—Practical plane geometry, practical solid geometry, intersection and projection of solids, expansion of surfaces.

"VI. Freehand Drawing—Sketching from diagrams and machines, sketching for drawings, sketching to scale.

"VII. Mechanical Drawing—Drawing office practice, copying, drawing from sketches, designing to suit special conditions.

As the result of observation in the other Colonies, I have formed the opinion that the staff (1) a Lecturer in Mechanical Engineering, and (2) a Lecturer in Civil Engineering, with which the College opened the school, is amply sufficient at present for its purposes. I might here remind the Board that though the School of Engineering in Melbourne was opened in 1861, it was not till 1882 that a professor was appointed. At Sydney the school was also opened by the establishment of a lectureship. I venture to think we may safely follow the example of those Colonies and proceed cautiously, developing the department as the success of the school warrants and our means admit. I hardly think the time has yet come for giving effect to the resolutions of the Board passed in April, 1887, by making an appointment to the Chair of Engineering. The resignation of the gentleman who was filling the post of Lecturer in Mechanical Engineering as a part-time lecturer, and the difficulty in filling his position in that way, has contributed to force upon the Board the reconsideration of the position. Moreover, the question of increased instruction, in consequence of having to provide for the second as well as the first year's students, must have been dealt with before the opening of the term in March, 1890. I think it will meet present requirements if the Board renews the appointment of the Lecturer in Civil Engineering. For the purposes of the School of Engineering, the teaching now given by the Lecturer in Civil Engineering is, I think, sufficient. Before dealing with the question of the appointment of some competent person to continue the work begun by the late lecturer in Mechanical Engineering, I would like to lay shortly before the Board one or two points that should be borne in mind in filling the office. While the Board should not lose sight of the necessity of making provision for instruction in the School of Engineering, other than that provided by the re-appointment of a lecturer in Civil Engineering to enable such of our students who desire to do so to take a degree in the School of Engineering, which covers Civil Engineering, Mechanical Engineering, Mining Engineering, Electrical Engineering, Surveying and Architecture, it should also keep in view another side of the question which I venture to think is of almost paramount importance. I allude to a system of evening classes, by which foremen in factories and workshops, mechanics, apprentices and others who are engaged during the day in or near the city may be afforded the means of perfecting themselves in their respective vocations. That, I take it, would be carrying out in a way, and in no unimportant manner, one of the purposes for which the endowment for a School of Technical Science was made. It might not be out of place if I here draw the attention of the Board to what is being done in the Working Men's College, at Melbourne—an institution that I was shown over when I was in Australia. A copy of the report and prospectus for 1887, and of the prospectus for 1889, I have caused to be laid upon the table. A reference to those pamphlets will show that a great work is being carried on in that institution, not only in the direction to which I have invited the attention of this Board, but in many other equally useful subjects, which are hardly within the province of this College. The Board, by the Ordinance, is charged with the duty of providing a liberal and regular course of education, and in founding a School of Engineering, and making due provision for its maintenance, it will have discharged in that direction one of the duties imposed upon it. But it has also cast upon it the administration of the funds of the endowment of the School of Technical Science, and this appears to me to be a fitting opportunity for the Board to consider the question from all its bearings. I think this College, looking to the experience in the other Colonies, with their large populations, of the number of students in the Schools of Engineering at Melbourne and Sydney, cannot expect any considerable number of students to attend the lectures with the object of ultimately graduating in the School of Engineering. Hence the greater necessity, while providing instruction which will enable those to take a degree who wish to do so, to establish popular classes, and, by so doing, to offer to a very large class the opportunity of profiting by a course of instruction which cannot but prove of the greatest advantage to them in their respective callings, and open to such of them as may see their way to take advantage of it, the means of obtaining a profession. I have satisfied myself that the whole of the elementary lectures could be given by means of evening classes, and thus made available not only for the students who intend to proceed to a degree, but for all others who may choose to attend them. These classes can be made to cover instruction in building construction, elementary steam engine, geometrical drawing, freehand drawing, mechanical drawing, and a proportion of the lectures in the advanced steam engine, applied mechanics, and elements of mechanism.

In order to make these classes popular in the true sense of the word the fee might be fixed at a price that would put them within the reach of all. Those who have watched the progress of events in the development of superior education in this district will remember that this College the outcome of the evening classes initiated by the "Collegiate Union." The Canterbury College, as it exists at the present day, with an attendance of 240 students at the different lectures, had a very small beginning. Therefore, there is every reason to hope that the school of engineering may be successfully established if it is launched on a proper basis, on one that will prove attractive to the very large and important class that I have already alluded to, and from which we may reasonably expect to draw a large number of students. I have referred to the fact that under any circumstances it would have been necessary for the College to provide increased instruction in the department of mechanical engineering before the commencement of the first term in March, 1890. I would therefore recommend the Board to appoint some competent person to the post of lecturer in mechanical engineering, who would devote the whole of his time to the duties of his office. The expense in the way of an increased vote for the salary of a full time lecturer is one the College must have faced under any circumstances. If the College thinks well of the suggestions I have made, steps could be taken for the extension of the system of evening classes without any additional expense to the department by way of salary over and above that which must have been incurred to provide the increased instruction by reason of the lectures to be given to first and second year students. Both in Melbourne and Sydney the services of skilled workmen are employed in the laboratories of the University, but I do not see any necessity why this Board at present should be called upon to make any provision in that way.

For the efficient establishment of the School of Engineering an outlay, though not necessarily by any means a large one, will have to be incurred for buildings. One of two ways may be followed, either by the erection of a temporary structure or by putting up a permanent building. I The authority of His Excellency the Governor might be sought, as is provided by the College Ordinance, for the raising of a small loan for the purpose, the interest! on which can be readily met out of the increased revenue of the endowment. In either case a loan would have to be raised if the College decide on the erection of buildings; it is only a question of amount. I fail to see how the work of the department can be done with advantage to the students or credit to the lecturers without the necessary buildings. The Board has before it the cost (£1500) of the buildings of brick, with a slate roof, erected by the University in Sydney and the accommodation provided. Presuming that a similar sum were spent by this College the annual charge for interest would not exceed £90 a year. I venture to think it would be better to put up a permanent building at a reasonable cost rather than erect some temporary "structure, possibly of corrugated iron. It would not only, I believe, be cheaper in the end, but would have this additional advantage which should not be lost sight of, of being, I trust, in harmony with the building in which we are now assembled. The Board, no doubt, will agree with me that on the College site we have, as it is, more than a sufficient variety in material in our buildings. A certain expenditure will also be necessary for plant, but the amount to be spent from time to time would be regulated by the Board. A total outlay of about £1500, extended over a period of say four years, would, I believe, be found sufficient for the efficient working of the department for years to come. That portion of the plant—(1) a testing machine arranged to test strength and elasticity of materials in tension and compression, (2) a transverse strength-testing machine, (3) verniers and measuring appliances—which would be required at once might be purchased out of capital, the remainder being pro-Tided out of income as the funds would allow of it.

Lecture Fees.

The Board will observe that in the University at Melbourne the Professors are paid by salary only, and receive an allowance of £100 per annum in cases in which the University does not provide a residence. They do not receive any proportion of the fees. The same rule as regards fees applies to the lecturers in that University. In Sydney, in addition to their salary, the Professors now receive half the lecture fees, but in the appointments about to be made to the four professorships mentioned above the Professors will not be entitled to any proportion of the fees. I have already stated fully the practice in the matter of fees in the case of lecturers in the University of Sydney. In the Canterbury College the professors and lecturers are paid partly by salary and partly by fees. The whole of the lecture fees are received by them. Many reasons, I think, may be urged against this system of payment in part by handing over the fees or any proportion of them to the Professor or lecturer. I have drawn attention to the practice that obtains in Melbourne, and to the change which is now being made in Sydney in respect of the lecture fees, so that in the event of any fresh appointments the Board may have the subject before them. I hope the Board will not think I have occupied too much of its time with my remarks on this subject. It is one, as some members of the College are aware, in which I have taken a deep interest from the first.

F. de C. MALET.

Christchurch,

October 26th, 1889.

The following resolutions were carried by the Board at the meeting at which the Chairman's report was read, viz., on the 28th October, 1889:—

1. That the thanks of the Board be accorded to the Chairman for his very excellent and exhaustive report, and for the trouble taken by him to secure the information it contains. 2. That while generally approving of the recommendations of the report, the College and Museum Committees be requested to draw up a scheme in connection with the School of Engineering, based upon the principles contained in the report, with any additions or modifications they may think desirable. 3. That the report be printed, together with any other documents or papers bearing on the subject that the Joint Committee considers would assist the Board in arriving at its decision.

Canterbury College,

dateline *of* AMOUNT *of* SALARIES *and* FEES *paid to* PROFESSORS *and* LECTURERS *during the* 5 *years*, 1885-9 *inclusive*.

1885 Salaries Fees. Total £ s. d. £ s. d. £ 8. i Professor of Classics ... ... 700 0 0 179 0 6 879 0 6 English Literature ... 700 0 0 378 0 0 1078 0 0 Mathematics ... ... 700 0 0 143 6 6 843 6 6 Chemistry ... ... 700 0 0 177 19 6 877 19 6 Biology ... ... 700 0 0 57 4 6 757 4 6 Geology ... ... 150 0 0 6 6 0 156 6 0 Lecturer on Modern Languages ... 150 0 0 33 12 0 183 12 0 Jurisprudence 150 0 0 21 10 6 171 10 6

1886, Salaries. Fees. Total. £ s. d. £ s. d. £ S. d. Professor of Classics ... ... 700 0 0 302 8 0 1002 8 0 English Literature ... 700 0 0 523 8 6 1223 8 6 Mathematics ... ... 700 0 0 202 13 0 902 13 0 Chemistry ... ... 700 0 0 123 7 6 823 7 6 Geology and Biology ... 700 0 0 77 3 6 777 3 6 Lecturer on Modern Languages ... 150 0 0 23 12 6 173 12 6 Jurisprudence 150 0 0 21 0 0 171 0 0

1887. Salaries. Fees. Total. £ s. d. £ s. d. £ s. d. Professor of Classics ... ... 700 0 0 248 6 6 948 6 6 English Literature ... 700 0 0 623 3 6 1323 3 6 Mathematics ... ... 700 0 0 246 15 0 946 15 0 Chemistry ... ... 700 0 0 157 10 0 857 10 0 Geology and Biology ... 700 0 0 56 14 0 756 14 0 Lecturer on Modern Languages ... 150 0 0 29 18 6 179 18 6 Jurisprudence ... 150 0 0 22 1 0 172 1 0 *Civil Engineering ... 75 0 0 12 12 0 87 12 0 Mechanical Engineering ... 150 0 0 ... ... 150 0 0 *Appointed 7th June, 1887; only paid half-year's salary.

1888. Salaries. Fees. Total. £ s. d. £ s. d. £ s. d. Professor of Classics ... ... 700 0 0 332 17 0 1032 17 0 English Literature ... 700 0 0 565 8 6 1265 8 6 Mathematics ... ... 700 0 0 240 19 6 940 19 6 Chemistry ... ... 700 0 0 207 18 0 907 18 0 Biology and Geology ... 700 0 0 60 7 6 760 7 6 Lecturer on Modern Languages ... 150 0 0 31 10 0 181 10 0 Jurisprudence ... 150 0 0 21 10 6 171 10 6 Civil Engineering ... 150 0 0 15 15 0 165 15 0 Mechanical Engineering ... 150 0 0 52 10 0 202 10 0

1889. Salaries. Fees. Total. £ s. d. £ s. d. £ s. d. Professor of Classics ... ... 700 0 0 273 10 6 973 10 6 English Literature ... 700 0 0 571 14 6 1271 14 6 Mathematics ... ... 700 0 0 236 15 6 936 15 6 Chemistry ... ... 700 0 0 176 8 0 876 8 0 Geology and Biology ... 700 0 0 64 1 0 764 1 0 Lecturer on Modern Languages ... 150 0 0 40 19 0 190 19 0 Jurisprudence ... 150 0 0 30 19 6 180 19 6 Civil Engineering ... 150 0 0 14 3 6 164 3 6 Mechanical Engineering ... 150 0 0 51 9 0 201 9 0

Report of the Proceedings of the First Annual Conference of the Industrial Protection League
Of new Zealand,
Held on
June 6th, 7th, 8th, 10th, & 12th, 1889,
In the
Cafe de Paris,
Christchurch, New Zealand.

decorative feature Christchurh PRINTED AT THE "LYTTBLTON TIMES" OFFICE CHRISTCHURCH.
MDCCCLXXXIX

Industrial Protection League of New Zealand.

THE First Annual Conference of Delegates from the several Branches of the Industrial Protection League of New Zealand commenced in Christchurch on Thursday, June 6th, 1889, in the Cafe de Paris, Cashel Street, at 11 a.m.

The following Delegates were present:—

- MR. J. M. DOUGLAS, representing the Invereargill Branch.
- MR. W. SWAN MR. B. S. MANTZ representing the Dunedin Branch.
- MR. D. SHAW MR. D. BELLHOUSE representing the Christchurch Branch.
- MR. T. N. HORSLEY representing the Auckland Branch.

The Wellington Branch was not represented.

The President of the Christchurch Branch, Mr. D. Shaw, took the chair, and Mr. D. Bellhouse, Secretary for the South Island Branches, acted as Secretary.

The Chairman opened the proceedings by welcoming the Delegates to Christchurch, and hoped their consultations would be the means of bringing about a better state of things.

The Secretary also welcomed them, and said he was particularly gratified to see them, as he had experienced a good deal of anxiety in bringing the Conference about. He also wished to state that the cause of delay in holding this Conference was owing to the apathy of the Executive in Wellington and the Wellington Branch, and not from any apathy of the other branches, and he hoped they would now by the foundation of the League in such a way that the delay could sever happen again.

The Secretary then read the minutes of the last Conference, held in Wellington last year, and it was moved by MR. MANTZ, seconded by MR. SWAN, and carried unanimously:—

"That the minutes of the last Conference be confirmed, and at the same time the Delegates present deeply regret that the late Executive in Wellington should, by its apathy and neglect, have rendered the proceedings of the Wellington Conference almost nugatory."

It was then moved by MR. DOUGLAS, and seconded by MR. SWAN, and carried unanimously:—

"That the best thanks of this Conference be given to Mr. Bellhouse, the Secretary of the Industrial Protection League of New Zealand for South Island, for his ability and 1 excessive energy throughout, knowing as we do that it is mainly through his efforts that the League continues to exist."

It was moved by MR. MANTZ, seconded by MR. SWAN:—

"That the Delegates now proceed to revise the organisation and policy of the League."

Resolved:—"That each district represented should have two votes "

Resolved:—" That the hours of session shall he from 7.30 p.m. to 10 p.m., unless otherwise arranged."

The Conference then adjourned to 7.30 p.m.

The Conference resumed at 7.30 p.m.

The President of the Christchurch Branch, Mr. D. Shaw, took the chair, and all the Delegates were present.

The following is the constitution of the League, as finally passed:—

1—Name.

That this organisation shall be called the "Industrial Protection League of New Zealand," and that its operations shall extend over the whole colony.

2—Objects.

That the objects of the League shall be as follows:—

- To formulate a general policy for the colony based on the principles of Protection, and to promote the development of New Zealand industries, and protect them from the unfair competition of other countries.
- To impose restrictions upon foreign emigration so that our own labour market may not be Hooded with the surplus population of other countries.
- To reconstruct the Labour Bureau, with enlarged powers, to enable it to cope successfully with the disturbing influences affecting the relations of Capital and Labour.
- To assume a firm attitude at Municipal and Parliamentary Elections to secure the return of Candidates pledged to support the principles of the League.

3—Membership.

That any person 18 years of age or upwards, may become a member of the League by paying the annual subscription of the Branch.

4—Government.

That the government of the League shall be worked by a President, two Vice-Presidents, Treasurer, Secretary, and two representatives of each Branch; and that all manifestoes issued by the League shall be signed by the President and Secretary. All the above officials (except the Branch representatives who shall be elected by their respective Branches), shall be elected at the annual Conference from the Branches in the district where the Executive holds its sittings.

5—Conferences.

That a Conference of Delegates from all Branches of the League shall be held annually, at such time and place as the Conference then sitting may decide upon. Special Conferences may, however, be convened upon the joint authority of the President and Secretary, whenever they may deem the business urgent.

6—Duties of Secretary.

That the duty of the Secretary shall be to keep himself in continual communication with the Branches, and advise them in all matters of general policy, to aid in organising public meetings, to interview the people's representatives, and at the end of every session to prepare a full digest and balance-sheet for presentation to the annual Conference.

7—Duties of Branch Secretaries.

That it shall be the duty of each Branch Secretary to attend all meetings, record the minutes thereof, conduct the correspondence, and at the end of every quarter transmit a summarised report of the proceedings of the Branch to the General Secretary.

8—Affiliation of Branches.

That all Branches shall affiliate themselves to the League as district sections of the organisation, and contribute a quota of 30s. each per year to defray the ordinary expenditure of the Executive.

9—Trades Unions.

That any Trades Union may affiliate itself to the League as a Branch by contributing the quota of 30s.

10—New Branches.

That it shall be within the province of each district to open new Branches in any locality whenever the conditions may be deemed favourable, to convene public meetings, to test the opinions of Parliamentary representatives upon the objects of the League, and to devote its attention to ascertain the strength of its supporters upon the electoral roll

11—Alteration of Rules.

That no rule shall be altered, or new rule made, except at the annual Conference, and that twenty-eight days' notice shall be given to the General Secretary of any such alterations, in order that it may be brought under the consideration of the Branches previous to such Conference taking place. This rule shall also apply to special resolutions.

Election of Office Bearers.

The following office-bearers were elected;—

Moved by MR. DOUGLAS, seconded by MR SWAN, and carried:—

"That a public meeting be held under the auspices of the Industrial Protection League of New Zealand and that the City and Suburban Members of the House of Representatives be invited to attend."

The Conference adjourned to 7.30 p.m. next day.

FRIDAY, JUNE 7.

The Conference resumed its sitting at 7.30 p.m. The President of the Christchurch Branch, Mr. D. Shaw, took the chair, and all the Delegates were present.

A letter was read from the Invercargill Branch, and it was decided to deal with it later.

The Chairman then introduced the newly-elected President of the League.

The President on taking the chair, addressed the Conference, and hoped the League would become an institution of great importance He considered the Customs tariff more of a revenue than a protective tariff. He advocated a land and income tax in place of a property tax. He also advocated the establishment of a State paper currency, which he considered was the sovereign right of the State. This paper currency would be made a legal tender, and would be used for the purpose of paying the civil servants, &c.

Mr Douglas, Vice-President, also addressed the Delegates in support of the President's statements.

It was moved by MR. SWAN seconded by MR. DOUGLAS:—

"That a Special Conference of the League be held in the City of Duneain in the month of January, 1890, leaving the date to be fixed by the Executive.

This Resolution was carried unanimously, as it was considered most necessary that a Conference should be held during the Exhibition reason.

The following resolutions, 1 2 4, were adopted and ordered to be forwarded to the Government:—

- "That as the existing Tariff abounds with the most absurd anomalies, it should undergo a thorough revision, and that in all future compilations the list of articles taxed for the purposes of revenue should be kept quite distinct from those which are taxed to protect the New Zealand producer."
- "That all articles absolutely essential for the manufacture of New Zealand goods, and which the Colony itself cannot produce, should be allowed to come in duty free as raw material; but all imported manufactured goods or fabrics which can be produced here should be taxed to that degree as would enable the New Zealand producers to hold their own against the foreigner."
- "That the contemplated changes by the Government, namely, the reduction of the members of the House of Representatives, and the introduction of Hare's modified system, is fraught with great danger to the Democratic Constitution of the Colony; as the former, by enlarging the area of the constituencies and increasing the canvassing expenses, will effectually debar any but rich men coming forward as candidates; and the latter will still further curtail the political power of the people by giving an undue influence to the voice of the minority. This Conference therefore asks the Government to refrain from legislation of this reactionary kind, and to fall back upon the one man one vote principle in all municipal and parliamentary elections."

The debate on this resolution was adjourned to the next sitting:—

- "That the development of the sweating system in New Zealand, especially with regard to several branches of female industry, calls loudly for parliamentary interference. This Conference therefore recommends that the Labour Bureau be reconstructed upon an enlarged basis and under a responsible head, so that it may take cognisance of all wage scales mutually agreed upon by employed and employers, adjust disputes by arbritation, obtain statistical information relative to the labour market, and also serve as an agceny for drafting the unemployed to districts where their services may be required without subjecting them to arbitrary conditions or unnecessary hardships."

The Conference adjourned to 7.30 p.m. next day.

SATURDAY, JUNE 8.

The Conference resumed its sittings at 7.30 p.m. The President of the League (Mr. D. Bellhouse) took the chair, and all the Delegates were present, also the Secretary Mr. J. W. Walker.

The debate on the following resolution was resumed, carried, and ordered to be forwarded to the Government, with the others:—

- "That the contemplated changes by the Government, namely, the reduction of the members of the House of Representatives, and the introduction of Hare's modified system,! fraught with great danger to the Democratic Constitution of the colony; as the former, by enlarging the area of the constituencies and increasing the canvassing expenses, will effectually debar any but rich men coming forward as candidates; and the latter will still further curtail the political power of the people by giving an undue influence to the voice of the minority. This Conference, therefore, asks the Government to refrain from legislation of this reactionary kind, and to fall back upon the one man one vote; principle in all municipal and parliamentary elections."

The following resolutions were adopted, to be moved at the Public Meeting on Tuesday next:—

- "That, it is the opinion of this meeting that a Protective policy is the only one that can conduce to the prosperity of the working classes, and promote the development of the natural resources of the Colony."

- "That, in the opinion of this meeting the Custom Tariff as it now stands is not sufficiently protective, it being evidently prepared with a view to revenue and not to protect our artisans and mechanics, and it considers every article absolutely essential for our own manufactures, and which we ourselves cannot produce should be allowed to come in duty free as raw material, while the duty on all goods and fabrics manufactured abroad which we can produce here should be greatly increased."

The Conference adjourned to 7.30 p.m. Monday night.

MONDAY, JUNE 10.

The Conference resumed its sittings at 7.30 p.m. The President of the League (Mr. D. Bellhouse) took the chair, and all the Delegates were present, also the Secretary Mr. J. W. Walker.

A deputation from the Bootmakers' Union waited upon the Conference, and explained the cause of the present trouble, which is a threatened lock-out by Messrs. Toomer Brothers.

The Conference expressed its sympathy with the workmen, and passed the following resolution:—

- "That this Conference deeply regrets that Messrs. Toomer Brothers have assumed such a dictatorial attitude towards their employees as to threaten them with a lock-out unless they agree to their harsh terms, and should the threat be persisted in it will be the duty of this Conference to afford all the moral and material assistance in its power."

The Conference then commenced to go through the Customs Tariff for the purpose of making amendments, and after doing some good work adjourned until Wednesday, 12th inst.

TUESDAY, JUNE 11.

The Public Meeting did not take place as there was so small an attendance—Messrs. W. B. Perceval and W. P. Reeves M H.R.'s were pent, and a letter of apology for his unavoidable absence was received from Mr. F. Jones, M.H.R.

WEDNESDAY, JUNE 12.

The Conference resumed its sittings at 3 p.m. at 109, Cashel Street.

The President (Mr. D. Bellhouse) took the chair, and all the negates were present.

The consideration of the Customs Tariff was further continued, and after making considerable headway adjourned to 7.30 p m.

EVENING SITTING.

The Conference resumed its sitting at 7.30 p.m. The President of the League took the chair, and all the Delegates were present with the Secretary.

I A letter of apology was read from Mr. W. B. Perceval, M.H.R., for his unavoidable absence.

The following resolution, proposed by Mr. Mantz, and seconded by Mr. Shaw, was unanimously passed:—

"That this Conference having carefully considered the various items of the present Customs Tariff by the side of the evidence furnished by our own manufacturers, is strengthened in its belief that the changes proposed by the Conference of March, 1888, are needed now more than ever, and it suggests that the Branches should interview their Parliamentary representatives, and prevail on them to insist upon a thorough revision of the Customs Tariff during the coming session, on the lines laid down at the last Conference with the various alterations made by this Conference."

Moved by MR. SWAN, and seconded by MR. MANTZ:—

"That this Conference strongly disapproves of any subsidy being granted to the San Francisco Mail Service, as by so doing it is offering a premium to America to undersell our farmers and manufacturers."

This resolution was negatived.

Moved by MR. SWAN, seconded by MR. HORSLEY:—

"That a full report of the proceedings of this Conference be printed in pamphlet form, and 100 copies forwarded to each Branch of the League for circulation among the members—Carried.

Moved by MR. MANTZ, seconded by MR. DOUGLAS:—

"That before closing its deliberations this Conference desires to call the attention of the Branches to three matters which must have a material influence upon the success or failure of the principles of a party. Perceiving that several seats were lost at the last election through two Protectionist Candidates standing against one Freetrader, it is hoped at the next election no candidate will come forward in the Protection interest until his candidature has been approved and endorsed by the Protection League, and when this has

been secured, every member should sink all personal differences and strive his utmost to return the candidate of his party.

"Another subject of equal importance is the necessity of the Branches forming sub committees to ascertain the strength of our party on the electoral roll, and to provide at the time of the election a strong staff of election speakers to promote the candidature of those the League desire to return.

"A third matter is that the Secretary of each Branch should keep up a continual correspondence with the General Secretary of the League."—Carried.

The Conference then finished the consideration of the Customs Tariff.

Resolved:—"That a vote of thanks be tendered Mr. F. Arenas, of the Cafe de Paris, for having so kindly allowed the use of his Commercial Room in which the Conference has held its meetings.

A vote of thanks to the President brought the Conference to a close.

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JULY] [1889. ZEALANDIA CONTENTS. " BON VOYAGE." Introductory Rondo, by S. T. Sharpley .. .. page 1 TO OUR READERS .. .. 2 "ARROW HEADS:" Editorial Chitchat .. .. 3 "THE MARK OF CAIN" By Owen Graham. Parti. .. .. 4 "SOME SOCIAL RESPONSIBILITIES OF A YOUNG COMMUNITY."-By the Rev. Rutherford Waddell, M.A. .. .. 17 OUR POETS" CORNER.—Under the charge of Richard Ellis Richard, "North Otago Times," Oamaru; "OUR PET KANGAROO."—A Humorous Poem. By Thomas Bracken 21 "MY RATA TREE."—A Translation. By Arthur Desmond .. .. 42 "WANDERINGS IN LAKELAND."-"©. 1, "Manapouri and the Matterhorn Mountains." The first of a series of Three Descriptive Articles on the Southern Cold Lakes. By Malcolm Ross 24 "A HELPLESS SPECTATOR"-Complete Story. By W. P. Reeves, M.H.R. .. .. 23 "OUT IN THE OPEN."—By G. M. Thomson, F.L.S .. .. 37 ZEALANDIA'S FAIR.—By "Annette" .. .. 39 YOUNG NEW ZEALAND.—Our Girls. By Mrs. Cotton .. .. 40 " " "—Our Boys. By the Rev. T. Flavell .. 41 CHESS in New Zealand.—By C. W. Benbow .. .. 43 DRAUGHTS in New Zealand.—By J. P. Bell .. .. 44 NEW BOOKS.—44 He Who Digged a Pit."—Review by the Rev. Rutherford Waddell, M.A. .. .. 45 44 The Riven Cloud."—Review by Wm. Freeman .. .. 46 NEW MUSIC.—By "Tutanekai" .. .. 47 THE CORNER COBWEB.—By "Spider" .. .. 48 OUR EXCHANGE AND MART .. .. .. (Inside Hack Cover net) Everything appearing in our pages is written specially for "ZEALANDIA."

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Zealandia.

A Monthly of New Zealand Literature, by New Zealand Authors.

Edited by William Freeman.
Pro Patria Populoque.
Vol. I.] [No. 1. July, 1889. decorative masthead

Rondo.

Bon Voyage.

Our modest craft upon the wave
We blithely launch 'mid omens brave,
With cheering friends and watchers kind,
In trust that she fair paths may find,
Nor meet the storms that wildly rave.

Untried the ocean we explore—
No earlier vessel left the shore
From which we steer with dauntless mind
Our modest craft.

So, gentles, of your grace we crave,
While doubtful seas her timbers lave—
While breezes play, or tempests roar,
That you will think of us,—and more,
Will ask the Sea-God that he save
Our modest craft.

SYDNEY T. SHARPLEY

Dmnedin

July 1st, 1889.

To Our Readers.

Not a few of the best friends of literature in this colony have become convinced that, in spite of the many well-meaning periodicals which have been established in New Zealand with varying success, no thoroughly popular—and therefore no thoroughly successful—effort has yet been made to system matically bring forward the very large amount of literary talent which is known to exist here, and which has spasmodically attracted public attention from time to time. Zealandia is the outcome of this conviction. The promoters of this magazine feel that another vehicle for the conveyance o the productions of English authors to the New Zealand literary market is altogether superfluous. Colony though it may be, New Zealand is a nation—not yet beyond its embryonic form, but still a nation; and to the realisation of this truth is duo the fact that Zealandia has been established as a distinctively national literary magazine. Its contributors will be all New Zealanders, and no subject will be dwelt upon in its pages that is not of interest, directly or indirectly, primarily to New Zealanders. It is nothing to us that it may prove of interest, secondarily, to all the world beside. But, whilst it is intended to assist New Zealand authors, and, in fact, *in order* to assist them effectually, rigid care will be exercised as to the

quality of the literary pabulum provided in ZEALANDIA'S pages. Although special pains will be taken to bring forward rising authors of promise, care will be taken to see that they *are* of promise, and also that each number of ZEALANDIA is sufficiently ballasted with the work of tried writers to give it weight. By good quality, however, we do not mean what is wrongly known as the severely classical. We prefer to sprinkle our road to the higher life with flowers of fancy rather than strew it with rugged philosophical boulders. It is, moreover, clearly recognised that to be of real use ZEALANDIA must be no ephemeral, meteoric flash. And to be permanent it must be popular. Therefore the most strenuous efforts have been made to accommodate ourselves to the prevailing taste. To this end a serial tale has been selected which by its inherent force and thrilling interest will appeal to the public at large, rather than to the hypercritical few, while at the same time its tendency will be ever upwards. Fiction will be further represented by a complete tale in each number. Every number will also contain an article, by the very best procurable writers, descriptive of some part of New Zealand. Still more solid matter will be found in our series of essays or papers on subjects of interest by our advanced thinkers. Popular topics will also be lightly touched upon in our editor's "Arrow Heads." A corner has been found for our poets. Natural History, always an interesting subject in a new country, has its allotted place. Specialists have been engaged to meet the requirements of our ladies, our girls, our boys, and our chess and draughts players. Reviews of books and music and advice to our authors, poets, and composers, both in print and by private letter, have been arranged for. "Our Exchange and Mart" should prove both an attraction and a convenience, and it is to lie hoped that our "Corner Cobweb" will catch humorous flies in abundance. This bill of fare should surety prove a most popular one, and popularity—and hence circulation—once secured, more solid matter will gradually be added, while the popular items will also be increased in number. Contrary to the usual practice, it is our intention to start, as far as possible, within our means, and to use the profits made to continually increase the size, quality, and attractions of our magazine from month to month. Finally, while ZEALANDIA'S aims should secure it the assistance of every New Zealander who has a singe spark of patriotism in his bosom, we rely upon the intrinsic merits of our reading matter to extend our circulation outside the colony.

Arrow Heads.

. . . "Arrow-heads of sandstone,
Arrow-heads of chalcedony,
Arrow-heads of flint and jasper,
Smoothed and sharpened at the edges,
Hard and polished, keen and costly."

SONG OF HIAWATHA.

Just seven years after the colony of New Zealand was founded Charles Dickens wrote of himself—" Inimitable very mouldy and dull. . . . Disposed to go to New Zealand and start a magazine." At that time it was the height of exquisite absurdity to suggest starting a literary magazine in the [*unclear:* ne] of savage cannibals, and yet in less than four years from that time the attempt was actually made; and failed, of course, as it did when tried again twelve years after. The time was not yet ripe. From that day to this New Zealand magazines have appeared with the regularity of spring flowers, and withered away almost as quickly. Their promoters did not accurately gauge the pulse of popular taste. Once more the effort is to be made, but this time upon lines such as the great master of English literature himself would have chosen had he carried out his threat and brought his genius to our shores.

I make no secret of my desire to model Zealandia on the lines which I believe Dickens would have chosen under like circumstances, although I am well aware that there exists in certain quarters a growing affectation to sneer at and depreciate the warmest-hearted pourtrayer of human joys and sorrows that ever touched a pen. It *is* only affectation, and so I treat it just as I do the comical superciliousness of those who affect to look down upon Shakespeare, because their minds are not capable of the expansion necessary to the comprehension of his most beautiful thoughts.

For my part I regard the thraldom of English literary princes as one of the surest and most binding ties between the Mother Country and her Colonies. However successful we may be in establishing a national literature in New Zealand, no lover of the true and beautiful would wish to shake off the pleasant bondage of the British master-minds of the literature of their ponger days. Imperial Federation may, probably is, steadily approaching—and a good thing too, from a purely practical point of view;—but it never will lined the British in England to the British in New Zealand, mind to mind and heart to heart, half as closely as a common literature.

This may be regarded as a sentimental way of viewing our connection with the Home country. And that is so. I strongly approve of the judicious use of sentiment even in the most important questions. In fact, sentiment of some sort or another, much as it may be despised, wraps the hardest of business men about in a way they little suspect. A disastrous thing it would be for all were the last remnants of sentiment rooted up and cast aside. Then, even more than now, would business be conducted in the same way that a brigand secures a purse—by holding a knife to its owner's throat. That the readers of ZEALANDIA may never become deadened to the practical value of sentiment is the earnest hope of
The Editor.

The Mark of Cain.

By Owen Graham,
Author of "Little Forget-me-Not" "My Friend the Foreigner," &c.

Part I.

A Wife's Confession.

"MY DEAR HUSBAND,—When you read this your wife of a day will be dead, I cannot convey to you how earnestly I wish you to credit what I am about to say. I could not rest in my grave if I thought the disgrace which has covered me is my life time should rest upon my memory when I am gone. Think of not as speaking from the dead; and remember that however improbable some of the things I relate may seem, I am not likely to write anything but the truth now, and least of all would I think of doing so to you.

"It is part of my diary—the only part bearing upon those facts of which I know you must so intensely desire to learn the truth. As it was written then, so it remains now.

"Since the day when I was dragged from before you in the cabin of your yacht, I have never known a happy hour. It was a heavy burden that was laid upon my shoulders then; and never for a moment has it been lifted from them. *You* believed me guilty—and oh! my dear, dear Matthew, it was in *that* that the bitterness of it lay. Everything has been against me;—every one has believe me to be a guilty, wicked woman, and I dared not open my lips to defend myself The trial came on; evidence was piled up against me; there was not a man or woman in the land that did not condemn me. I saw it in the faces of the gaping crowd that came every day to stare at me; in the stern looks of the judge, the jury—everywhere. I wonder I did not go mad. I have sometimes wished they had found me guilty, for then I should have escaped the slow torture I have endured since.

"And yet I was innocent.

"I might have cleared myself, but I could not bring myself to do it. It was not that I was careless of life; on the contrary, I had the one thing that should have made life happy. I knew then, as well as I know now, what I was giving up but there was only one thing that weighed with me—and that was your low, my dear Matthew, for I may call you so now. Yet I made the choice; and had I my life to live over again, I could not but choose to do the same again. Believe me I had a reason for what I did; and, much as you must have suffered, before you have read to the end of this Confession you will admit it was no light reason.

"The struggle to contain myself in silence has been a hard one for me. I have often heard about you. The world is a small place after all, and it has come to my ears in many chance ways how you have lived since that fatal epoch is our lives. I have heard how you have shut yourself out from society; how you have gone from country to country an aimless and hopeless wanderer; how you have been pressed again and again by those who had every right to advise you to get a divorce from one who was but your wife in name, to whom you had attached yourself by a hasty boyish pledge, and who had, apparently, proved herself so base and unworthy of you. I know, too, that you have remained true is spite of all. Think then, if you deem me worthy of the bestowal of a thought how I must have suffered in my obscurity when I saw from what I had shut myself out, and whether I would have condemned you and myself to all this without a weighty reason. That reason, dear Matthew, it is now my purpose to show you.

"And when you have read this Confession, and pass judgment upon my poor afflicted sister, who has been the unwitting cause of it all, do not forget the calamity that had befallen her. She was not responsible for her terrible set had she been sane she would have been incapable of even conceiving the thought. She had had much wrong, and had been basely deceived. She was an instrument in the hands of a just Fate. My heart is fit to break when I think of her and all the terrible misfortunes that overwhelmed her through one rash act. My poor Catherine!

"May you be happier henceforward than you have been while I lived to blight your prospects. May you learn to forgive her who entered into your life only to [*unclear:* in] it, but who would gladly have given her existence to make you happy had Providence ordered our lives more kindly than it did. Would that I could convey a you by some other means than pen and paper what i feel towards you at this mount of writing. Though misfortune has come down upon me like a thick darkness, my life has known one green spot in its dreary wilderness—through all my love for you has remained as strong as on the day when you first won the [*unclear:* ission] from me. I may confess it now; for when this reaches your hand the save will have hidden all the faults and follies of

"Your loving wife,

October 9. 1888.

"ESTHER."

The Diary.

I.

Jan. 15, 1885.—How strange it seems to me to be seated in this room writing in my diary to-night. I can scarcely realise that I am the new governess, and that I am at The Peak. The advertisement was: "Wanted, young lady of education and refinement as governess. Knowledge of languages required in addition to [*unclear:* ty] to instruct in ordinary curriculum. Terms, £40 per annum. Apply, The Park."

Well, I was a young lady of education and refinement. I knew French and Spanish passably, was well acquainted with Latin, had a slight smattering of [*unclear:* men] (very slight, I may say), besides English, which of course didn't count, [*unclear:* tered] myself I knew how to instruct in the "ordinary curriculum "—which I supposed meant the three li's—and above all, I wanted that £40 badly. I applied for the place, got it, and here I am, tired to death with travelling for the last two days, and with my daily portion of diary-writing, which I have religiously pledged self to do, still staring me in the face.

To day was one of those unseasonable days occasionally met with even in mid gamer. Thick clouds of mist were drifting over the hills as we set out from Wellington this afternoon, and in about half an hour it began to pour down in torrents. The driving sheets of rain made the scenery a mere indistinguishable blurr, and I by back in the carriage in despair of finding anything from without to interest me. I was full of a feeling of timid nervousness. I had not yet seen Mrs. Shaw, the [*unclear:* ly] by whom I had been engaged, for I had applied for the situation in writing, and I wondered what she would be like. I took out the letter she had written in ably mine, and read it over again. It was kindly enough worded, assured me [*unclear:* ing] a very comfortable place, that the two little girls it would be my duty to [*unclear:* ct] would be found *exceedingly* docile and teachable, and all that; but it was written in a thick heavy hand. The t's had no upstrokes, and had great black has dashed across them; the tails of the g's and y's were as stiff and unbending is pump-handles, and the ends of the words ran away into mere ragged lines. Altogether a grim, forbidding kind of hand; a hand that brought up a vision of a [*unclear:* an] with a little too much will of her own, a set, severe face, and tightly [*unclear:* ed] lips. I did not like the picture I had conjured up, put the letter back in the [*unclear:* ule], and looking out of the carriage window again, found I was at length in [*unclear:* dit] of The Peak.

From the valley road along which we were slowly crawling—I could call it nothing else—I caught sight, through the grey cloud of rain, of a large rambling [*unclear:* ing] perched apparently on the top of the highest hill. The coachman [*unclear:* ted] to it with his whip, and said that was "It." From the valley it was impossible to form any idea of what the place was like, for I could only make out the dim outlines of a number of high-shouldered gables pushing up above the trees; a great straggling pile it seemed, all the bigger and more unwieldy from the mists that hung about it. Then it was shut out again, and we began to ascend a hillside, so steep that the horses had to go in an abrupt zig-zag to lessen the strait. The trees, heavy with the rain, overhung the banks at the roadside and brushed against the coach windows as we passed. Then, without in the least knowing how we got there, I found myself jolting along a rough narrow mountain path, with The Peak in the midst of its wide grounds lying below. Behind the house, the mountains rose giddily upward till their tops were hidden in dense clouds of mist, that closed, and opened, and changed, and hung down the steep hillsides like masses of tangled drapery. A cold icy wind had arisen and was sweeping keenly along the heights; a wide, bleak prospect opened out; on every side stretched rugged brown hills studded with the blackened stumps of

charred tree stems, with random patches of native bush showing here and there through rifts in the mist, and having an indescribably wet and draggled look about them. I wondered what could have possessed any one to build such a house as the one before me, and then hide it away in a wild, barren, out-of-the-way spot like this.

A few more turns in the road, and we stopped before a pair of tall iron gates, which the driver opened. Then we wheeled up a broad pebbly yellow-sanded sweep of carriage drive, and halted before the hall door, and stepping out, I found I myself fairly arrived at The Peak at last.

It is not the most comfortable feeling to entertain at the beginning of such an engagement as mine, and I may be wrong, but I have an unpleasantly strong idea that Mrs. Shaw and I will not be the best friends in the world. She received me herself in the drawing room on my arrival to-day, and I was surprised at the closeness of her resemblance to the picture I had formed in my mind. She was tall, gaunt and bony, with eyes severe, and dress of formal cut. Her eye brows were bushy—too bushy for a woman; and her forehead, though she was by no means an elderly woman, was full of wrinkles. Her nose was pointed; her ears stood out sharply from her head; and in the very first moment of my introduction I was conscious of a certain grim, disagreeable air of sanctimony about her.

She rose from her chair as I was announced, and stood with one arm crossed in front of her, and the other by her side, steadily looking at me. She took in every point before she spoke. Then she said, "You are Miss Gower, I presume. I am glad to see you. I trust we shall get on very well together." I trusted we should get on very well together, added what I thought the occasion required and presented my credentials.

"You will be tired after your journey," she said, when she had made me thoroughly uncomfortable by the critical way in which she seemed to read over the letters. "The servant will show you your room." She rang the bell, and a servant girl appeared, who piloted me up a flight or two of stairs and along a dreary stretch of passage to the quarters assigned me, where I have remained ever since, Mrs. Shaw being considerate enough to indulge me with tea in my own room.

And now I am just about tired out. The bed looks inviting, and I think I have done enough for one day.

II.

JAN. 16.—First day over, and I am not sorry for it. I want an hour or two's leisure to decide whether I like the place or not. I think it will do. Mrs. Shaw, whose chief characteristic seems a pretty strong will and a pretty quick temper, is not so bad as I thought she would be. I concluded last night that she was not a lady—by a good deal, and she left the impression upon me to-day that she has not always been used to her present style of living, and is afraid of the fact being known. It appears she is a widow. Mr. Shaw died at sea about thirteen months ago Besides the two young girls I am engaged to teach, she has one son, the offspring of a previous marriage. He is at the University, she told me to-day, and she expects him down almost immediately. His name is Edgar Stadding, and he is spoken of (by his mother), as a rising man in the scholastic world.

My two pupils seem only ordinary specimens of child life. Mediocre in every—nothing remarkably good, bad, or clever about them, and consequently a very fair field to work upon.

The Peak is much more comfortable than one would think from its surroundings. It is an isolated, bleak place certainly, but it has its advantages—among them a magnificent view. The grounds are of great extent, and are well laid out—that is, from my point of view. The paths are full of odd twists and turns, and reveal all sorts of unexpected attractions at unexpected places. The shrubbery is cut into a variety of strange artificial shapes, which is the one point in the gardening I do not like. The whole place, both grounds and house, is sadly neglected. The house itself is a very substantial affair, having been built in the time of the Fitzherberts, and the Fitzgeralds, and the Holdsworths, when the Maoris were troublesome, and when the possibility of a raid on their part was among the things which might be calculated upon. There is even now some legend extant about a solemn league and covenant having been made between the earliest representative of the Shaw family and a certain Epuni, who, in those days, was a chief of the Ngatiawa, and a mighty man in the land.

Jan. 18.—Great preparations were being made for the arrival of Edgar Stadding all day yesterday, and the place is even yet in a state of mild uproar. Things had been left to the last moment, too, and the object of all this fuss arrived in the midst of the confusion. He came very unexpectedly, and without sending any word. I had the rather doubtful honour of seeing him last night before anyone else in the house, and there was something in his behaviour that puzzled me then, and which I am at a loss to understand now.

It was a beautiful night. The moon had just risen, and the dew was glittering in the silvery light. I had wandered from the house, and found my way to the low stone fence that borders the garden. I stood there enjoying the fresh beauty of the night, looking along the road that stretched away in the moonlight like a long grey ribbon till it was lost in distant windings among the hills.

There was a spire of tufted grass growing out from between the stones of the wall, and nodding in the breeze. It was such as Goethe's Marguerite might have said her charm over—"He loves me, he loves me

not"—and I plucked it, and choosing two words, repeated them as she did, picking a blossom at each word. I came to the end, and held the stripped blade in my hand,

I was to be unfortunate!

I laughed and threw the blade away, and turned to go into the house again, but paused. Slowly there grew out of the silence a faint rattle that gradually took the sound of carriage wheels, and two dots of flame, like twin stars, floated out into the dimness far along the road. As it came nearer I saw that the lights belonged to a dog-cart, which had two men in it. It stopped suddenly when directly opposite me, and one of the men, giving a hasty exclamation sprang out, and the next thing I was conscious of was that a young man was approaching me with lifted hat and outstretched hand. I was more than surprised. I had never seen him in my life before, but he seemed, in some unaccountable way, to regard me as quite an old friend. He was tall and overdressed—even in the moonlight I caught the flash of jewellery on cuff and shirt-front—and the fingers of the hand he held out had several rings on them,

"Ha," he said, as if he were greeting some familiar acquaintance, "who the tumentionable would expect to see you hanging over a fence at this hour? How the deuce did you get here, of all places? You've stolen a march on me, you pass; begad you have. Good heavens!" he said, stopping short in comic despair within a pace of me. "Is it not—can I have made a mistake?"

He certainly had, and I went so far as to say so. "Puss," indeed! the impudence of the fellow.

"Indeed, I—I beg your pardon. I thought I had the pleasure of meeting—"

The man in the cart laughed, and the other, murmuring some apology which I could not distinguish, scrambled back to his place in what I thought a very ungraceful and undignified way, and drove on again. As I walked towards the house, wondering how such a strange mistake could have arisen, I heard a peal of laughter from along the road, and looking back, saw the dog-cart take the turning that led up to the house, and it at once crossed my mind that it was Edgar Stadding who had taken this informal way of returning home, and that it must have been he who had spoken to me. And I should like to know who on earth could he suppose me to be, that he should have the unheard-of impudence to call all me" puss!"

Jan. 19—I saw him again to-day. He introduced himself the other night in a way that prejudiced me pretty strongly against him, and my dislike—for it amounts to that; I always go by first impressions—was increased this afternoon, though he seemed to put himself to some pains to make himself agreeable. As I was walking by myself in the garden after the day's lessons were over, I saw him lolling on one of the old-fashioned garden seats that are scattered here and there over the grounds. He had a number of letters beside him on the seat, and seemed to be reading one very attentively; he kissed it once or twice, too, if I am not mistaken. From "puss," I suppose. I wonder who the creature can be? How that word does annoy me, to be sure! Presently he caught sight of me, and, thrusting the letter into his pocket, came hurrying along the path after me.

"Oh, Miss Gower," he said, as he overtook me, "I have just been over to the post-office for our daily batch of letters, and here is one for you."

I took the letter, thanked him, and was passing on, when he said—

"I hope you have forgiven me for my stupidity of the other night, Miss Gower.

It was the dim light did it; and you really are so much like—the party I took you for."

I felt anything but flattered by the resemblance! Like a "puss," indeed!

"There is nothing to forgive, Mr. Stadding," I said, tartly. "I had forgotten all about it."

It was a case of antipathy at first sight. Without there being any one thing in his manner or appearance that one could single out as *the* objectionable feature, there was something about him that roused my dislike at once. If he thought to use the letter as an excuse for opening a conversation, as I supposed he did he had chosen the worst possible means for his purpose, for it was in my sister's hand, and I was anxious to get away to my own room and read it. But he stood right in my way, flicking the flowers with his riding switch, and apparently determined not to go till we were better acquainted.

"You are very kind to say that, Miss Gower," he said; "you have no idea how I have been tormenting myself about my awkwardness. I am afraid yon will find The Peak very dull," he went on, after pausing to see if I would speak, "especially after being accustomed to living in town—you come from town do you not?"

"Scarcely that, I have been at Nelson for a while; but you can hardly call that town life. I don't think I shall find it at all dull here, though. I prefer country to town."

"Do you? Well, I don't. Awful bore, I think it. Tells on a fellah, you know-least, it does on me. Gives me the miserables, and I make for the town the first chance I get. Course, being a university man—student, you know, and all that" (he looked out of the corners of his eyes with elaborate slyness as he said it, but I carefully avoided his glance)—"er—town offers me many advantages."

I said, "Indeed," endeavouring to reduce myself to a lump of inanity in the hope that he would drop the conversation, but he went on as cheerfully as ever.

"Oh, yes, six months in the country would make me into an unmitigated clod-hopper" (a great deal less than

that would do it, I commented mentally) "*Allow* me," and he picked up the letter, which had slipped from my fingers.

"Do you know, Miss Gower, I can do a little at the second-sight business," he said, desperately trying to keep up the conversation, as he held out the letter and gazed impudently into my eyes. Everything he did was more or less impudent, it seemed to me.

"Yes?" frigidly.

"Yes. Shall I give you a sample of what I can do? For one thing, now I can prophesy good news for you in this letter. Shall I go on?"

"By all means, Mr. Stadding, tell me all you know; only I am afraid you are not recommending yourself as a letter carrier for the future."

"Oh, I say," he said, with a stupidly deprecating air, "that's—that's very seven. But, now—you couldn't cross my palm with silver, could you, in true gypsy style? No change? Oh, very well. Your letter, then," and he gazed abstractedly into space, and let the words drop slowly, one by one, from his lips, "is from one near and dear to you—whom you haven't seen for some time—a female, a mother—no, not a mother, nor an aunt—let us say a sister; let us further say her name has nine letters, and that the first is C. Am I right as regards the writer so far, supposing it is from her?" and he assumed what he meant for an engaging smile.

"Quite right, so far," I said, somewhat surprised.

"Good breeding requires that I must not allow myself to pry too closely. She is an actress, tall, dark, has—well, in fact, has a temper of her own, and—yes, meditates very shortly paying you a visit."

"Why, Mr. Stadding, you must surely be acquainted with my sister to know all this!"

"Performance is over, Miss Gower" (another smile), "it merely remains to pass round the hat."

"But, tell me, do you really—you must know my sister Catherine."

"To those who have the gift of second sight, ordinary conditions don't apply. We know 'em all, anyone you like, without the preliminary of introduction have that marvellous gift, and it enables me to know that the Grand What's-his-came of Thibet is a humbug, and that the Czar Alexander looks under the bed every night before he goes to sleep."

"Oh, but," I said, impatiently, "without any nonsense, do you know my aster Catherine?"

"I know Catherine's sister—"

He was interrupted by a shriek of laughter, and little May Shaw, one of my two pupils, came running along the path, her hat hanging round her neck by the strings, her hair flying out behind her.

"Oh, Eddy, hide me quick! She wants me to go to bed, and I won't go-o-o," shrieked the child, trying to hide behind him.

"Confound the child! go away; don't bother me with your nonsense now," he said irritably, pushing her away.

"Oh no, of course not," and the child fell back a pace and pouted, "'cause you want to talk with Miss Gower," she said, with the charming frankness of her years.

"May Shaw I" I said, severely.

"You impudent young monkey!" said Mr. Stadding, at the same time looking at me and smiling as if there was a perfect understanding between us.

"Miss May," said a sharp voice, "come along and let's have no more nonsense," and the nurse, a cross, vinegar-faced woman, appeared round a sudden tend in the trees and seized the child by the wrist. She looked sourly from me to Mr. Stadding, and back again, and was turning away without speaking, when Mr. Stadding said ill-temperedly—

"I wish you could manage to keep those youngsters a little more under control, Mrs. Hetherwick."

Now, Mrs. Hetherwick, I have reason to know, occupies a peculiar position in the family. She is generally spoken of as "the nurse." That is her official capacity. She came into the house with her mistress, and from their long acquaintance has drifted from the position of servant into that of confidante. She is allowed considerable authority, and, from what I have seen of her, seems to exercise it in the most disagreeable way, and is heartily detested by the other servants. She has the reputation, too, of being the most consummate of gossips, and has unusual facilities in the way of learning local scandal, being related to the landlady of the Truss o' Straw, a hotel at the Hutt, where such news naturally collects.

She turned upon Mr. Stadding at once, with crest erect.

"Indeed, Mr. Stadding, I think I know my place better than *some others* I could name, if it comes to that," she snapped. "I am sorry if the little thing *interrupted* you. There *are* times, I know, when children are in the way." She looked spitefully at me as she spoke, and I began to wake up to the fact that I was being placed in a very unpleasant position.

"Hoity-toity, marry come up," said Mr. Stadding, mocking her. "Do we know who we are speaking to, Mrs. Hetherwick?"

"Yes, we do, Mr. Stadding, and it would be better if some others in the house were just as careful who they talked to. I know my own place, at least—and know how to keep it, that's what's more."

"If I had my way, that last is just what you wouldn't do, madam."

"Oh, I dessay! And I think I know some who would be just as sure of their place if you had your way, sir—which the Lord forbid you ever should!" she said, shaking her head at him fiercely.

"You take my advice, Mrs. Hetherwick, and don't go too far. I didn't ask you for any impudence, you know, and when you speak to me you'll be good enough to remember the difference in our positions. If you are allowed liberties elsewhere, you'll lay aside your Jack-in-office airs with me. I've no more words to waste on you. Miss Gower, may I see you into the house?"

I had felt *de trop* during this passage, and did not wish to appear to identify myself with either party. I was irritated at the conduct of Edgar Stadding, whose thoughtlessness had placed me in a very false position. It was impossible not to understand the point of Mrs. Hetherwick's reference to myself, and I dreaded how she might use her influence with Mrs. Shaw if her enmity were once aroused.

"Thank you," I said, coldly, "I shall stay out here a little longer."

He lifted his hat, without speaking, and passed on after Mrs. Hetherwick, who was striding up the walk to the house, dragging by her side little May, who was continually looking back and tripping up, and being jerked on again till a turn hid them from sight.

The evenings are raw and cold up among these bleak hills, so, giving them a few minutes to reach the house, I turned to go in also. As I passed up the stairs to my room I heard the voice of Mrs. Hetherwick saying, "Take my word for it, she's too good-looking by half. I know 'em of old." I heard no more, but may modesty could not make me doubt as to who it was that was under discussion, and I have serious misgivings as to how this will end.

Edgar Stadding was a true prophet. The letter was from Catherine. It was very short, and contained little more than the intimation that the company with which she was travelling would shortly be in Wellington, and that she hoped to be able to get time to visit me soon after I received her note.

As I finished reading the letter I remembered what Edgar Stadding had said in the garden. Could he really be acquainted with her, and did he by some means know that she intended coming here?

A thought strikes me: We were always considered very much alike. Can this be the explanation of the strange mistake he made the other night? I sincerely hope it is not!

III.

JAN. 22.—I have seen Catherine to-day for the first time for five years! She is very little changed, and I feel quite sure now that it must have been she that Edgar Stadding mistook me for on the night of his return; and the knowledge is very far from being pleasing to me. I not only dislike him personally—and I frankly admit that I do, as I have said before—but his tone, when he spoke to me, both on the first occasion and since, was to my thinking a deal too familiar and—well, disagreeable, to say the least. From what I have seen of him during the last day or two, I believe him to be a selfish and unprincipled man.

Catherine is staying at the Truss o' Straw, at the Hutt, where she established; herself this morning. She sent a note telling me she had arrived, and as soon as my work for the day was over I went down to see her. I inquired for "Miss Ada de Bonville," which was the name—a foolish one, I thought—on the note she had sent, and was shown up to her room, where we committed all kinds of extravagances in the first joy of meeting after so long a separation as ours has been. At least, I know I did; and when my first lucid interval occurred, I found myself, with tumbled hair and dress, sitting on the sofa opposite Catherine, and both of us in a generally confused state of half laughter, half tears.

When I say she is little changed, I mean as to her appearance; in other respects there is a change, though what it is I scarcely know, except that I have an uneasy sense that it's there, and that I wish it was not. But beyond this it is the same dear self-willed impulsive Catherine of old.

We sat and talked as girls will talk after they have been long parted, but what it was all about I haven't the faintest idea now. The long summer evening dosed in upon us all too soon, and as I wished to be back at The Peak before dusk, I rose to go. I was standing in front of the glass arranging my head-gear with Catherine beside me, when I was struck anew by the resemblance between our faces, and at once recalled my first interview with Edgar Stadding, and the mistake lie had made.

"Catherine," I said, suddenly, "do you know anyone named Edgar Stadding?"

She started, and then laughed guiltily, and began to colour up.

"We are in the way of knowing a good many people in our profession," she said, evasively. "It's different to a governess's, you know—considerably."

"Well?"

"Well, what?" with a short laugh.

"Do you know Edgar Stadding?" I repeated, determined to have a direct answer to my question.

"Well, as I say, one knows so many—but why do you ask?"

"Because I'm pretty sure he knows you, and knew you were coming here too."

"Oh, that's very likely," she answered, carelessly, "and so did five thousand others, for the matter of that. It was in the papers about our coming long enough, goodness knows. Besides, more people know Tom Fool—you know the rest."

"Yes, but he knew more about you than he got from any paper. The papers didn't say you were my sister, or give your right name, did they; or say that you were tall and dark, and had a temper of your own?"—(Or speak of you as "puss," I was going to add, but checked myself in time.)

"Did he say that?" she said, her eyes sparkling. "You know him—you've spoken to him, then?" and she glanced up at me quickly.

"Or, rather, he has to me—and I'd thank him not to in future."

"And why, indeed? Isn't he good enough for your ladyship?"

"I don't say anything as to his goodness or badness, though I have my doubts about the former. But I don't like him—for one thing."

"Indeed! And what is the other thing, may I ask?" she said, wavering between jest and earnest, with a growing inclination to the latter.

"Simply because he doesn't know how to speak when he does do so—as far as I have seen as yet, at anyrate."

"That sounds very like a 'bull,' doesn't it? Did he say anything so very shocking, then?"

'It's not what he has said to me altogether, but to others, and his manner in general. But that has nothing to do with my question as to whether you know him or not—though I scarcely need ask you now."

"What a persistent little fool it is! Why, of course I do—that is, we have a I slight acquaintance—platonic, you know. The fact is, he is an artist, and appreciates I good acting-"

"*And* actresses," I said, with a curtsey.

"I accept the amendment. *And* actresses, as you remark," with a return of the curtsey.

"He may be an artist, but he's certainly not a gentleman, nor the kind of person I would choose for—for—well, a friend—"

"Oh, nonsense. Don't be so absurd. What do you know about him to form an opinion on, and what's your opinion worth when you have formed it, I'd like to know? I'll be bound you haven't spoken to him half a dozen times altogether."

"No indeed I haven't, and don't intend to, that's more. I found twice quite enough for my taste."

"Twice! There you are, now! The very idea of running away with an opinion of a man's character after seeing him twice! I wonder you were introduced to him it all."

"It would be a good while before we'd become acquainted if he waited for that, I'm afraid. We *weren't* introduced; he doesn't wait for such old-fashioned formalities as that. He introduced himself, and that, too, in a way that was a good deal more peculiar than agreeable."

"He *has* a free and easy way with him, I know."

"Yes—very much so. The first time he saw me I've a shrewd idea he took me for some one else." I looked hard at her, but she met my eyes with a look of childlike innocence.

"I shouldn't wonder if he did. I doubt if he would have the courage to speak to such a little dragon of propriety, if he knew. You always were a little prude, you know that yourself. But who could he take you for?"

"Can't you guess?"

"Not the faintest idea," she said, shaking her head.

"Shall I tell you?"

"Please."

"Ada de Bonville."

"Ada de Bonville! Me! Never!" she exclaimed, with well simulated surprise.

"Come, come," I said, mischievously, "you're not on the stage now. It's well acted, but only acted after all. You know it was you he must have mistaken me for if he mistook me for anyone."

"Go along with you, you impudent minx! How should I know? He might have taken you for one of the old maids of Lee. As likely as not—you look the part. But tell me—what did he *say*?"

"No more than you might expect any other young man to say who found himself in a very ridiculous position. Mumbled something I suppose he intended for an apology, got back into his dog-cart, and drove off again—and all with the worst grace imaginable."

"Mumbled! He *didn't* mumble. But surely that wasn't *all* he said. What were his words—what did he *say*?"

"Bless my heart, I don't set so much store by his words as to be able to repeat them verbatim a week after

hearing them. Something about an unexpected plea-sure, and how on earth did I get there. Which I think it was like his impudence to say." (I still suppressed the "puss.")

"And was that all he said?" she asked, with a certain air of relief, as if she had been afraid he had said a good deal more.

"As far as I remember that was all he said."

"Ha! ha! ha!" she laughed, "the very idea of his taking you forme! That *is* good. Well, we are alike, certainly—in looks, anyway. I suppose you were *highly* indignant at the innocent mistake he made?"

"Indignant? Why should I be, at his saying to me what it would be appropriate to say to anyone else in a like position?"

"Oh, but you were always such a straight-laced little prude of a thing. You know you were."

"A prude," I said, irritably. "I think you told me that before, this evening. I'm not quite sure what you call a prude. If it's prudish not to like anyone who doesn't know how to behave himself, then I'm a prude, and mean to remain one."

"I'd better count ten before I add anything to that, don't you think, Ettie? Don't let us quarrel over it."

"Quarrel! I don't *want* to quarrel. But what do you say such ridiculous things for? And all for the sake of a—"

"Let us change the subject, Ettie," she said, stopping me by putting her hand over my mouth. "When shall I see you again?"

"I'm afraid I shan't be able to call here often. Come up and see me at The Peak. I've got a room to myself."

"Thank *you*," she said, with another curtsey. "I've no wish to see your puritanical old Mother Hubbard up there. Besides, what would she think of the governess who defiled her house by bringing an unregenerate, painted actress into it; and that actress her sister, too?"

"Why, what can you know about Mrs. Shaw?" I asked, in surprise.

"Oh, I know plenty about her. I know her a good deal better than you think," and she nodded her head wisely.

"From Edgar Stadding," I commented mentally, and then aloud—"Have you ever spoken to her?"

"Not I, but I know what kind of woman she is, all the same. I have means of hearing. What? The time? Oh, well if you must go. Will yon have a ticket for the theatre? 'Deeds Done in Darkness.' Come and see your sister filling the *rôle* of the 'Deserted Wife' as played by her for two hundred and fifty nights before enthusiastic audiences in all the leading cities of the colonies, an impersonation universally admitted to be unique in its boldness of conception and minute conscientiousness of detail—ahem! Can't I reel off the patter? I got that from one of the notices written by a newspaper fledgling I charmed in the stalls one night. Won't, you come? I'd like you to see it. I'm sure you'd like it. We begin in Wellington in a night or so. My leave is up to-morrow."

"Thanks. I'd like to go; but then you know—"

"Oh, yes; Mrs. Shaw, propriety, and all the rest of it. I'd go in spite of the old cat, if I had to climb out of the window. What's it got to do with her, I'd like to know."

"But being an irreclaimable prude I couldn't do that, you see."

"*You* climb out of window! I don't believe you could persuade yourself to leave a house afire if you had to save your life at the risk of your ankles being seen. What is it Miss Mowcher says about that? Well, what must be, must be, I suppose. I should like you to see it, though, at the same time. I rather pride myself on my 'Deserted Wife.' You wouldn't believe what a hold it has taken of me. I quite terrified myself the other night when I woke up in the middle of a dream and found myself going through the scene on the floor of my room."

"I should like to see you too, Kate; but if I can't see you in the part of a Deserted Wife, perhaps I'll see you have a still longer run in that of an Old Maid in the Comedy of Life, so cheer up."

"No, that *indeed* you won't—not while leap year's in the calendar and I've got a tongue in my head. Good night, old chap. I can see you are taxing yourself to work up a joke on something about a 'drop-scene' and a "curtain lecture,' but I don't care to hear it. Here, take this ticket in case the spirit should move you to try the window-climbing business. Ta, ta!"

IV.

JAN. 24.—Mrs. Shaw has treated me very coldly since the evening when Edgar Stadding spoke to me in the garden, and I am glad that that gentleman has of late been away pretty frequently at one place and another, and that when he does meet me he makes no attempt to engage in conversation. I think he understands me pretty well now. Mrs. Hetherwick ignores me altogether—of which I should be glad did I not doubt she is only waiting a favourable opportunity to injure me in the eyes of her employer.

Mrs. Shaw surprised me yesterday. I have mentioned that I was struck with a certain grim suggestion of sanctimoniousness about her at our first interview, and that impression has been made a good deal stronger

lately. She is the very last person in the world I should expect to see patronising a theatre or, indeed, any other amusement; yet last night she not only went to the theatre herself, but took her retainers with her—me along with the rest. I wonder what she would think if she knew my reason for being interested in the play? Early in the morning she received a visit from a certain Dr. Carmichael—a tiresome, good-natured old man, who officiously superintended my work with my pupils during the forenoon, and seemed to think his grey hairs justified him in playfully pinching my cheek and pulling my ears, which he *would* persist in doing—and I think it must have been on his persuasion that she allowed herself to be led so far out of her ordinary hum-drum groove. I had taken the ticket Catherine had offered me, but without any hope of using it, for I was anxious to avoid doing anything that I thought might displease Mrs. Shaw—and I was pretty sure my going to the theatre would displease her—but I felt very much disappointed, for I was really curious to see how Kate could act. Mrs. Shaw is one of those persons who have gained us the reputation, as a nation, of taking our pleasures sadly. She called the two servants and myself into the drawing-room yesterday, where she was sitting in company with Doctor Carmichael, with Mrs. Hetherwick knitting and glowering in the background. She surprised them even more than she did me by saying she had gone to the expense of buying tickets for the theatre. She was opposed to the habit of theatre-going. It was, generally speaking, a Thriftless, Worldly, even Immoral practice; but on this occasion the piece seemed different from those usually given, and was advertised as being of a strictly moral tendency, and specially adapted to appeal to the young, and it was for the purpose of assisting a good charitable object. She approved of that—she emphatically approved of that. She was a charitable woman herself, and always wished to help a good object with her humble mite. But still, those who did not wish need not go, and she would write an appropriate text on their tickets, which they might keep instead. Both the servants assumed an air of infinitely preferring the text, but being compelled by a disagreeable duty to go to the theatre.

"And which will Miss Gower have, the text or the play?" said the doctor, with a sly smile, sidling up to me and pinching my ear again. "*I* am going to the play, myself. Gratify an old man by saying you will go too. Miss Gower smiles. I answer for her, Mrs. Shaw; Miss Gower will go to the play, and you can give her the text afterwards."

Mrs. Shaw, who was no doubt vexed at the others declining the text, received my decision with a very bad grace, and silently offered me a ticket. I did not wish to place myself even under the trifling obligation of accepting it, and in consequence I allowed myself to commit a piece of very bad generalship.

"Thank you," I said, "I have a ticket."

"Oh, *indeed*," she said, icily. "I was not aware of that."

Something like a muttered, "Well—upon—my—word," from Mrs. Hether-wick's corner, as if the speaker had almost lost the power of speech from amazement, showed me the mistake I had made.

"*Very* good. You see, Miss Gower's charitable feelings have anticipated yours, Mrs. Shaw," said the doctor, who seemed to understand the situation.

"Quite so. It is a very commendable feature in a young person's character, "said Mrs. Shaw, with a frigid stare. "I can quite understand the ticket was bought with no *other* purpose than that of charity."

Her temper was still ruffled when we set out for Wellington, and was made worse by the sudden appearance of Edgar Stadding, who had been away duringthe first part of the day, and who now declared his intention of accompanying us to town. I, too, could have wished he had not put himself in evidence, for though I was not looking at her, I knew Mrs. Shaw at once set herself to keep a vigilant watch upon me; and when we entered the theatre, I took care to take the seat farthest away from Mr. Stadding.

I had very seldom been in a theatre before—never, of course, under like circumstances—and I sat with a feeling of nervous distraction upon me, waiting for the rising of the curtain, and the appearance of Catherine upon the stage. The house was not half full as yet; and a confused buzz of conversation arose from the continual throng of new comers making their way in. As I was wondering, in my simplicity, how Catherine would ever be able to go through her part before so many people, and thinking how impossible it would be for a nervous creature such as 1 to say even half a dozen words in the presence of such a battery of eyes, 1 was startled by a face I caught sight of on the opposite side of the circle. It was that of a tall, dark man, who had just been obsequiously ushered to his seat, and was standing waiting, with a certain statuesque pose, for two ladies, who were making their way towards him. He was a spare, powerful-looking man, with a closely-cut black beard, and one shoulder a very little higher than the other.

"Who is that man," I said, laying my hand on the arm of Doctor Carmichael, who sat next to me.

"Who? Where? How your hand trembles! What is the matter?"

I knew my hand shook, for I was excited, though I did not know why.

"That tall dark man opposite us, who is showing the lady into her seat. There, he has just sat down, and is reading his programme."

The doctor, who is rather short-sighted, put up his glasses.

"That," he said, focussing his glass, "is Llewellyn, the owner of Scythe-bearer, the disputed winner of the Auckland Cup, that we have heard so much of ever since the race. This is the first time I have had the chance of a good look at his face, and what an evil-looking one it is, isn't it? He could play the part of Mephistopheles without change of dress, and no one would notice the incongruity. Here, just look at him through this," and the doctor offered me his lorgnette.

Llewellyn raised his head as I brought the glass to bear upon him, and I had a good view of his face. As the doctor said, it was indeed an evil-looking one. But its chief characteristic, and that which fixed the attention to the exclusion of all else, was the expression of the eyes—deep-sunk, black, and piercing, with a depth of hidden passion and fire in them.

"Miss Gower, you shuddered, I'll take my oath you shuddered! How would you like a man like that for a husband, eh? You wouldn't care to cross his purpose, would you?"

"No, that indeed I shouldn't," I said. "I hope our paths in life may never meet." And then the curtain went up.

I could wish that my record of the evening ended here, for, as a matter of fact, I blush even in the privacy of my own room, when I think how I disgraced myself; and I am really ashamed to think I could let a mere piece of make-believe sensationalism have such an effect upon me.

It was the last scene of the third act, the central tableau of the piece, and was, to my thinking, horribly realistic. It represented a glade in a forest at midnight, so dimly lighted that one could scarcely distinguish the actors. Two men had met, and were talking angrily. Presently they closed furiously in a death struggle. In the midst of the combat, the stage moon burst out from a bank of canvas clouds, and revealed one man in the act of plunging a knife into the other. The wounded man sank upon the ground; the murderer, alarmed at what he had done, made off—and all was done in such dead silence that it made one quite nervous. Then, from among the bushes, Catherine, in the character of the Deserted Wife, rushed towards the fallen man, who was no other than her faithless husband. He struggled to his knees as she came near, and dumbly held out his hands to her, and clutched her dress. She snatched up the knife from where it had fallen upon the ground, seized one of his wrists, and brandished the dagger over his head. Her action was so terribly life-like I could not bear to see more, and I covered my face with my hands. I heard her clear voice ringing through the building, "Let me finish the work!" There was quietness for a moment, and then a burst of applause, that died away on my ears as if I had been plunged under water, and then—well, and then I must admit I was guilty of the weakness of fainting.

When I recovered, someone was holding my head up, and someone else was chafing my hands. There was a crowd of people round me—a pyramid of curious eyes piled almost to the ceiling, it seemed to me in my confusion, and the first face I distinguished, as the mist cleared away from my eyes, was that of the man Llewwllyn looking down at me over the shoulder of Edgar Stadding. Then, I saw Mrs. Shaw, who seemed, by her looks, to have been disappointed in detecting the moral tendency of the play, standing grim and silent beside me, with my shawl dangling from her hand. Then, I found myself outside, and revived as if by magic with the breath of the keen cool night air. The carriage drove up. Doctor Carmichael, who had monopolised me as completely as if I had been a piece of his property, gently lifted me in, and we were soon trundling homeward again. Had it not been for the doctor, I think we should have been absolutely the dreariest party of pleasure-seekers that ever rode on wheels. I remained dumb under a sense of my own humiliation and disgrace, and the humiliation and disgrace I bad brought upon my rigid mistress by making her, upon the one occasion on which she had relaxed, the centre of a scene in a theatre. She had insisted on having a light in the carriage—owing to her uncertainty as to what further weakness I might betray, I suppose, and she sat next me, bolt upright, angular, mute Once I thought I heard her mutter, "Moral tendency, indeed!" but that was all. Doctor Carmichael was saying, "I was disappointed, too, in the piece—I most admit I was disappointed in the piece. There is too much of the garments rolled in blood about it to my thinking."

"Dev—er—jolly good play, I think," said Edgar Stadding, "as plays go nows-days. I hate your milk-and-water crossbreds between a Sunday school pic-nic and a Methody prayer meeting. Give me something hot and strong before your tea and-cake-in-the-garden business."

Mrs. Shaw glared, but said nothing.

"I don't know," said the doctor. "I've got a theory on the point. I believe, and have always believed, that an actor's character is affected by his profession. He unconsciously takes upon himself the features of the part he represents."

"Oh, that's all stuff," answered Mr. Stadding, in his delightfully frank way.

"You mean to say that a man is more likely to become a murderer because he pats a man on the sconce with a brown-paper club—why, what rot!"

Mrs. Shaw glared harder than ever, but still said nothing.

"What seems 'rot' to you, sir, as you elegantly term it," said the doctor, gripping the head of his stick very tightly, and getting red in the face, "may seem sound common sense to other people with perhaps equal powers

of judgment. I mean to say that a conscientious actor, who sinks his own individuality, and for the time being assumes that of a murderer—though there is no necessity for flying to that extreme, mind you—forces himself into the same frame of mind, and acts as a murderer would act—he is, I say, simply putting himself through a course of criminal education. And that's the long and short of it."

"And that's your theory, is it? If you saw murderer and murdered over their oysters and beer after the play, you'd see what nonsense it is."

"Upon my word, sir, you have a peculiar way of putting your argument," said the doctor, growing redder in the face, and taking a fresh grip of his stick. "I repeat, and I speak from a pretty wide professional experience of human nature, that, given the provocation, a man, who, by repeatedly acting the part, has lost that salutary horror of crime, which is the best safeguard against it, will be prone, much more prone to—to—to—"

"Commit murder for instance," suggested Edgar Stadding, with a grin.

"Well, if you will persist in going to that extreme, sir,—even to commit murder than if he had not had such an insidious training."

"Oh, query, query, query," said the other.

"Oh, it's easy to cry 'query, query, query'; but that's no argument. And let me add, that the chances would be increased tenfold if he were under the influence of drink, or was delirious, or—"

"Or mad."

"Or mad, especially if mad. I'm glad you follow me."

"I follow you! Not at all. The way you were running on naturally suggested 'mad' to me."

"Upon—my—word!" gasped the doctor, with long intervals between his words, his face of an apoplectic hue. "You're impudent, sir. You're talking of what you know nothing about."

"One of us is, I'll take my oath," admitted the amiable Edgar.

"I *quite* agree with what you say, doctor," said Mrs. Shaw, opening her lips for the first time. "And I *ben* of you never to ask me to go to such a place again. I consider myself *imposed* upon, and my charity abused. Moral tendency, indeed!"

"We didn't stay long enough to see that," put in Mr. Stadding, with another grin; "the moral tendency didn't come out till the last act."

"I am very glad you do agree with me, Mrs. Shaw," said Doctor Carmichael "I am sorry if you have not enjoyed your evening; but theatre-going is apt to lose its charm for people of our years, I know."

"Considering this is the first and last time I have ever been in such a place—and considering I was only induced to go under the mistaken idea that I was doing good—I fail to see why you should use the word '*theatre-going*' in connection! with me, doctor," said Mrs. Shaw, ill-temperedly, and speaking very rapidly. I don't think she liked the doctor's last phrase.

"I beg your pardon; I did not mean to offend," he answered. "And what is your opinion of my theory, Miss Gower?" he said, turning to me.

"I have never given the subject any consideration, doctor."

"And *therefore* hold the same views as Doctor Carmichael," put in Edgar Stadding, apparently thinking he had said a very good thing.

"Perhaps, sir, you will allow Miss Gower to give her own opinion! When you are as old as I am you too will probably see fit to draw the same conclusions as I do."

"H'm, most things would be excusable under those circumstances!" said the amiable Edgar, with spiteful significance.

The doctor drew in his breath hard; but before he could answer the carriage drew up at the gates of The Peak, and he stepped out in wrathful silence

Jan. 28.—Edgar Stadding went away to-day on a visit to some friends in the country; and I am glad of it.

Feb. 10.—A good long while since my last entry, and a good deal has happened in the interval. It has come at last. I am the most unfortunate girl that ever lived. I have dreaded it ever since I overheard Mrs. Hetherwick's flattering remark concerning myself after her quarrel with Edgar Stadding in the garden that day—of which quarrel I suppose I may regard myself as in a measure the innocent cause. But it has come from a most unexpected quarter, and has arisen from a source whence, unless I am much mistaken, more trouble may be looked for.

I have left The Peak. Have been ignominiously dismissed, in fact, and am writing this at the Truss o' Straw, where I have temporarily taken up my quarters in the room in which I saw Catherine, when she came to the Hutt.

Ever since I had the misfortune to rouse the dislike of that vindictive old creature, Mrs. Hetherwick, the tide in my affairs has steadily set against me, until the climax has been reached in my summary discharge.

And what is the reason?

A charming, romantic, Gretna Green elopement, if you please, between that detestable Edgar Stadding and

Catherine, who is now Mrs. Stadding! She must be mad! I would not trust my happiness in such hands for any earthly consideration. I do hope there may not be the seeds of future unhappiness for her in I thus recklessly throwing herself upon the mercy of that man; for I am convinced of nothing more surely than that he is utterly unworthy of being trusted. I may be wrong; I hope for her sake I am. But I am afraid she is blinded to his faults, sad that her awaking will be a bitter one. The future will show—the future will show!

[*To be continued*.]

Some Social Responsibilities of a Young Community.

By Rev. Rutherford Waddell, M.A.

RESPONSIBILITIES to whom, or what? First, to the Past. It has put into our hands a great heritage—a heritage of race, riches, thought, law liberty, literature, language, religion. These things are the fruitage of the slow centuries of the toils and tears of our fathers. Key have given us these things in trust. It is a great trust, and, therefore, a great responsibility. Now, youth has a tendency to refuse to be bound by its past. What is true of the individual is true of the community. My point, therefore, is that to do this is fatal to true and full development. Nations, as persons, belong to the past. They are its children. They are organically connected; their roots are in it. They draw their best sustenance from it. There is a floating atmosphere of traditions, memories, sentiments, customs, modes of thought and feeling and action, whose air we breathe, which is in our blood and our brain, and from which we cannot suddenly separate ourselves without severing arteries essential to a harmonious life. No nation has ever attempted to do it without disaster. France, *e.g.*, a century ago made an experiment of the kind. The Revolutionists, as Mr. Rusell Lowell puts it, "carefully grubbed up every root that drew its sustenance from the past, and have been finding out ever since, to their sorrow, that nothing with roots can be made to order."

I know, of course, it is possible to abuse this truth—possible to make it procuress to a blind conservatism—possible

. . . . to sit, the idle slaves
Of a legendary virtue, carved upon our father's graves;

still, I think this is the lesser danger that besets us, and gives the right to insist on the other truth.

In the second place, the Present lays certain social responsibilities upon us. The word "social" itself points a moral. It is a new word. It belongs to this century, and chiefly to the latter half of it The keynote of the past was individualism, now it is socialism—(I use: the term in its broadest sense). Formerly the watchword of reforms was the rights of man; now it is the duties of man. The battles of our fathers used to be over theological questions; now they are over such questions as temperance, labour and capital, land laws, sanitary laws, factory laws, &c. Mazzini long ago was right in saying that "every political question was rapidly becoming a social question." What, then, is the social responsibility of a young community in the present? The most important I can think of is the assertion of its organic unity. That covers everything. The word "social" implies that we belong to each other. How?—as the units of a sand-heap? No, but as the members of a body. Therefore, the stronger is bound to serve the weaker. It is more than a duty—it is a necessity of existence. Moreover, "if one member suffer, all the members suffer; with it." A popular political economy says that every man should mind his own business. That may be the way to make money. It is not the way to make manhood; and the nation that neglects that is not long for this world. France, *e.y.*, pours the scum of her scoundrel ism into adjacent islands. This is the product of the sins of men and women whom we never saw; yet we have to suffer for their sins. Thus, we are all bound together. The race is a unity. What enriches one enriches all—what impoverishes one impoverishes all. If this were realised, how could we permit such miseries in our midst as the "sweating" revelations discovered? It is a disgrace that such things should be in a young community. Who benefits by low prices? Nobody. Ultimately, everybody is the poorer. A few grow rich for a little, but, their gold is spotted with human blood. And is that a thing to be proud of? And whose business is it to put an end to these and all other wrongs? It is everybody's business. We are so related that the suffering of one must touch all, for, as I have said, we are not a sandhill, but an organism. We have tried individualism, isolation, long enough. Its fruit is

death. As Rossetti, in one of his fine sonnets, puts it—

Because man is parcelled out in men
To-day; because for any wrongful blow
No man not stricken, asks, "I would be told
Why thou dost strike?" but his heart whispers then,
He is he. 1 am I. By this we know
That the earth falls asunder, being old.

So we do. That is what wrecked all the old civilisations and threatens all the new. Let us be warned.

Another present responsibility of a young community is education. This is doubly special to us, because we are *young*, and because we are a *democracy*. Our ideal is Lincoln's "Government of the people by the people, for the people." This irresistibly postulates universal education. An aristocracy, an oligarchy may do without it; a democracy cannot. It is essential to its very life. Our kings of to-day are not in Windsor or Wellington; they are at the street corners, in workshops, in fields. But if these cannot govern themselves, how are they to govern each other? There must be education—education equally for the poorest as for the highest. It must be a real education, not a cramming of 'ologies, but a drawing out of faculties. It must embrace the whole of the nature, not a part only. It must contemplate more than material ends—more than how to make a living. The seat of our best emotions is not in our stomachs. It is in our souls; and neither men nor nations are profited if they gain the world and lose these. Bacon said of wars that they went on their bellies; but a democracy cannot, or, if it does, it will soon go to dust? Our danger is that we are going to try to live by bread alone. There is a lack of the ideal, the spiritual, in our education. It is made too subservient so bread and butter considerations. It wants a high outlook, a moral perspective. I would like to see, therefore, the State putting its ablest to teach, and paying them well. I would like to see the way to the highest education made free to the poorest child in our community. It is costly to do all this, you say? Yes, but it is far more costly not to do it. True education is never expensive. Ignorance always is.

In the third place, we owe responsibility to the Future. I put emphasis here on the word "young." The child is father to the man. Trite is this truth, but it must still be repeated. As with the individual, so with the community, so with the nation. What the future of this country will be depends on us who are here to-day. History and heredity assure us of this. Great is our trust, and great therefore our responsibility. Think for a minute how great. Take our material resources. We boast of our rich soil and mineral wealth. We do well. But all this is a trust—we have but a life interest in it. It belongs to the future as well as to us—we are simply stewards. It is required in a steward that he be found faithful. Faithful! Are we? What do we see? Year by year we see this vast trust passing into the hands of private individuals, syndicates, and companies. We see a responsible Minister of the Crown actually asking praise of his country for his skill in thus bartering away the rights of the people and of posterity. It is a pitiable spectacle. It is as if one sitting on a plank that bridges the chasm between two precipices should rejoice at the agility with which he is sawing through his own seat. I agree with those who, like Dr. Abbott, criticise Henry George as not being sufficiently radical. He objects to private property in land: I object to primate property in anything. So does the Bible. It knows nothing of absolute ownership. Here is our country—its soil, its gold, its silver, its coal, and all the rest. Who made these? Who stored these up?—and for whom? For a London syndicate, or a private capitalist? No, these are great trusts. None of us have a vested interest in them.

They belong to those who come after us, as well to those who are here to-day. If we alienate them we are as dishonest as the steward who appropriates his employer's gold.

Then there is our scenery. We make much of this, and rightly. It is our best asset, even financially. It is quite singular in its variety. Within a few hours' travel you may pass through all the wonders and wealths of the five zones, and yet fire and axe are busy by river and lake, and hill and city, reducing forests and ferns to ashes. Why should not Government step in and stop the Vandals and Huns who are turning our natural beauties into desolations? These also are trusts, and to allow them to be destroyed as we do is not only a disgrace to ourselves, but a crime against posterity. Why should not Government also set aside large reserves all over the country for parks and gardens? Why should not Municipal Councils make like provision in our towns and cities? We are a small folk yet, but shortly we shall have a teeming population. Now is the time to secure that our children shall have light and lungs, open spaces, fresh air, healthy cities, and lovely landscapes. This is the opportunity that never returns. One law "now is worth ten half-a-century hence. It may be true, as somebody has said, that legislation can never be the driving force of social reform; but it should at least be the ratchet-wheel holding every advance. It should preserve and extend what we have. It should keep our land, our mines, our scenery, as a sacred trust for the people and posterity.! Let me fortify myself here by John Ruskin. In

the "Seven Lamps of Architecture," he says that few think of self-denial, of economy, of planting forests and raising cities for posterity; "yet these are not the less our duties; nor is our part fitly sustained upon the earth, unless the range of our deliberate usefulness include not only the companion! but the successors of our pilgrimage. God has lent us the earth for our life—it is a great entail. It belongs as much to those who come after us as to ourselves, and we have no right, by anything that we do or neglect, to involve them in unnecessary penalties, or deprive them of benefits which it was in our power to bequeath." How true is this, and how pertinent to us! For our outlook is low and near. Our young men, one is often vexed to find, think only of the present. The materialism that threatens us is not that of Haeckel or Buchner—it is the materialism of land and gold—the materialism that binds us to earth, and keeps our eyes from the sun and the stars. We need to get our vision enlarged, to realise that society is an organism, and! national life a continuity. We want to be taught that the individual may indeed escape here the visible consequences of his sins by dying but that while the individual life is fleeting, the collective life of the community and of the State abides, and carries stamped upon it for long centuries the faults and follies of its ancestors.

We want to realise, too, that the best fruit is slowest in ripening, and that the further off we place our aim, the richer and more abiding our success. If ZEALANDIA will help to teach us these things, then I may be permitted to say to it the words Mathew Arnold wrote to a Republican friend—

God knows it. I am with you! If to prize
Those virtues, prized and practised by too few,

Man's fundamental life; if to despise
The barren, optimistic sophistries
Of comfortable moles, whom what they do
Teaches the limit of the just and true
(And for such doing they require no eyes).
If sadness at the long heart-wasting show
Wherein earth's great ones are disquieted;
If thoughts not idle, while before us flow
The armies of the homeless and unfed—
If these are yours, if this is what you are,
Then I am yours, and what you feel I share.

Our Poets Copnep.

Contributions to be addressed to RICHARD ELLIS RICHARDS, "North OtagoTimes," Oamaru.]

"The great end
Of Poesy, that it should he a friend
To soothe the cares and lift the thoughts of man."

Our Pet Kangatoo;

(An Australian Idyl.)

We caught the young marsupial

One winter ere he learn'd to spring;
His ma was shot, and from her pouch
Hopp'd forth the frisky little thing;
His story's short—his *mater's* tail
Was long and made a rich *ragout*—
A novel and romantic feed—
We all enjoyed that Kangaroo.

The little orphan soon became
Our pet: he quite familiar got.
He jumped among the saucepans, though
His loving ma had gone to pot:
He throve so well, and grew so fat,
Our *chef de cuisine* Chong Ah Loo
Petitioned us to let him try
His skill upon the Kangaroo.

But no,—we scorn'd so mean a trick,
And made the Tartar-tempter fly.
He spoke of soup, and we could see
The gravy in his almond eye—
His bitter almond eye, for he
Was cruel to be kind—"For you
Me makey soupy welly lich,
All samey puppy, Kangaloo."

But from that day Chong never dared
To make the same suggestion.
We Some kittens lost—but that was not
A serious catastrophe;
Our native bear "vamoosed" one day,
We missel our pure-bred bull-pup too,
We mourned them not, but set our hearts
Upon the tame young Kangaroo.

We named him Budgeree—that's "good"
In native lingo, as you know;
He earned the appellation well;
We watch'd our pet in goodness grow;
We taught him many a harmless trick,—
He couldn't smoke, but he could chew;
We always found him "up to snuff"—
He grew so 'cute, our Kangaroo.

He followed us about the house,

And on our rambles round the run;
And when his kin we hunted down,
He'd look sedate and watch the fun.
We took him once unto a ball
In Tapley's pub. at Bangaboo;
And didn't he enjoy the hop?
You bet he did—that Kangaroo.

He skipped right through the gay quadrille,
And joined the waltz's mazy whirl;
He lick'd the fiddler's foaming pint,
And kiss'd the hurdy-gurdy girl—
"*Du sollst es nicht thun!"* she exclaimed
(Which means "Now don't! be quiet, do!")
And no one there enjoyed the spree
More fully than our Kangaroo.

But thunder often follows calm.
And clouds at times obscure the sun,
Though old, those proverbs still are trite—
The "Lancers" and a waltz were done,
When Tapley jumped upon a chair,
And said—"I've to announce to you
That Dougal Gunn has just arrived:"
All cheered except the Kangaroo.

Big Dougal was a kilted Celt
Who never swore an English oath;
He measured six feet three or four,—
His tartans had not oheck'd his growth:
At all the games he prizes won
For bagpipe tunes. So well he blew,
I thought and said, "He'll charm our pet,
For sweet sounds please our Kangaroo."

Then Dougal march'd around the room
With ribbons streaming from his pipes;
His mien was royal, though he wore
So many brilliant stars and stripes.
With cheeks distended, he prepared
To play the "March of Callum Dhu;
Our Budgeree surveyed the pipes,
And wondered much, that Kangaroo.

And now the instrument emits

Preliminary grunts and groans;
Notes, wild and fitful, rise and swell—
The chanter struggles with the drones.
And louder yet, and wilder still,
The pibroch swells—when madly flew—
Crash! smash I dash!—through the window panes
Our peaceful pet, our Kangaroo!

The narrative is very sad—
Full ten feet high, from off his tail,
He'd sprung; he couldn't understand
The martial music of the Gael.
We gallop'd home in hopes to find
Him safe and sound; but not a clue
From that time out we ever found
Of Budgeree, our Kangaroo.

And often now on New Year's Day,
When sound the war notes of the Celt
Through New Edina's streets, old times
Rush back, and cause my eyes to melt.
Fond mem'ry conjures up that night
In Tapley's pub. at Bangaboo,
When Budgeree left home and' friends,
And fled afar—poor Kangaroo!

Yes! yes! whene'er I hear the pipes,
Old scenes will rise before my gaze,—
I see the homestead lawn in spring,
Where wealthy wattles, all ablaze,
Made scented sunshades for the lambs;—
But bah! I'm getting "quite too too"
I talk just like a bleating bard,
While dreaming of that Kangaroo.

THOMAS BRACKEN.

Dunedin,

May 25th, 1889.

Wanderings in Lakeland.;

I.—MANAPOURI AND THE MATTERHORN MOUNTAINS.

By Malcolm Ross.

AWAY down in an out-of-the-way corner of Western Otago lies Manapouri, or more correctly speaking Maniwapouri, "the lake of the dark influence" or "sorrowing heart." It is perhaps the most beautiful lake in all the world. "Lovely," is the word that best describes it. In the days that are past it was no doubt a favourite camping ground of the Maories. Their rude stone axes and greenstone ornaments are still to be found on its shores. The tribe that fashioned them has vanished. The graceful beech trees now nod over the graves of stalwart warriors and dusky waihenas, the tall slender manukas bend with the western wind o'er shady nooks where once the dark wanderer sought his meal of fern roots; but Manapouri, the lonely, the beautiful, glistens there in the sunlight as of old, lapping the bases of the great mountains with its restless waves, and stretching its long thin arms far away among the frowning fastnesses in the direction of the western sea.

The stranger who has permitted himself to be jolted for hours over the vile road that leads to the lake is well repaid long before he gets a glimpse of its blue waters, for e'er half the journey is completed he finds himself in an amphitheatre of noble snow-clad mountain stretching far beyond the northern fiords of Te Anau. Then, as he approaches Manapouri, the view is narrowed down, and the stem rocky buttresses of the Cathedral Peaks, with their deep snow-filled culoirs rivet his attention. Let him go there on a summer's evening, when the sun is sinking, and he is indeed a poor-souled man if he be not entranced with the poetry of the scene.

Late one December day, just as the sun was sinking down into an inky cloud, that came slowly creeping up from behind the dark mountain masses, our party, hastening forward on a sorrowful expedition, reached the shores of the lake. For a few minutes the sky was ablaze with colour, and then the azure and gold slowly faded away, leaving only the neutral tints of the dull grey clouds, and the dark waters of the lake losing themselves in the dim twilight. We were not long in getting to the little hut, which—the sole habitation on the lonely lake—stands hidden among the leafy beech trees,; where the broad silent waters of the Waiau issue forth on their long journey to the sea. It is rude accommodation this, but somehow is in harmony with the surroundings, and one naturally prefers it to the luxurious comfort of the palatial hotels which must eventually find a place in this spot. Having discussed our pannikin of tea and home-made bread and mutton chops, we take a look out of doors and find the moon cutting through the dark fleecy clouds, and shedding a golden band of light far across the waters. The tall, graceful beech trees form a fitting foreground, and the lake with the moonlight on it, seen through the leafy branches, is like a bit of fairyland. The wind sighs softly, the moon sails on, gilding the lake with its beams; and one stands there and gazes, and longs that it would sail on thus for ever. But it must not be so. There is sunshine and shadow, calm and storm alternating at Manapouri. In those dim glens in the distance, where the snow-flakes gather, the wind sometimes shrieks, the thunder rattles, and avalanches slide down over the dark precipices with an awful roar.

Taking a boat, and proceeding up the lake, we pass several low wooded islands, near Hope Arm, and then sail on between Pomona and the mainland at Grebe Arm. A few miles farther on, the North Arm stretches away on our right, and, nearly opposite, there is a fine stretch of pretty beach gleaming white in the sunlight. The green waters lap lazily on the snowy strand, along which the little flakes of mica are glistening like diamonds, and fine beech trees fringe the shore, while the feathery fronds of the tall tree ferns give a tropical look to the scene. The strong wind which is sweeping down the western arm, ruffling the bosom of the lake, comes not in here, except in gentle puffs, which barely ruffle the quiet waters of the bay, and just stir the beech tree leaves. The scent of the olearia is in the warm air, and the meek-eyed wood pigeons, sitting motionless in the branches, coo down upon the stranger a mild remonstrance at his intrusion. This is the" Fairies' Grove." It is surely a veritable arcadia, where one could lie long, basking in the sunshine—listening to the swish of the waters, the rustling of the leaves, and the soft cooing of the pigeons—forgetting all about the little worries of life, and the turmoil and bustle of the great world of cities. Some day I suppose it will be a favourite resort, defiled by the prosaic excursionist. Up till now very few have been privileged to see it, and it lies secure in a lonely solitude. Hastening on, the surroundings increase in grandeur, and the strange Leaning Peak, nearly 5000 feet high, and other tall mountains, are seen coming straight down to the water's edge, hemming in the lake on every hand. We camp for the night at the very head of the lake, and of all the camping grounds in existence, this must, I think, be one of the worst. It is a regular inferno. The ground is low and damp, and millions of hungry sand flies nearly drive the traveller mad. With the dusk, the night birds come out. The shrill whistle of the weka, the softer cry of the kiwi, and the harsh croaking of the kakapo, come up from the dim weird solitudes of the bush at intervals; and altogether the traveller, if he be not used to such scenes, is inclined to think that he has chanced on the most uncanny spot in existence.

We leave the lake behind and struggle on, after a night's rest, through the pathless forest, with heavy swags slung on our backs; we flounder and stumble on over rotten logs, knee-deep sometimes in dead leaves and mosses, till, after a couple of hours' hard work, we emerge into an open space on the side of a little stream, near the banks of the Mica Burn. Looking ahead from this point the grandeur and beauty of the scenery are most impressive. Over a foreground of tall beech trees, whose sombre shade is relieved by the more delicate greens

of the pretty ribbon wood, the eye wanders on up the valley, to where a huge dome of snow, capped by a sharp rocky peak, rises at the head of the valley. At first you can barely distinguish its outlines against the pale blue of the northern sky; but soon the eye becomes more familiar with its grace and purity, and looks long without tiring. On either hand of this great white Southern Mosque, rise two steep rocky peaks, contrasting strangely with their white-robed sister. People talk about the dome of St. Peter's, and go into raptures over the beauty of the Cathedral at Milan; but where was ever a dome that in grace, or purity, or grandeur of proportion, could equal this spotless peak, with her two dark minarets standing sentinel on either hand? Over a tall precipice to the left, a waterfall a thousand feet high comes thundering down to join the Mica Burn, while other little streams—

Born of a yesterday's summer shower,
Hurry along with a restless motion,
Silent or whispering every hour,
To lose themselves in the great lone ocean.

It now approaches mid-day, and the Mica Burn, swollen with the melting snows, comes tearing along over the boulders. It is no child's play getting through the dense bush now. Sometimes we literally cut our way through with billhook and axe, and at other times we chose the bed of the stream, though it is waist deep, in preference to the exertion of getting through the bush. Occasionally, however, we are driven to the banks, for the stream gets deep and dangerous, and a safe footing is to be preferred although it involves greater exertion. At length, just as the shades of night and a drizzling rain begin to fall, we reach the junction of the Disaster Burn with the Mica Burn, and hurriedly pitching our tent, camp for the night. We are wet to the skin, and tired with the rough journey, but a draught of strong whisky and a hearty tea put us to rights, and we lie down on our bed of beech branches and fern-fronds, with the roar of the rushing waters, and the strange cries of the kakapo and kiwi resounding in our ears.

Next morning there is a toilsome journey up the Disaster Burn, and the remainder of our time is spent among scenes of grandeur that well repay for all the trouble of seeking them out. Under the spreading branches of a fine beech tree we have pitched our tent, and the smoke of our big camp fire curls gracefully through its branches. We are in a narrow gorge where the mountain tops are crowned with snow, and their bases clothed with trees, through which beautiful waterfalls descend to the swift waters of the stream, hurrying on with its long monotonous roar over the stones, a few feet from our tent pegs. A quarter of a mile up the gorge the stream divides—one portion of it issuing forth from the snows on the right, while the other comes over a bushy precipice in three fine falls, which find their way through the impenetrable scrub at the foot of the cliff, and meet again lower down. Above this is a small plateau, and then, rising over an intervening knoll, we come suddenly upon the dark waters of the beautiful little Main waring Lake, nestling at the foot of Brown peak, with no visible outlet, and locked in on either side with fine snow-clad peaks. Streams come rushing into it from every side; but, so far as can be seen, it has no outlet. Flanked on all sides by the everlasting mountains, its shores untrodden by foot of man, there it has lain, who knows for how long, with the cold white snows creeping down to its shores in winter, and thousands and thousands of beautiful delicately-flowered mountain lilies and pretty golden-eyed celmesias, smiling on its little waves in the summer time, nestling among all that is beautiful in alpine scenery, it lies, secure in its inaccessibleness from all defilement—a gem, a picture, and a poem!

Leaving the lakelet, and climbing up a few hundred feet, over grassy slopes and snow-filled gullies, the highest point of the saddle is reached, and a scene of surpassing grandeur gradually opens out before us. Mountain is piled on mountain, Ossa on Pelion, with gleaming glacier and high waterfall, while down at the bases of these tall mountains rest the dark waters of one of the long arms of Doubtful Sound, ruffled here and there by a passing breeze. Far down in the deep glen, a thousand feet below, the capricious mist comes and goes, now wreathing itself in a tender embrace about the tops of the dark beech trees, anon hanging over the brink of some grim precipice, only to fade away as mysteriously as it came, till "some strong enchanter charms it into fond returning, or binds it fast within those bars of bough." A great bank of dark cloud creeps up the sound, obscuring the distant mountains, save where their snow-crowned summits, gleaming with a ghostly whiteness in the upper sunlight, pierce through into a clearer atmosphere with magic effect. Then suddenly, we too, poor puny things in this upper world, become wrapt in the thick mists, and can see no farther than our noses. Carefully we begin to creep back to our tents. We do not fare sumptuously for the next two or three days, but so long as we can get biscuit and water, or perchance the leg of a grilled kakapo we are happy. Lying there, all the night long listening to the rain pattering on the tent, and the roar of the Disaster Burn, as it hurried along over the boulders past our camp we often thought of him

Professor Main waring Brown, lost in the mountains on Thursday, December 6th, 1888, and never heard of.

for whom we had come to search in vain. Had he wandered away among the cold, bleak, inhospitable mountains? Had he met his death in the seething torrent that was now rushing madly past our tent? Or was he quietly sleeping his last long sleep, far away from sorrowing hearts, under the cold snows of yonder avalanche? We could not tell, and the troubled stream, ever sounding a dreary monody, refused to give up its secret. In despair, we prepared to depart at last, leaving a small cairn and a wooden cross, wreathed with beautiful celmesias and alpine lilies, to mark the spot where he was last seen. Another page of mystery had been added to "the lake of the dark influence," and perhaps no man will solve the problem. Well, maybe it is as well so: and he, if he could speak, would perhaps pray now that his bones should be left among the lonely mountains to rest peacefully in their beautiful tomb.

There let us leave him, for his shroud the snow;
For funeral lamps he has the planets seven;
For a great sign the icy stair shall go
Between the heights to heaven.

A Helpless Spectator.

By W. P. Reeves.

I.

DISCHARGED! They call me a free man to-night. Well, free in body I am. My eyes can range over the eastern heavens, and watch the great luminous globe of the moon, full and yellow, swimming half submerged in faint bars and wisps of thin vapour. Then I can turn to the west, and watch how Venus outshines the stars, her neighbours. I can listen to the night wind rustling in the pine branches of that black coppice close at hand, and can note how the silvery light softens roofs and leaves, and how dark, by contrast, seem the shadows underneath. I can put down my hand and feel the grass-how wet it is already with the dew; and I can expand my lungs, and drink in the wandering air, soft, fresh, cool, and fragrant. Ah! that I could add calming and soothing also! Surely, if anything could calm and soothe, this sweet breath of heaven should be that thing.

I am called a free man! I can walk fifty paces forwards in a straight line—I can put out my arms in the darkness—without touching stone or iron. I have heard no key turn, no door clang to-night; I am dressed like other men, and can walk through a crowd without seeing faces turned in disgust or curiosity; strangest of all, I have a name once more—I was called by it to-day—I am no longer a unit, a mere numeral, I am a man!

For seven years and a-half I have not seen the spacious cum of the star-lit sky, or felt the night-breeze on my face, or smelled its sweet odours, or brushed the dew, or paced backwards and forwards uncontrolled. For seven years and six months I have not stretched out my arms in freedom, or looked boldly up; I have looked down; I have not been a man, *anthropos*.

Seven years and a-half! O men and women, you who pray "for all prisoners and captives," can you dream how I have waited and longed for this day? How I have counted those hundreds of weeks, those thousands of days, those tens of thousands of hours? How their numeration is burnt into my brain, in indelible figures? I can tell you, off-hand, how many hours there are in a week, a month, a year, seven years and a-half; how many minutes, how many seconds. How often have I done the same old dreary, dismal sum in my head, by night and day? How often has it dazed and wearied me? How often, again, has it soothed and occupied my horror-stricken brain, and driven away distracting misery?—

"The sad, mechanic exercise,
Like dull narcotic numbing pain."

How often has it kept *that* at arm's length, and saved me from death, or from worse than death—from madness!

Thank Heaven for this at least—I have kept my reason. Through all that remorse and despair can do, through all their stings, and stabs, and wrenches, I have lived on, and my mind is clear, my senses sound. When I passed in through that gate, how little did I hope for this, how little wish for it! I wished for death, idiocy, stupor; anything that would "raze out the written troubles of the brain," and bring rest and the thrice-blessed

balm of forgetfulness. Certainly, I dreaded imprisonment, but not for its own sake, not for its shame, hardships, and restraints, but because it would keep me stationary, lonely, quiet; because it would give me all those hours, days, weeks, months, and years in which to think; because it would keep me chained and motionless, to be tormented by "the worm that dieth not, and the fire that is not quenched;" by remorse ever piercing and i devouring through the long, silent, dreadful hours. And all that I dreaded, I have suffered. The cup was drained to the dregs; and yet I am alive, and am not mad. I was guilty, I do not deny it; but not of the crime with which they charged me—No! not of that—not of murder! I have killed an innocent fellow-creature, killed her by the most cruel and horrid of all deaths. It was my crime, my felony, which caused her death; yet the Searcher of Hearts knows how little her death was through my evil intent. I did not know of her existence until I had to look on helplessly, and see her tortured to death by my act!

They say my punishment has been light. You who read this after I am gone, shall judge.

II.

WE are bidden to love our neighbour; I hated mine. That, I suppose, wascrime number one. But I wonder whether the saint ever trod this earth who could have loved that man. Possibly some old colonist may see this, who will remember "Grip" Thompson. I heard to-day j that he was dead—of old age. Why was he kept alive, I wonder, for eighty years to war against his fellow men? Why was he permitted to lock up those broad leagues of sunny hill and fertile valley, while thousands of his fellow-colonists were painfully hewing their little farms out of the giant bush; sinking their little capital deep in spongy swamps; starving on stony plains; or eating the bitter bread of public charity on relief works? For thirty years, he stopped settlement as with an iron wall. In vain he was written at, preached at, prayed to, I threatened with laws and lawlessness. The land was his, he said, and he meant to keep it;—keep it he did, for a whole generation. Well, he has not taken it with him!

My farm marched with a piece of his interminable boundary-fence. My few sheep looked through the wire fences at his great flocks; sometimes, when feed was short on our side, a few stragglers would slip through to his pastures, which were seldom fed down, as their owner boasted. When mustering time came, I got the usual notice that ten, a dozen, or a score of my sheep were in his yards, waiting to be claimed, and I would ride across with the dogs and get them, and get with them a sneer from "Grip" and black looks from his manager and shepherds.

Though the number of the strayed sheep might vary, one thing never varied—they were always shorn when I saw them, "Grip" took excellent good care of that. In the year after I bought my farm, it happened that most of the stragglers to be reclaimed were ewes which, in the ordinary course of things, should have had lambs with them when I was sent for to take them from Thompson's yard. He pretended to give me every opportunity of "mothering" (as it is called) my missing lambs, but for fifteen ewes I could find but four. Again, next year, he played me a similar trick, and when I ventured to complain, curtly told me to keep my—crawlers on my own grass, if I had any grass to keep them on. There was no help for it, and, choking down a desire to wring the old brute's neck, I drove the unlucky sheep home. As the devil would have it, a fatal opportunity to make Thompson pay for his insult offered itself only too soon.

In passing my own sheep through the race in the following week, I found six of his amongst them. In previous years there had never been more than two, of which he had more than once taken care to sneeringly remind me. The stragglers were young half-bred wethers, very similar to a flock of my own. Here was a chance to square the account. I had but to alter the ear-marks and the paint-brand. A paint-brand is, of course, easy enough to deal with; and, as it unfortunately happened, there was no particular difficulty about changing the ear-marks in this case. Thompson's marks were a "swallow-fork"' in the left ear, and an oblong hole punched in the centre of the right ear. A "swallow-fork," I may mention, is made by snipping an angular piece out of the extremity of the ear. Now my brand consisted of two such snips out of the left ear, and an oblong strip cut from the tip nearly to the root of the right ear. I had thus but to take one of Thompson's wethers, cut an extra "swallow-fork" out of the left ear, and enlarge his oblong punch-hole in the right ear, and the thing was done. It *was* done; done, not once or twice, but for years together. I swore that for every lamb of which Thompson cheated me I would take a sheep from him; and I went on until some thirty of his had been treated after the fashion described. No shame or repentance troubled me; nor, after the first year, was there any fear of being found out. When an enemy was too strong to be fought openly, was it not perfectly justifiable to meet him with his own weapons?

Though Thompson, for the most part, lived alone and unseen in the heart of his brown hill kingdom, he occasionally came out to concern himself with public affairs: he found it paid him to do so. By sitting on the Road Board, he could get his solitary road kept in repair at the district's expense, and could also help to keep rates as low as possible—an important point when one has one hundred and twenty thousand acres to be taxed. Then, though he was never a candidate for a seat in Parliament, and openly scoffed at that body as a set of

babbling fools and rogues, whose trade was to plunder honest colonists, he always did his best for the Conservative candidate for the electorate; and, mean as he usually was, would spend more money on such occasions than twelve months' living could have cost him. What his household expenses were, indeed, was known to none but himself and his book-keeper. He did not live at the homestead of his station, but in a small, mean-looking, two-storied wooden house, about three miles therefrom. The grey shingles of its sloping roof could be indistinctly seen from the road, looking out from some straggling plantations of blue-gum, willow, and Californian pine. No guest had ever been known to pass under the said grey roof. No man was ever known to boast that he had sat down within those unpainted walls. Anyone who came to see Thompson on business was always met at the manager's house, where, if necessary, the stranger could put up for the night. Old sun-downers told highly-coloured yarns of ferocious mastiffs who flew at the throat of any man on foot approaching within a quarter of a mile of old "Grip's" castle. It was quite certain that the most persistent swagger had never obtained the inevitable feed and shake down there. Moreover, extraordinary as the thing was in the case of a colonial house, no changes of servants ever gave Thompson's neighbours information about his household. It was generally supposed that an old childless, married couple attended to his wants, but, if they existed, they had never quitted the premises for twenty years at least. Neighbours believed in their existence, but none knew their names, or could describe them. Thompson took his own stores across from the homestead in his waggonette. His oldest station hands knew as little about his domestic affairs as the veriest stranger; not that many of his station hands were old servants; thanks to his meanness he generally parted company with his men at short intervals. Of this meanness full advantage was taken by his opponents in the election contests I have just referred to, and especially in a battle which took place nine years ago-just before, my ruin—and wherein I was prominent on the popular and anti-Thompson side. We elected our man, after a desperate fight, during which feeling ran very high. How proud I felt as I rode home that night, thinking over the victory of the people's cause, of how our [triumphant candidate had gripped me by the hand, and of what a change this day was to bring about—this day on which the wool-kings had been beaten at last.

Lying on my table when I reached home was one of the usual curt notes from Thompson's manager, requesting me to fetch ten sheep of mine from their yards at my earliest convenience. I hardly thought twice about it, so full was my mind of the day's excitement. Going to bed, I slept happily and soundly. It was for the last time. On reaching the yards next day, I saw at a glance that something was wrong. Thompson looked grimmer, his manager blacker, the shepherds more sullen than usual. Asked whether I claimed the sheep, I said "Yes." "Then," snarled Thompson, with his drawling accent, "we shall pros-e-cute you for sheep-stealing." He looked steadily at me as he spoke, under his straight, white eyebrows, with the most honest, open look I had ever seen on his face-a look of honest, open, gratified hate. The lines that curved from the base of his thin, crooked nose down outside the corners of his mouth deepened into furrows, the upper lip drew back slightly: it was the face of a man who felt that his enemy was in his grasp, and who was about to tighten that grasp. Boldly though I faced him, my heart misgave me, and I knew that he must have discovered something, if not all. Simply remarking that Mr. Cross, the manager, would hear anything I had to say, Thompson turned on his heel, and walked off, rigid as a rod of iron. In answer to my questions, Cross stated briefly that these particular sheep had been found on their land. Seeing my brand and ear-mark on them, he had treated them as stragglers. The shepherd, however, had drawn his attention to the fact that the earmarks were Mr. Thompson's, but clumsily tampered with. On closely examining the sheep, it was also plain otherwise that they belonged to Mr. Thompson's flock. Of course these sheep (five in number) would be detained; the other five I could take home if I pleased. I could examine the detained sheep if I liked, and explain, if I could, how it was that while part of the cutting in the ears was several years old, part had been done so recently that clotted blood was still sticking to the edges. Had Thompson been an ordinary man, I think I should have broken down, and begged for mercy. As it was, I could but ride home, cursing my folly, and prepare for the worst.

Strange to say, the worst did not come. Some lawyer's quibble partly saved me. I was not put in the dock as a thief, but was merely charged with the fraud of altering ear-marks. The magistrate inflicted! a fine of a hundred pounds, hoping that the disgrace and exposure would, in my case, somewhat add to the severity of the otherwise light' punishment. I left the court, a man with whom no honest settler would care to shake hands. I, who, a week before, had dreamed of regenerating the nation, I whose pulse had beat time with the march of progress, and whose eye had brightened at the eloquent words of my successful champion, slunk away alone through the little crowd outside the court door, an unconvicted felon.

III.

MORE than a year passed before I again met my enemy face to face. For me it was a year of much solitude; a time of dull, daily work, and of constant brooding over the same bitter, never-to-be-forgotten humiliation. It was not remorse, but the shame of exposure, and still above that—of defeat. Why should I feel remorse? I

argued. What had I done but fight Thompson with his own weapons? He was stronger and more cunning; so I had been worsted. He was rich, and I was poor; was not the law always for the rich and against the poor? He was respected and I was disgraced! Pah! what did that matter? Did not men always cringe to the strong, and forsake the beaten? I would defy them all, and hold up my head in spite of them.

So, looking neither to the right nor the left, I walked, one autumn jay, through a group of loafers, into the little public house of the township nearest to my farm, and sat down at the common dinner table. No one took a seat within several feet of me. Thompson, at the other end of the table, was surrounded by a dozen obsequious acquaintances, laughing and talking loudly. They had evidently been talking, and were ordering their food. Thompson, raising his voice, ordered "sheep's head." There was a titter. Coolly turning to the landlord, he asked whether they cooked the ears of his sheep with the rest of the head. His own roar of coarse laughter followed this exquisite sally, and half-a-dozen faces were turned in my direction. Choking with rage, I glared at Thompson in silent fury. What would I have given to have my hand on his throat!

Though my head was whirling, and there was a singing in my ears, I managed to swallow some mouthfuls of food, washed down with spirits and water. As in a dream, I heard, without listening, the talk it the other end of the table. Presently, something said by Thompson faced itself upon my attention. He was explaining to some intending visitor to his station that he would not be there that night as his servants were leaving him, and he had to drive the man and woman some twenty miles or more to a railway station. Riding home alone, I thought over these words. In a purposeless, stupid sort of fashion they repeated themselves in my brain, simply because they were the last words I had heard my enemy utter. Then I thought of his brutal jest, and clenched my right hand till the nails pierced the skin of the palm. Oh, that the days of duelling had not gone by! Oh, that I had him there in front of me in that lonely valley! Oh, for anything to give me vengeance on my enemy! I felt I could have ridden over to is house that night, and shot him on his own door-step. But, no; of course he would be many miles away that night,

Suddenly, a thought struck me. To be hung for killing such an old ruffian would be cutting off one's nose to spite one's face. Here was a safer way of paying the first instalment of my debt. Why not tide over at midnight, and put a match into his deserted house? It would burn, wretched, rotten, tinder-box that it was; and since fere was a hill between it and the homestead, would burn unseen, and be a heap of ashes when Thompson returned next day—the first man to find it. A paltry vengeance, perhaps, but only the first instalment of the debt—only the first instalment. More should follow with God's help or the devil's; I cared not which. True, twenty-five long Biles lay between me and the house; so much the better, it would avert suspicion. A good horse could do the journey, and I had a good horse. That lean, wiry, old Australian, famous as a roadster, famous after cattle, famous for having bucked off the best rough rider in the country—he should do me service that night. How Thompson's mean, miserable, penurious soul would writhe on the morrow. Better a thousand times hurt his pocket than injure him in life or limb. He would rather lose a limb than have to re-build a house.

All the evening I brooded over Thompson's savage triumph and boorish insult, upon the cluster of friends around him, and upon my deserted loneliness. I was an Ishmaelite, every man's hand was against me. So be it. One man, at least, should feel my hand in return. Therefore, after purposely speaking to my shepherd the last thing that night, and slamming my own bedroom door loudly as I pretended to retire, I waited, like a caged animal, for midnight. Then, slipping quietly out with saddle and bridle, I went down to the paddock where "Merryjig" was, led him on foot for a quarter of a mile, till we were out of hearing, then off we went. The brisk motion of the canter and the cool night air roused me and steeled my courage. At half-past two, I was outside the plantation round Thompson's house. Half-a-dozen dogs barked furiously, but no human shout followed, no light appeared. Plainly the house was empty. Riding straight up to the front door, I hammered at it with my hunting crop. If anyone appeared, I had decided to ask for Thompson. No one came; that settled it. It was late autumn; dead leaves and dry twigs and grass were all around. I had some rag and paper in ml pockets, and a flask of kerosene. Fastening the horse securely, I raised an inflammable pile against the door. Without a moment's hesitation, without a twinge of compunction or fear, without one thrill of premonition I lit the flame, fanned it, and stood back to watch it take a fair hold of the woodwork. How I feasted my eyes on the sight, as I saw the thin blue and yellow tongues and streaks of flame, after licking the wall again and again, at length seize upon it for their own. How I walked up, and deliberately warmed my hands at the blaze, and muttered some mad words of speeding and encouragement. Hurrah! the wall was ablaze up to the second story. The flames crawled about the verandah roof; the front door was blazing, and the fire was gaining hold of the interior. Good fire! Brave fire! Goodbye. Hurrah for Thompson's welcome home to-morrow!

Waving my hand insanely, I flung myself into the saddle carelessly and heavily, and gave the horse a cut with the hunting-crop. Knowing him as I did, nothing but the half-delirious state I was in could have made me treat him in this way. "Merryjig" was notoriously a ticklish animal to mount, and, if handled in aught but the lightest and most delicate fashion, was certain to fiercely resent it. He did so now. In an instant, before I could bring the bit to bear, he plunged his head! furiously between his fore legs, arched his back like a wild cat and

with a frantic, writhing jump, and contortion of his whole body, sen saddle and rider flying on to the ground. Half-stunned, I struggled to rise on hands and knees. Something had gone wrong. Lifting my head and shoulders, everything swam round; the moon-lit night became dark; a heavy hand seemed to press on my throat and chest, and hold me down to the ground. I remember being violently sick, I remember wondering whether the hand holding me down was death, and then for some moments I became unconscious.

Noises awoke me. The house was burning bravely amid the incessant barking of the chained dogs. The fire was up to the roof on come side. Soon it would be a beacon, near which I must not stay. Where is the horse? There, quietly grazing, not twenty paces away. I must mount somehow, and be off without a moment's loss. I try to move. Is every bone in my body broken? One of my legs is a useless trailing weight, and every movement racks me from bead to foot. Nevertheless, I *must* move. Setting my teeth, I drag myself with infinite agony a few paces. The horse, frightened at being thus approached, snorts with fear, bounds, and is off.

Then I knew what is felt by the trapped wild beast, as he waits for the trapper's coming. I was caught—caught by a snare of my own making. A moment's stupidity had ruined all. Yet even this was not the worst; a more awful horror was to come upon me, as I lay helpless. For now, from the burning house, came shriek upon shriek—shcrieks of wild, incoherent terror, like the voice of a woman face to face with imminent death in its most agonising and terrible form. Form a side window in the upper story some glass fell shattered, and a human arm protruded, waving frantically. That was all I saw—noting more. No face to haunt me for ever with its ghastly agonies. Only this poor and feeble arm and hand waving for succour. In gain I shouted again and again; in vain I begged and implored the unseen victim to go down the stairs while there was yet time; to make a rope of her bed-clothing; to fling herself boldly out; to do anything—not stay there! In vain! In vain! The flames roared and crackled and devoured amid the barking and howling of the dogs, and still the poor, helpless arm waved, and still the voice rang in my ears, with cry on cry, and scream on scream of mortal fear. God be my witness, I tried to drag myself to the burning building, but the pain and sickness were overpowering; body and mind yielded to it, and I swooned away.

When I came to, the flames were still roaring, but the shrieks had leased.

IV.

THEY tried me for Wilful Murder. My counsel had much ado to make me promise to plead "not guilty," for, in very truth, I felt the guilt of murder on my soul. But, dead to the world, and reckless of life as I felt, I had still the one passionate desire that my fellow-men should not loathe me as something even worse than I was. I had not meant to murder the poor lunatic daughter, whom Thompson had left under lock and key and bar, in the deserted house. He, himself, admitted in the witness-box that it was most unlikely that I should have known aught of her; that the study of his life had been to conceal her existence from the world, and that he believed he had succeeded. His own manager and station hands swore that they did not know of her existence. Why the cold-blooded miser kept her there, instead of in proper medical hands, unless it was to save his pocket, I know not. Assuredly, it was not from any affectionate wish to have her near him always, and watch over and minister to her in her unhappiness. Perhaps there was some tragedy connected with her state, which her father wished to bury. I have heard of such things.

I need not dwell on the trial. I would fain not dwell on any episode of that awful time. My counsel's eloquence won, I believe, the admiration of the court. But, though he saved my life, I hardly know what he said. I did not fear death; much less did I think myself worthy to escape it. I only said, over and over again to my advocate, "Don't let them think I meant it." Whether it had anything to do with the popular dislike for Thompson, or whether my advocate's speech wrought upon them, or whether, indeed, a touch of commiseration for my abject and broken state moved them, certain it is that the jury found me guilty of manslaughter only. I heard myself sentenced to ten years' imprisonment, with the one only feeling of dread of the endless hours of loneliness and silence in which I should be given over a prey to unbearable anguish and remorse. When the judge said something about "leisure for repentance," I almost smiled at his grave commonplaces. How could he guess at the chaos of reproach, despair, and self-abhorrence which was rending my heart?

I have said that I did not fear death. Why should I?—I, who carried already the torments of eternal punishment about in my breast. Month after month passed, and found me alive; yet, if even I, who passed through them, cannot describe my suffering, how can you conceive them?—you who never have and never will taste of the cup that is worse than death. Night after night I lay down in my cell, only to thank fate for the brief interval of sleep that was coming, and to pray that I might never wake. Morning after morning I awoke to feel a vague, sickening sense of misery mingle with my dreams before my scattered senses could recall the dread reality. Day after day I counted the hours and minutes which should elapse before sleep came round again. Morning, noon, and evening, the ghost of remorse was with me. In the workings of the mind I might escape it for an instant, but oh, the inevitable shock with which every reverie, every train of thought would be broken! It

is with me now, with terrors less acute, indeed, than of old, but with its haunting, accusing presence, ready to rebuke the slightest lapse into happiness or peace!

They call me a free man to-day; but you know the terrible old verse, "If I climb up into Heaven, thou art there; if I go down into hell, thou art there also." In most men's eyes, no doubt, my punishment has been light indeed; but you who have read this, and know the measure of my guilt, may perhaps guess better at the measure of my atonement.

Out in the Open.

[*Contributions to be addressed to* G. M. Thomson, F.L.S., DUNEDIN.]

IF the question were asked, In what respect does New Zealand differ most from all other countries in the world? the replies no doubt would be of a very varied nature. Its scenery cannot be considered its most distinctive feature; for fine as it undoubtedly is, many of its beauties can be matched—we will not say excelled—in other parts of the world. Its geological structure, its mineral wealth, its climate, are all paralleled elsewhere. It is only when we come to consider its indigenous animal and vegetable life that we find its most unique and distinctive characteristics. Even in this department of Natural History, however, we find that the characteristics of New Zealand are generally those of large isolated islands, of which, for instance, Madagascar furnishes another example.

Not only new comers to these favoured islands, but even its natives of the present generation, often ask this question:—What is there to be seen in this new—this very new land? It seems so destitute of bright wild flowers and showy insects to charm the eye; it has few sweet songsters to enchant the ear. We miss alike the eglantine and cowslip from its woods, and the purple heather from its hills, Nature revels here only in shades of green, and these mostly of sombre hue. *Our* answer to the question is—much every way.

Naturalists in other lands look to New Zealand as one of the most remarkable fields for investigation in the world. Separated for enormously long geological ages from all other lands, it has developed a very peculiar fauna and flora, the study of which has been, and will always continue to be, a delight to zoologist and botanist alike. So that, while we speak of it as a new country, we feel that in reality it is one of the old lands of the globe, a relic of an archaic world. During all these past æons it has been under conditions quite different from those existing anywhere else, and as a result its plants and animals have here developed certain peculiar features. Into this remarkable old preserve of Nature's, we are now intruding all sorts of immigrants, without the shadow of an idea as to how they will develop in their new surroundings. We introduce forms of life which for long past periods have been subjected to the keen competition of the struggle for existence in more densely populated regions (using the word populated here with reference not to human beings, but to all of the humbler forms of life), and we take no account of the fact that here all the conditions are altered. One result of our settlement is, that the old, the original, and indigenous animals and plants are disappearing before the new comers, just as the Maori race, weakened for the struggle by long isolation, is melting away in the conflict with the European race, which is itself the outcome of a long-protracted development.

Here then lies a field for our young and rising naturalists—a field in which the patient and observant eye is wanted more than anything else. Much has been recorded on the curiosities of our native plants and animals, but infinitely more remains to be done. Newton's simile is true here, as elsewhere:—We are but children picking pebbles on the seashore while the sea of knowledge stretches its illimitable expanse before us. But every day conditions are being changed. We not only want to record all we can about these indigenous forms of life as they exist while under unaltered conditions, we also want to note the changes which they undergo as their surroundings alted, and further, the changes which the introduced forms of life are rapidly undergoing. Just let us consider a few of the innumerable question of this nature which face the naturalist. We have brought here scores of plants which are annual in the old country, but which here—on account of the milder winter—are biennial or perennial. Let us record the alterations in habit which they undergo. Many native flowers are fertilized by special and peculiar forms of insects; in many cases these insects are rapidly disappearing before our introduced birds, while we have ourselves introduced other flower-fertilizing insects, such as hive and humble-bees to further complicate the question. The development of the last-named insect promises itself to present an interesting problem. We have placed them here in much the same circumstances as the rabbits were—in a new country where none of their hereditary enemies exist. Here, then, is field for work and observation. Nor must we forget what opportunities the disciples of Isaak Walton enjoy for furthering the knowledge of Nature. We have stocked our streams and lakes with several varieties of trout, but again we have left their enemies behind them. What remarkable changes may have to be chronicled regarding them we cannot yet surmise.

In this page of ZEALANDIA we hope to be able to present a constant record of facts bearing on these and

cognate questions. We ask our many readers to contribute from their stores of observations all such facts, remembering that no item of the kind is trivial, especially in the eye of the future. We may be able from time to time to propound questions to be answered from all parts of the colony, and it will be a gratifying feature of this enterprise if these notes of "Out in the Open" become a very popular part of the Magazine.

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ZEALANDIA'S FAIR

By Annette.

I AM desirous of providing in this page, month by month, designs of suitable clothing for the women of our new country. If I save any of my busy sisters indue worry over this matter, I shall be well repaid. I intend planning out, in detail, a gown or costume in each number of ZEALANDIA, with the addition of a few other useful novelties. I have every opportunity of knowing the newest and most useful in female attire, and shall use my knowledge in your service.

I have designed for this number a Directoire walking costume. This costume is in the style of the latest English designs, and is very elegant and becoming, giving the wearer quite an old-world air. It would look very hand-some made in one of the smooth-faced cloths so much worn this season. Vicuna is a capital material both in appearance and in wear; a good serge would also be nice. There are many varieties of colour to choose from—green, brown, blue, or red would all make up well. A good shade of dark green, braided with black—a fashionable combination this winter—and a handsome green *moire* silk for the sash would look very *distingue*. Arrange the front and sides of the skirt with three handsomely braided panels, slightly draped at the top; between these put pleatings of the material, widening at the feet. Braided pieces are sold ready for use in this kind of work, and save much time and trouble: or a handsome gimp would be pretty, but the braiding is preferable. Make the back drapery quite straight, pleated into the waist; over this drapery place a wide sash of *moire* silk, arranged in two loops and ends.

The bodice I think I have made very attractive. It is to be cut away in front to show a handsomely-braided waistcoat matching the skirt panels in design, and furnished with a wide roll-back collar, under which put two small capes, reaching in front no further than the revers. These can be put on with books and eyes under the collar, and can be worn or not at discretion. Beneath the points of the collar, on either side of the bodice, put three large fancy pearl buttons. Place a large pocket on each hip, and furnish the neck with a high, braided collar, under which, at the throat, wear a *jabot* of lace. The sleeve should be cut coat-shape, and finished with a small cuff, either braided, or, if preferred, of *moire* to match the sash.

With this costume one of the Directoire hats would look very stylish and suitable. The wide brim should be lined with *moire* silk the same shade as the sash, and the crown trimmed with a profusion of handsome feathers, either green or black, and a few loops of green ribbon. In this hat a large buckle of antique design would look lovely, if any of my readers are fortnnate enough to possess one. A muff also can be made to match the costume. The centre of it could be of puffed *moire* silk to match, with a band of black for on one side (black fox is very becoming and handsome); on the other side arrange some loops of green ribbon pointing upwards, and with long ends. I am quite sure that any one who worked out this costume would be fully content with it, and feel themselves to be well dressed—a feeling absolutely essential to the comfort and well-being of womankind; for if we do not feel well-dressed we are nervous, and nervousness is injurious to the well-being of any and every woman.

Art. Furnishing.

THE art of furnishing has taken such strides within the last ten years that one needs to study the subject well in order to keep up with the times. An is the great object before every one's eyes now-a-days, and whether they be artistic or not, they must obey its mandates or be content to be out of the fashion. And certainly we cannot find much fault with the carpets, curtains, furniture, &c., that artistic taste designs. They are nearly all pretty and graceful, and, indeed, are infinitely nicer than our old, stiff style of furnishing, with a round table in the centre of the room, and the half dozen chain and sofas ranged against the wall. But all this beauty of decoration requires great thought and care to ensure its being a complete and unique success, and not a bad imitation of the more fortunate efforts of others.

My intention is to ensure success to all who will take the trouble to ask my advice on any point which will

assist them in furnishing their house artisticalty and prettily. This page will be kept open for correspondence on this subject of furnishing, and all letters will receive due and prompt attention at my hands. Letters must be received not later than the first week in each month if the writer is anxious to receive a reply in the next number of ZEALANDIA.

I have every opportunity for knowing the latest and best designs in furniture and art materials, and have studied the subject well. I shall do my utmost to please my correspondents and to satisfactorily solve all the difficulties of this kind about which they may seek my aid. To do this effectually, however, the statement of what is wanted and the description of materials in hand, and the room to be dealt with, should be as full and clear as possible. I can only deal with one room at a time for each correspondent.—ANNETTE.

Young New Zealand.

OUR GIRLS.

MY DEAR GIRLS—

The editor of ZEALANDIA has paid me the compliment of requesting me to address to you a few lines from month to month, touching upon such subjects as seem to me calculated to interest, amuse, or instruct you. May I hope that you on your side will help me a little by telling me of any new game, &c., or asking for information on any subject near to your hearts? If you will do this, I have good hope that "Our Girls' Page" will prove both acceptable and useful to those for whom it is intended.

This month I should like to bring before your notice the advantages of what are termed "Magazine Clubs," especially to those who live in the country, and yet do not like to feel themselves behind the times in general information and knowledge of what is going on in the great world around.

The idea is to form a society of girls; each girl takes in a magazine, and once a week—or oftener, if desired—the party meet at afternoon tea, to discuss, instead of scandal and fashion, selected articles from their magazines. Each member of the club makes her own selection from her own magazine, thus giving play to her own individual tastes, and training the critical faculties, which are of such value in teaching people to discriminate between the relative merits and demerits of literary work.

The reading of every article is sure to suggest pleasant subjects for conversation, and sometimes for discussion; and the little social gathering can be made useful in other ways as a relaxation from home work, or the opportunity of plying one's needle for a Dorcas or other society.

Of course each club must form its own rules, guided by special circumstances of time and place. These rules should be as few and simple as possible, but when once made they should be strictly adhered to, as nothing is more demoralising than the habitual breaking of any rule, however trifling.

The magazines should be exchanged among the members at stated times, and for one year they should be the property of the club as a whole, and should then revert to the members who ordered them.

I have known of several of these magazine clubs at Home, and have heard of at least one in New Zealand. They are easily managed, not expensive, and calculated to give pleasure to a wide circle of friends; and I think that if some of my girl readers would try the experiment of starting one, they would probably thank me for the suggestion.

I append a list of a few suitable magazines, but the number is infinite, and others will occur to every reader.—Your sincere friend,

F. E. Cotton.

Roslyn.

LIST OF MAGAZINES.

"Harper's Young People," "St. Nicholas," "Atalanta," "Monthly packet," "Good Words" and "Good Words for the Young," "Leisure Hour," "The Girls' Own," "Chambers'," "English Illustrated "—not forgetting our own ZEALANDIA, of course.

OUR BOYS.

BY THE REV. T. FLAVELL

IT cannot be too often repeated that the boys of to-day are the men of tomorrow. It was the custom of an ancient nation at certain festivals to have a procession in which old men led the way, feebly shouting—

Once in battle bold we shone.

The middle-aged men came next, answering vigorously—

Try us, our vigour is not gone.

And the boys, who brought up the rear, sang—not in a spirit of brag, I trust, but with some sense of personal responsibility—

To us belongs the palm alone,

Something similar to this is taking place to-day. Three ages are swarming across the islands. We don't see the divisions nor hear their thoughts; but the old men are everywhere retiring, men in the prime of life are taking their place, and the younger men and boys are pressing on to mingle in the fray. Have you read Emerson's fine paper on "The Young American?" If you have you will be sure to have been struck with this bright, inspiring nought:—"I call upon you, young men, to obey your heart, and be the nobility of this land" (ii., page 305); "Every great and memorable community has consisted of formidable individuals who, like the Roman or the Spartan, lent his own spirit to the State and made it great. Yet only by the supernatural is a man made strong; nothing is so weak as an egotist" (p. 305. That is just it. We would have the Young New Zealander become a bright, manly, noble fellow. Strength and agility of body, keenness and fullness of mind, pureness and greatness of spirit, are all necessary to help you to take your place amongst the noblest of our future citizens. James Russell Lowell says—

Be noble! and the nobleness that lies
In other men, sleeping, but never dead,
Will rise in majesty to meet thine own.
Then wilt thou see it gleam in many eyes.
Then will pure light around thy path be shed,
And thou wilt nevermore be sad or lone!

No one can have read Marzio's "Crucifix" without pausing at this passage:-"As we grow older, life becomes the expression of a mood, according to the way we have lived. He who seeks peace will find that with advancing age the peaceful moment, that once came so seldom, returns more readily, and that at last the moments unite to make hours, and the hours to build up days and years. He who stoops to petty strife will find that the oft-recurring quarrel has power to perpetuate the discontented weakness out of which it springs, and that it can make all life a hell. He who rejoices in action will learn that activity becomes a habit, and at last excludes the possibility of rest, and the desire for it, and his lot is the best, for the momentary gladness in a great deed well done is worth a millennium of sinless, nerveless tranquility" (p. 89).

This page is intended for boys such as fill the upper standards in our public schools, or for boys who have just left school and have begun the battle of life, and I cannot believe that what has been written is above them. If I know boys, they like reading something with "grit" in it. They prefer the man who is trying to help them to look *up*, to him who comes *down* to their exact level. They will therefore perceive that the aim and drift of the above is to kindle their best feelings and to assist them in realising the enormous power of habit.

I had intended saying much about games, outdoor and indoor, about habits of observation, of reading, and of thinking, but my allotted space is more than filled, and I must postpone the pleasure until next month. Meantime our editor would be very glad indeed to get letters from "Our Boys" suggesting subjects to write about, telling him of new games, seeking his advice, asking for help in any difficulty, and generally treating

him—as he wishes to be treated—as a kind friend and helper to the boys of New Zealand.

My Rata Tree.

[*A Maori lament for the late Ngatimaniopoto chief, Wetere Te Rerenga, of Mokau*.]
Translated by ARTHUR DESMOND.

My Rata tree! my Rata tree! great was thy shadow.
Thou wert my shelter when the roaring tempests shook the hills.
In thy strength I dwelt securely; in thy shadow I felt no fear.
Thou art fallen! thou art fallen! gone for ever to thy long sleep.
Gone is my refuge from the icy blasts; gone is my shelter from the wintry storms.

Rerenga! Arise, O Defender of thy people! Awake, O Helper of the helpless!
Uplift, uplift thy voice! Let mine cars once more rejoice in thy words of wisdom.

Why is silence my reply?—why no answer to the cry of my yearning?
Who shall now be our Vindicator? Where, O where is my strong defence?

O Rerenga! Rerenga! Rerenga! Sorrow is in my bones; desolation is in my heart:
My Rata tree is fallen—fallen—fallen, and darkness clouds my soul.

King Country, May, 1889.

Chess.

All communications to be addressed to the Chess Editor-MR. C. W. BENBOW, Wellington. We shall be pleased to receive contributions of original problems and games; and also to get solutions to the problems published by us.

Problem No. 1.

By THOMAS SEXTON (Ashurst).
(Respectfully dedicated by the composer to MR. JOHN MOUAT.)

Black.

White.

White to play and mate in three moves.

The above is by the foremost composer in New Zealand, and will be found worthy of the attention of our readers.

Chess in Wellington.

GAME No. 1.—Played in the last tournament of the Wellington Chess Club between Messrs. Brook and Benbow.

Draughts

All communications to be addressed to the Draughts Editor—MR. J. P. BELL, Ravensbourne, Dunedin. We shall be pleased to receive contributions of original problems and games; and also to get solutions to the problems published by us.

Problem No. 1.

By MR. D. BRODIE (Dunedin.)

Black.

White.

Black to play and win.

GAME NO. I.—"GLASGOW."

New Books.

[An able staff of reviewers have been engaged, who will not only review books, but also, whenever requested, give written opinions and advice to those whose manuscript may be rejected by the Editor of ZEALANDIA. It has been decided to adopt the American system of ginning each review with the full name of the reviewer. On no consideration will any review be published without having a name attached to it.]

"*He Who Digged a Pit*." By William Freeman. Dunedin: J. WILKIE AND CO. If merit is a guarantee of success, i have every confidence in foretelling a prosperous career both for the book under notice and its author. It is distinctly a clever work. Buskin says somewhere that the evidence of ease is on the front of all great works: that is one of the notable characteristics of this book. The ease with which it is written and read is the best proof of its power. The literary execution is excellent. The story is an interesting one, and wins the reader's attention from the first page to the last. But the principal feature in the book is the delineation of the character of Count Lezza, who is drawn with a power not unworthy of Marcus Clark himself, and it were hard to accord higher praise than that. From the moment of Lezza's introduction, through the scenes at the Chateau of Angels, where he checkmates and at last overthrows the malignant cunning of Devinie—another powerfully conceived character—up to the final catastrophe that overwhelms the sombre and unconventional villain of the tale, he is depicted with a force and originality as delightful as unusual in colonial literature. Most writers would have made a concession to popular prejudice in the last scene, and have so arranged it as to obviate the Count's very characteristic but very un-English expression of retributive justice, and thus have spoiled the artistic unity of the conception; but this difficulty, instead of being avoided, is boldly grappled with and made to contribute more than anything else to the clearness of the reader's appreciation of the character; and the Count moves off the stage of action without abating a lot of his singular power of self-reliance and self-possession. The Count is emphatically good. It is a pity, however, that the sketch as a whole is so brief. It does not allow full elaboration of character, and hence there are here and there blank spaces, which must be filled up by the reader. Readers are not always ready to do this, and doubtless "He who Digged a Pit" may not impress all as it has done me. Yet I I venture to predict for its author a very high place in the rising school of Colonial writers. There is another suggestion I may venture to make to the author. If instead of going so far afield he tried scenes nearer home than Italy, I am sure the interest of his fiction would not suffer, and, for New Zealanders at anyrate, it would have additional attractions. The questions which this little book throw into prominence are present-day ones, and the author's treatment of them is fresh and suggestive. Mr. Geo. Fisher, M.H.R., to whom the book is dedicated, writes a kindly and encouraging preface. The author's own introductory note will excite interest and sympathy, on account of the pathetically personal references which it contains. I have but to add that the type, paper, and binding are all that could be desired, and the publishers may be congratulated on a finish very unusual in colonial works; only I must take exception to the cover. The conception of the design may be artistic and original, but the execution is decidedly indifferent. One does not buy a book for its cover, however, and as the little work combines so admirably the good with the attractive, I am safe in predicting for it an extensive sale.—RUTHERFORD WADDELL.

"*The Riven Cloud."* Being a sketch taken in New Zealand. By William Ross. Dunedin: J. Horsburgh. The first duty of a literary critic is to lay before readers an opinion which shall guide them in their choice of literary pabulum; his second duty is to assist authors by pointing out both the faults and the good points in their

productions. Beyond this he has no right to go. The critic who allows sentiment or feeling to sway him into unduly praising or unwarrantably attacking a work, is dishonest and unreliable. Holding these views, it is with a certain amount of positive distress that I receive for review such an evidently well-meant but painfully crude effort as "The Riven Cloud." Well-meant, because it must be almost as apparent to the casual reader as to the pains-taking critic that the little work was intended to inculcate a moral lesson; crude because the writer has lacked the ability to convey clearly to the reader's mind the particular lesson intended to be conveyed, and because the general style shows either a careless—almost slovenly—haste, or else literary incapacity on the part of the writer. Speaking broadly, and excepting certain rare Heaven-born geniuses, work that has not been revised seven times with appropriate intervals (for maturing, so to speak), is seldom worth reading. It is difficult to understand how, if "The Riven Cloud" had been properly revised even once, such a passage as this could have passed muster:—"At eighteen, she 'came out' at a ball given by one of the squatters' wives living in the district, and dressed in silk and lace and sundries to the full extent of what constitutes the perfect costume of a *debutante* in colonial society, at anyrate, enhanced the effect of her charms to a degree that her partnership was much sought in dancing, and she was considered the belle." Here punctuation, grammar, phraseology, are all at fault, and the meaning is obscure. It is even a worse fault to discover at the end of the book that it is impossible to obtain a clear idea of the plot; though doubtless it is all plain enough to the author, he has not the gift of imparting his thoughts clearly to others. Moreover, the taste displayed is occasionally of that doubtful kind which is so often noticeable in the works of quite young writers—but, generally, more especially of the gentler sex—when they do not understand the subject of which they are treating. Indeed, a certain effeminate style of nibbling at subjects which should be let severely alone unless boldly grappled with in a masterly way, is observable throughout the tale. I have personally a great dislike to the repeated introduction in a work of fiction of religious words and phrases. To bring them to this common use seems to me flippant and irreverent. For instance, it came upon me with a positive shock to be told, in excuse for actual sin, to "Remember Gethsemane, and think of the lesson, and those gentle words so full of meaning, 'The spirit indeed is willing, but the flesh is weak.' "I shall have concluded what is to me the most disagreeable of tasks—fault-finding—when I say, with all due deference, that it might have proved the truest kindness if the first friend whose advice had been asked about the MS. had advised the author to put it by unpublished, and to fit himself by long-continued study, careful preparation, and constant practice for the position of educator or amuser of his fellows. In all professions a long course of apprenticeship is considered absolutely necessary to success. Why is it so many attempt to disregard this in literary matters? The dialect used occasionally in "The Riven Cloud" is really very fair, and the conversation I altogether is greatly superior to the descriptive writing. There are several excellent flashes of humour in the book—"Nature evidently intended the old bachelors as mates for the old maids"—for example. What the author really needs to produce a readable tale is study and assiduous practice! The printing and binding have been well and carefully done, but the design on the cover hardly preposseses one in favour of the book.—WM. FREEMAN.

New Music.

[BY "TUTANEKAI."]

[I shall be glad to receive for review, under this head, new music, songs, etc., of all kinds; but special space and attention will be devoted to New Zealand productions. Very shortly, I trust to be able to add to the Music, Art, and Drama Notes. To those who have no knowledge of Maori legendary lore, I may explain that "Tutanekai" was Hinemoa's lover—the melancholy swain who sought nightly comfort from his flute, and whose midnight strains guided the dark-skinned maid during her long swim from the mainland to the island in search of her betrothed. It struck me, when I was asked to undertake the charge of this department that no name was so suitable for a New Zealand reviewer of music as—"Tutanekai."]

I have received from Messrs. C. Begg & Co. the following for review:—

"Cynthia;" Michael Watson. London: Robert Cocks & Co. This name (Cynthia) was one of Queen Elizabeth's romantic titles, the composer tells us. He calls the piece, also, "A right merrie dance;" and the title suits the music well. It is slow, but graceful and charming. The piece is by no means difficult, and a Medium player would find no trouble in learning it. It is written in the natural key.

"Love's Golden Dream," a waltz by Theo. Bonheur, transcribed from the fell-known and well-liked song of the same name by Lindsay Lennox. London:publishing Company.

"Three Songs Without Words." M. Bourne. These are called "Reverie," "Adieu," and "Revoir." They are all three pretty graceful little themes, and not at all difficult. I can recommend them.

" Ever and Ever Mine." H. B. Farnie; Robert Planquette. London: Hop-wood and Crew. This is a charming little song, with a waltz refrain. The name of the composer is sufficient to ensure its success. The highest note is

F.

"Six O'clock in the Bay." F. Weatherley; Stephen Adams. London: Boosey. A capital baritone song. Needs to be sung in spirited style.

"Down the Sunlit Stream." Mike Beverley; J. T. Molloy. London: Boosey. I very pretty soprano song, reaching as high as G. It is written in E flat, and will be a favourite.

New Zealand Music.

I have also received from the composer a song called

"The Grand Old British Game." Words and air by David Will. M. Burn; accompaniment by Arthur J. Barth. Christchurch: Lyttelton Times Company. The game is football—and not cricket, as some might suppose. The poet treats the subject in capital style. He touches on the dangers and difficulties of the game, from broken limbs to "tender woman's" objections, and at the end of each verse gives a spirited little chorus to the effect that "the danger's half the game, my boys,"—which, I think, is quite true: it is curious how a sense of danger adds a piquancy to any situation. The music is by no means difficult, and its simplicity will the more admirably suit a party of lovers of the "grand old game." The song would be improved by the addition of a little more variety of tune. However well the air would suit the class of singers for which the song is intended, it seems to me that for ordinary singing the words would have come with better Effect if set to a more declamatory style of music. In fact, to put it briefly, although the music is nowhere faulty, the words are too good for it. Mr. Barth's accompaniment is not remarkable in any way; but he had not much scope for a complicated display of musical fireworks. The song must be sung with spirit and vigour. It is written in G major, and reaches from D to D.

The Corner Cobweb.

"Will you walk into my Cobweb?"
Said the Spider to the Joke.

[Contributions invited of brief scraps of original humour, riddles, puzzles, acrostics, &c]

The rush of photographers to "take" the Sutherland Falls may fairly be said to be the "March of the *Camera—n* men."

New suggestion for the Exhibition! Splendid idea!—When Dunedin is filled with visitors, have a competition of steamers' whistles and steam signals! The result would be a *fog-horn* conclusion.

P.S.—I shall always leave my readers to wrestle with the most puny puns, without assisting them with explanatory brackets; that always seems to me to be diluting the cream of a joke into sky-blue milk and water.

Z EALANDIA! All hail to thee!
E ntrancing thou wilt prove to be;
A ll subjects do thy leaves embrace—
L ove, science, poetry, will find place;
A n essay here, a story there—
N one of diversion need despair.
D oubtless, the reader, too, will find
I nstruction, with delight combined,
A nd with good fare will feast his mind.
AZILE.

UNCONSCIOUS HUMOUR.—In a house where there are no children, but where two pet kittens are kept and treated with unusual kindness, a new hand-maiden asked the mistress, gravely, "Plaze, mum, an' sure are the dare kittens, bliss their pretty hearts, to have a boite av iverything as comes aff the dining-room table, mum?"

"DEAR ROBERT—

"Your unexpected letter came duly to hand. I am glad to find you have always borne a good name. It pleases me beyond expression to hear that you can give good references. It is of thrilling and absorbing interest to me to learn that you left your last employer without a stain upon your character. It is also (e-o-o-eugh—that

was a yawn, Robert) deeply gratifying to others to know that you are fully competent to do any work that you may be asked to perform. Likewise, it is most (o-e-e-e-enooough—that was another yawn, Robert) important to have a clear understanding as to the number, ages, and sexes of your relatives, Robert. Thank you, very much, for the information Robert. But may I venture to imagine, Robert, why you have tilted this cart-load of facts into me? I didn't need filling up, Robert; I was full up before I had read three lines of your ten-page letter. Ah! a thought striker me!—Possibly you want employment, Robert? But no, you don't say so. You just go buzzing along through your ten pages like an old rip-saw, pouring out an avalanche of facts, without asking anywhere for sixpence to get a drink, much less for work. If work is what you want, why don't you say so? No, you say nothing of that kind, so I must suppose that you only want to be pleasant. Thanks, very much, Robert; you write very nice letters, so full of soul-absorbing matter of thrilling interest, you know. Let me hear from you again soon, Robert; but don't be disappointed if circumstances over which I have no control prevent my replying.

"Yours affectionately,

"SPIDER."

realistic power which could be detected in embryo in Colonists will be found grown to maturity in the author's present little book. From first to last the story flows pleasantly from his pen, and the art of the practised novelist has been acquired to an extent which is really remarkable. . . . We do not hesitate to say that the work before us will have a deservedly wide circulation, and that the author has before him a literary career of which he will do well to take advantage." —Dunedin Evening Herald. "His power lies chiefly in reflection and sentiment, in both of which qualities the present tale is a distinct advance on Colonists. Sometimes the reflection and sentiment are dramatic, sometimes expressed by the author himself as a running comment on the events of the story." —Otago Daily Times. "The story is worked out naturally, there is no violation of the proprieties, and the tendency of the book is wholesome. Although the sensational element is not absent, it has no undue prominence attached to it. . . . Then there is a freshness about the book which those who have been dependent on the Home Country for their literature are sure to appreciate to its fullest extent. The sketches of Dunedin and St. Clair are particularly happy, and the author shows a due appreciation of Nature. Here and there also we find observations on social matters which are worth more than a passing glance."—Oamaru Mail. BOOKS BY COLONIAL AUTHORS.

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Front Cover

The Auriferous Resources of Otago and southland.

With Some Reference to Other Minerals.

A Lecture

Delivered at Invercabgill and Dunedin

By James Ashcroft,

Official Assignee Otago and Southland, and formerly Editor of the "Outgo Daily Times."

decorative feature Dunedin: Printed by G. R. Smith, "Otago Daily Times" Office. High Street. MDCCCLXXXIX.

Preface.

I have received so many kind expressions of approval since I delivered this Lecture in Invercargill and Dunedin that I venture to publish it, with considerable additions. It has been the result of a good deal of labour and some expense, and, as I think it is calculated to do some good, I shall ask my friends to do their best to circulate it widely in this Colony, at Home, and in Australia. I think I may also claim the support of the Dunedin Manufacturers' Association. I regret that I have been unable to publish with this edition the map and other illustrations which I used in delivering the lecture orally, as the expense would be too great. If subsequent

editions are called for, shall endeavour to arrange for at least some of these being published, as they are of considerable interest and make my meaning clearer.
The Author.

The Auriferous Resources of Otago and Southland.

IT may be necessary at the outset that I should make my apology for appearing before you this evening to lecture on the subject which I have undertaken to bring before you. It may seem to some of you somewhat anomalous that one whose daily avocation is analogous to that of an undertaker, whose duty it is to decently bury the dead, or to that of the long shore man, or wrecker, who saves here and there some little flotsam and jetsam, remnants from the disasters of the sea, that he should come to you with words of encouragement to tell you how much life there is in you, and how little need there is for your gallant barque to get into shoal water and make [*unclear:* shipwreck] of your hopes. I will briefly state, therefore, how it is that I have come to take an interest in the question of our auriferous resources, [*unclear:* and] how I have acquired such little knowledge as I have of the matter, Some 18 years ago I had, in the capacity of Member of the Provincial Council, to accompany a Goldfields' Warden on his journey over what is now our most northern goldfield, in order that he should report whether it should be proclaimed or not. I saw so much then to interest me that I rubbed up my early studies in geology, and began to seek a clue to some of the problems presented to me. I subsequently travelled over a large part of the interior, and hitting at that time upon the glacial theory—which, if I remember rightly, was first suggested to me by Mr. L. O. Beal—I found that it fitted in with much that I saw in my travels, and from that time to this, I have accumulated evidence that this theory is now established almost to demonstration, and that it is a most important key to the geological features of the wonderful country in which we are living. I shall have much to say about this theory this evening. Some 16 or 17 years ago I ventured to give a lecture at Cromwell on "Glaciers and Gold," and I was glad, on a recent journey, to find that this was still remembered. An old inhabitant remarked to me: "Do you remember giving such-and-such a lecture?" "Oh, yes," I said. "You were quite right," he remarked—"perfectly right." I hope some of my present audience will be able to say the same when I have finished this evening. Fellow colonists, we have of late passed through a period which has somewhat daunted us, and one of my objects this evening is to inspire you with fresh hope. I wish to see a period of progress set in once more, and as a homely illustration sometimes goes a long way, I may be permitted to remind you of that useful animal who would not proceed, and of the two courses taken to induce him to get on. Fellow colonists, you are the donkey, and I am holding] before you, like the bunch of carrots, a tempting bait, in the shape of vast wealth, not, indeed, available without labour, thought, and skill, but affording for generations to come vast scope for all these, and a fair reward. I imperfectly remember some lines addressed to "Luck," in which that shadowy will-o'-the-wisp is apostrophised thus:—

By labour and thought, by skill and persistence,
My house I have wrought without Fortune's assistance;
And since I have gained the reward of my labours,
And without help from you am as good as my neighbours.
Now, Luck, keep away!

Accordingly I shall seek to show you that not luck, but labour, steadily applied and well directed, will make you as rich as you deserve to be and mark this—no richer. With this brief introduction to a subject which would afford matter for many lectures, and which might well be handled by abler hands than mine, I proceed. My main divisions will be as follows:—

- What has the past disclosed in regard to our Auriferous Resources?
- What has Science to say on the subject?
- What may we fairly expect the Future to disclose?
- What are the principal obstacles in the way of development?

And finally, I shall make a few practical suggestions bearing especially on the local conditions which are of most interest to my present audience.

I.—The Past.

The date of our first important gold discovery was 1861. I shall not enter into details. Everyone knows about Gabriels Gully, the rushes, the enormous cost of carriage, the flood of "new iniquity" which almost swamped the "old identities." Suffice it to say that within four years, no less than £7,000,000 worth of gold passed through the Dunedin Custom-house. The highest export was in 1863, when it reached £2,380,000. A year later followed the exodus to the West Coast, and since then the returns have fallen year by year till they reached about £320,000, at which or thereabouts they have staved for several years. I have marked on the large map before you about 70 places from which this gold has been obtained, and several rivers of which the Shotover, Kawarau, and Clutha are the principal, and along the course of which gold has been found in large quantities. Of course there are hundreds of places where small returns have been obtained, but I am giving you a bird's-eye view of the chief-known source of supply. You will see how large an area they cover, and how widely distributed throughout the Province are these mines of wealth, Roughly speaking, to say nothing of our unexplored western ranges, the area embraced is 150 miles by 100 miles—equal to 15,000 sqare miles, two-thirds of which at least may be said in one sense or another to be auriferous; or, 10,000 square miles, including mountains with quartz reefs, mountain tops with alluvial deposits, terrace formations, the margins of old lakes and rivers at various elevations, modern river beds, deep leads yet to be disclosed, and auriferous beaches, extending for miles along our sea-coast. When we consider that we have gold at all elevations downwards from 6000ft. at Mt Pisa and 4000ft. at Mt. Criffel and Mt. Burster, to the level of the sea, and in many cases successive layers at different depths over the some area, some faint idea will be gained as to what the past has revealed in respect to our auriferous resources. From first to last we have produced in Otago and Southland £18,000,000 worth of gold out of £44,000,000 produced by the whole Colony. Now, we may naturally suppose that a country which has produced so much contains still more, only we are confronted with the fact that we are now producing less than one-eighth of what we produced in the second year of the discovery. No more Gabriel's Gullies have come to light, and no quartz mines like the Cromwell Mine, which from first to last turned out £350,000 worth of gold. Most investors have suffered more or less, and out of 3900 allurial mines in the province, 1460 are Chinese, so that one is inclined to ask with Bret Harte, "Is the Caucasian played out?" I think not. I think the Celestial has taught us many a useful lesson of patient labour and combined effort, but it is still for the Caucasian to lead the way. I shall here briefly summarise the lessons of the past, and endeavour to answer the question, Why are we not finding gold in such large quantities as in the early days of the diggings? 1st. The gold then found was on the surface and easily obtainable in large quantities. 2nd. The rush to the West Coast took away a large portion of our best miners. 3rd. Wrong nations have been entertained as to where the gold is to be looked forth. Many misapplications of labour without skill have resulted in failure—*i. e.*, water races at too low a level; quartzmining of unskilful and haphazard character. 5th. The share-jobbing mania, attended by bogus schemes and consequent losses of capital. 6th. The difficulty of rasing sufficient capital for really legitimate enterprise. 7th. The want of efficient machinery, with respect to which we are at the experimental stage. 8th. The raising of English capital on most disadvantageous terms.

NOTE.—In one case after large payments to the original shareholders and to as English syndicate, only £10,000 was left out of £100,000 to develop the mine; and in another, out of £120,000 only £1,000 in cash was sent to the Colony. This is to court failure.

Now, it is the experience on all alluvial goldfields that often the precious metal lying on or close to the surface has for some time been picked up in large quantities, a reaction takes place as soon as such easy methods of getting rich are exhausted. I do not say, for I do not believe, that no such surface deposits still exist. It is as likely as not that other Gabriel's Gullies are somewhere concealed among our mountain ranges; but such finds are only hit upon by accident, and we any dismiss them from our calculations as uncertain quantities. But that there is far more gold "over our heads" (as Mr. Pyke well put it) and also under our feet, than we have yet got, I am very confident The period of "rushes" is, I hope, over, for these are always attended by severe reactions. We are entering on the scientific stage of gold mining, and that will last.

Vita brevis, Ars longa.

I will now endeavour to answer my second question—

II.—What has Science to say on the Subject?

And here I might detain you for hours without exhausting my materials, though I might exhaust your patience. I can only deal with outlines in the short time at my disposal.

A. As to the occurrence of lodes, whether by chemical means, at ingeniously suggested by my good friend Professor Black, or a combination of that with other causes, I shall not now attempt to inquire. This is a subject

by itself, and a very interesting one, and I do not despair of a workable theory being established. I start with the fact that such lodes do exist all through the quartzose schist rocks, which are among the oldest and most common formations in the country, and that these lodes have been the original sources of supply to our alluvial goldfields.

B. I come then to my main inquiry this evening—"How have these rocks been disintegrated and the gold in them distributed over so wide an area?" And I unhesitatingly answer—(1) By glacial action (2) By the action of water. I referred at the outset to the "glacial theory." When I first adopted it I had read only a few British authorities, and nothing of what has been written on the subject in .New Zealand. Your late lamented fellow-townsmen, Mr. J. T. Thomson, and Mr. L. O. Beal, were among the first who adopted it. Since then much has been written by Yon Haast, by Hutton, by Hector, by M'Kerrow, and others; and, though they differ in details as to the locality and extent of the ancient glaciers, and as to their duration, and their relation to the geological periods, in the main all agree that in post ages, subsequent to the Middle Tertiary Period, the glaciers—of which we have many existing examples in our alpine ranges—have extended far below their present altitudes, and for at least a hundred miles nearer the eastern coast-line, with some out-liers still further eastward. It is an accepted theory that the same state of things has occurred all over the British Isles, over Europe, in North and South America, and—for aught I know—at one period or another, all over the world, Miss Buckley, who held the position of Secretary to Sir Charles Lyell (page 433), in an admirable little work called "A Short History of Natural Science," gives this account of the theory, which she attributes in the first instance to Professor Agassiz, who first began to entertain it about 1840:—

"GLACIERS.

"Agassiz proves that parts of modern Europe and North America must once have been covered with great fields of ice (1840), Although his chief study was zoology, yet he could not live at Neuchatel and travel about the Alps without being struck with those mighty rivers of ice called glaciers, which creep slowly down the valley of the Alps in Switzerland, carrying with them stones and rubbish. These glaciers are formed by the snow which collects on the tops of high mountains, and, sliding down, becomes pressed more and more firmly together as it descends into the valley, until it is moulded into solid ice, creeping slowly onwards between the mountains, and carrying with it sand, stones, and often huge pieces of rock which fall upon it. At last one end of this ice-river reaches a point where the air is warm enough to melt it, and here it flows gradually away as water, leaving the stones and rubbish it has brought down lying in a confused heap which is called a moraine. Towards the end of the eighteenth century a famous geologist named De Saussure spent much time in examining the glaciers of the Alps, and pointed out how they are now forming large deposits in the valleys out of these heaps of rubbish which they bring down from the mountains. Since his time many geologists had taken up the study, but it was Professor Agassiz who first spelled out the wonderful history we can learn from it about the former climate of our hemisphere. He noticed that rocks over which a glacier had moved are polished and grooved by the rough stones and sand frozen into the bottom of the ice, just in the same way as a piece of wood is scraped by the sharp iron at the bottom of a plane; and by these glacial cratches or striæ, as they are called, he could tell where glaciers had been, even though there was nothing else to show that ice had ever [*unclear:* existed] in the country. Now, when he began to examine the slopes of the [*unclear:* lips] many hundred feet above the present glaciers, and also in places [*unclear:* where] it is now too hot for ice to remain, he found to his surprise [*unclear:* members] of these glacial striae, and also remains of huge moraines, [*unclear:* shewing] that the glaciers of olden times must once have been much larger, and have stretched further down the valley than they do now. And what is still more strange, these same marks were to be seen on the jura Mountains on the other side of Switzerland, where there are [*unclear:* ever] any glaciers at present; moreover, on the Jura there were found large blocks, some of them as big as cottages, which were not made of [*unclear:* the] same materials as the hills on which they rested, but were broken [*unclear:* pieces] of rock such as are now only found on [*unclear:* the] Alps. It was clear, when, that these enormous pieces of stone must have been carried right [*unclear:* across] Switzerland from the Alps near Mount Blanc, and across the lake of Geneva, which is 1000ft. deep, and then deposited on the Jura [*unclear:* large] near Neuchatel, where one block of Alpine gueiss [*unclear:* their] the ferre-a-Bot, as large as a good-sized cottage, sits perched on a mountain [*unclear:* 600ft.] above the top of the lake. How had these blocks travelled [*unclear:* across] the Swiss plains? No flood could have carried them for they [*unclear:* were] too heavy, and besides they were not smooth as stones are which [*unclear:* have] been rolled in water, but were rough, with sharp edges. Agassiz [*unclear:* was] convinced, therefore, that they must have been carried by ice, and [*unclear:* that] huge glaciers must once have come from the high Alps right across [*unclear:* Switzerland], filling the Lake of Geneva with ice, and carrying these [*unclear:* tacks] with them as modern glaciers do now in the Swiss valleys. This [*unclear:* was] a marvellous history, for it showed that all the lower land of Switzerland must once have been buried in ice, but other facts

after wards came to light which were more wonderful still. In 1840, Professor Agassiz came over to visit Great Britain, and when he went to Scotland with Dr. Buckland, his practised eye discovered at once in the Highlands glacial scratchings, remains of moraines, and blocks which had been carried by ice; and soon it became evident that these were not confined to Scotland, for Dr. Buckland recognised them again in Wales and the North of England, where moraines and erratic blocks are to be seen in all parts of the country. So that here, too, in our little island, there must have been at one time huge glaciers as large as those now found in the Alps. Nor was this all; for when once geologists knew where to look for these signs of glaciers, it began to be discovered little by little that all the Northern countries of Europe Norway, Sweden, Russia, Germany, Switzerland, Northern Italy, England, and even on the other side of the Atlantic—Canada and North America—have been smoothed and scratched; and huge erratic (or wandering) blocks have been scattered over them, shewing that in very remote ages (yet still while very nearly the same kinds of plants and animals as now were living on this globe) the temperate parts of our Northern Hemisphere must have been intensely cold, causing a great part of these countries to be covered with great fields of ice, as Greenland is in the present day. And just as we see now that icebergs break off from the Greenland glaciers, carrying with them stones and mud and dropping them at the bottom of the sea, so in those times icebergs floated over many of the valleys of Europe which were then submerged beneath the ocean. You may see in the railway cuttings of Wales and in the sea-cliffs on the coast of Yorkshire and Norfolk, huge masses of glacial drift, as it is called, made of mud and stones confusedly mixed together, which were dropped from icebergs travelling south wards from the ice fields."

I remember an amusing example of the incredulity with which this remarkable doctrine was at first received. In one of Hugh Miller's books, "The Testimony of the Rocks," he mentions that he pointed out such a carried block to a shepherd, and told him it was brought by ice from mountains 100 or 200 miles away. He replied: "Na, na! that's just where God created it." A friend told me a similar story of erratic blocks near Te Anau, and when he remarked: "I can't think how [*unclear:* ou] earth they got there," the man to whom he was speaking said: "I expect they just dropped from the cloods!"

Perhaps two facts will help you to receive the theory with more credulity:—(1) We are but 1600 miles from the great region of perpetual ice in the Antarctic. (2) We have glaciers now existing on our western coast, extending quite closely to our sea shores, in the Sounds and on our Alpine range within 200 miles of the eastern coast. Among the various New Zealand authorities, I shall select from the [*unclear:* picturesq] sketches of the late Sir Julius von Haast, on whom I shall rely for my descriptive facts, Here some of my readers may ask: "What is a glacier?" A glacier is a mass of ice filling a valley, cutting its onwards with enormous force, carrying slowly along in front of [*unclear:* image not readable] masses of rock known as its terminal moraine, and on its sides other masses known as the lateral moraines. Slow as its movement is—probably not more than 25 feet in the year—it has immense cutting and grinding force. A glacial river descends from its terminal face under an arch, carrying with it and further disintegrating the moraine matter, and supplied with material from the snowy mountains along its course. Glacial action is characterised by U-shaped grooves in contradistinction to the V-shaped groove of a Intercourse in any hard material; by striae, or markings on hard rocks; by polished faces along its sides where the rocks are hard; by drift containing masses of hard boulders and broken rocks at places far beyond their natural habitat; by angular pieces of rock cut across the natural cleavage; and by *roches moutonnèes*, or sheep backed—*i.e.*, pounded hills along their ancient courses. All these are more or less present as evidence of a great extension of the present glaciers in former times all over Canterbury and Otago. Now let us hear Von Haast. In his descriptive work on the geology of Canterbury there is a great deal about glaciers, but I will only trouble you with three extracts:—

"Francis Joseph Glacier.

"Before we reached the glacier itself we had to cross a moraine, mostly consisting of small detritus, denoting by its mineralogical character that it came from the very summit of the snowy giants before us. My whole party had never seen a glacier, and some of the Maoris had never seen ice; thus the nearer we came the greater was their curiosity, and whilst I stopped some few hundred yards from the terminal face to take some bearings, the whole range, owing to the clear sky, being well visible, they all ran on, and I saw them soon ascend the ice, which, with the exception of a few small pieces of debris in the centre, was perfectly spotless, and presented a most magnificent sight. Having finished my work, I followed them, and soon stood under the glacial cave at the southern extremity, forming an azure roof of indescribable beauty, and which one of my European companions could only compare to the magnificent scenery of some London Christmas pantomime. The glacier not only fills the valley, the sides of which are formed of perpendicular walls of mica schist, but even from the ice large hillocks rise, consisting of the same rock, on which, better than anywhere I had ever observed, the planing and furrowing action of the ice can easily be studied. And no one having done so will afterwards feel surprised at the facility with which that wonderful and powerful plough of nature will furrow

deep valleys, and model *roches moutonnèes.—Haast, page 103*.

In another place he says:—

"I have repeatedly alluded to the Great New Zealand Ice Period, or Glacier Epoch, and as this remarkable era plays such an important part in the physical geology of New Zealand, I may be allowed here to make a few remarks upon it for the general reader, the more so as there are scarcely anywhere alpine countries so easily accessible for the Scientific observer, bearing such clear and distinct traces of the post tertiary Glacier Period as the Alps of New Zealand. The action of the giant ice-ploughs, as we may well call these glaciers, has essentially assisted in preparing the lower regions for the use of man, since by it the narrow valleys have been widened, the rugged mountains rounded off, and large plains have been formed. Thus we find everywhere, as soon as we penetrate into the New Zealand Alps, where even the out running ridges near the plains often attain a height of 6000 feet, that the valleys are distinguished by rugged forms where the rivers which break through them have not only cut their bed deeply into the rocks, but have also formed such steep precipices that it is often impossible, even for the pedestrian, to pass along their banks, in order to reach the alpine lakes or plains situated in the valleys above. Inside of the eastern divergent chains, as soon as we enter the district of the earlier post tertiary glaciers, the valleys widen out to broal basins, the mountains on both sides—or even standing in the middle of the valley—have the recognised roche moutonnèe, or ice-worn rounded-hill form, and the fall of the rivers is less rapid. At the upper end of these fiats, which are filled up with drift, alluvium and glacial deposits, and through which the rivers have cut their new bed, lakes, surrounded by distinct moraines, are generally situated. The regular occurrence of these earlier terminal and lateral moraines supply us with the incontestable evidence that these lakes have been formed by the retreat of the glaciers. These lakes are found in every possible stage; some have already disappeared, the delta of the principal tributary entering from the Alps having completely filled the up; others are very much contracted by the deltas of the main affluent, and of the secondary water-courses descending from both sides; other again are great swamps, having become so shallow, through the enormous quantity of glacier silt deposited in them, that they also may soon disappear under the continually advancing masses of debris. The extent of these flats, and of the lakes in them, stand in almost all cases in exact proportion to the extent of the present glaciers at the end of the valley and, therefore, of course to the height, extension, and other orographical conditions of the alpine chains. The form and width of the valleys above the alpine lakes show in the most striking way that they must once have been the bed of great glaciers, to the action of which they principally owe their present form. They are frequently, even up to the present glaciers, of the same width as the lakes. On both sides of them, several thousand feet above the level of the valley, enormous moraines are found stretching along the mountains, so that one can often follow the terminal moraine at the lower end of the lake for twenty miles upwards. Roches moutonnèes occur everywhere.

NOTE.—Mr. F. R. Chapman, who is familiar with the Swiss Alps, tells me he has only seen one true rochc moutonnee in New Zealand, in one of the Sounds.

However where the colossal glaciers of the Ice Period have pierced through to the Canterbury plains, the secondary ridges are also rounded off and the valleys widened."

—Haast, page 189.

And again:—

"The natural consequence of such enormous accumulations of snow was the formation of glaciers of gigantic proportions descending in course of time by the pre-existing or newly-formed channels towards the see grinding down the rugosities of bottom and sides. The action of the glaciers beginning to lay open the rocks of the higher ranges soon offered sufficient material for morainic accumulations, first on the glaciers themselves and afterwards on the terminal faces. The scooping action of the iec-plough having once begun to eat into the plateau-like ranges, not only in the main course of the glaciers, but also into the lateral valleys, became more extended every day, and furnished more and more material for the formation of huge moraines. In their turn these moraines were destroyed by the great torrents issuing from the glaciers, and ample material was furnished for building up fan-like courses for the former. Boulders, sand, and ooze raised considerably the sea bottom along both coasts of the island, and the low land at the foot of the alpine ranges was more or less enlarged according to the physical features obtaining. It will thus be seen that without invoking the aid of cosmical causes Much might or might not have existed, I attribute the great glaciation of New Zealand to physical causes still now in operation, although on a much smaller scale, and without even assuming that the country had risen to a higher level than it occupies at present."

—Haast, page 374.

On this point Hochstetter says:—"In enquiring into the causes the pleistocene glaciation of the South Island, we need not resort to the hypothesis of a general Ice Period caused by Cosmical influences, and which was supposed to have covered the surface of the globe from the Poles to the Torrid Zone with snow and ice, but find the most reasonable explanation in the physical causes now in existence, if we only suppose that the Southern Alps during the Pleistocene Period differed somewhat from their present features, forming higher and

more plateau-like ranges, while the climatic influences, as well as the action of water and ice at that period, were the same as at present. My views is this respect are perfectly in accord with those advocated by my friend, Dr. Haast."

Here we have a picture giving Haast's idea of the probable former extension of the glaciers down to the Canterbury Plains, shewing what an immense mass of ice must then have extended to within 30 miles of the present coast line; and another of the fan-shaped deposits in the neighbourhood of Waimakiriri, shewing a well-defined semi-circular series of ridges from 450 feet down to 63 feet above sea level, the contour lines running nearly exactly parallel as the plain descends. Now applying this to our own Province, I will read you a brief extract from Hutton, only premising that there is some difference of opinion as to the earlier and later extensions of the glaciers; but they are chiefly referred to the Pliocene or Post-pliocene Age, that is to say, to the upper tertiary, or post tertiary. On this point there is room for a good deal more investigation—it is sufficient for our present purpose that there have been earlier and later periods of extension and retrocession. Hutton says:—

"ANCIENT GLACIER DEPOSITS.

"I have elsewhere

"Transactions New Zealand Institute," v. p. 384.

given my reasons for supposing that the greatest extension of our ancient glaciers took place during the intervals between the Pareora and Wanganui formations, and in the next two sections I shall bring forward the additional evidence bearing on the question that I have collected during my survey of Otago. Of course, as glaciers still exist in our mountains, our glacier deposits must range in age from the most ancient period of their greatest extension up to the present times; and in this place I only propose to describe the more ancient deposits This, however, is easily done, for, with the exception of the Blue Spar already described, I as yet only know of two morainic deposits in the whole province that I am inclined to refer to this period. The first of these immense accumulations of clay and angular blocks of schist of all sizes that is found on the eastern side of the Taieri Plain, extending from the Taieri River nearly to Otakia, a distance of about three miles. This deposit is a confused mass of quite angular fragments of schist-some of them of large size and composed of mica schist with quarts laminæ, which must have come either from the neighbourhood of Outran or down the Waipori River. They could not have come from Brighton on the sea-coast, as many of the blocks are considerably above the highest level of the mica schists there, and there is no conceivable agency by which they could have been brought from there. Consequently, although I could find no trace of striæ upon them, I have very little doubt but that they were placed in their present position by a glacier descending from the Lower Taieri and the Waipori River."

NOTE.—I pointed out to a settler that there would probably be gold in the neighbourhood, running over to Brighton, and he tells me this is so. It might pay for hydraulicing, and is worth prospecting.

—Hutton, page 62.

This places the eastern end of the glaciers quite close to the coast From a cursory inspection of the locality, I venture to express a doubt whether this deposit is not a small outlier such as might be brought down by an avalanche carrying forward part of a true moraine I have noticed similar evidence of glacial deposits on the western sided of the Taieri Plain where cuttings are made for the Otago Central, and it is possible that the ancient Taieri River was the bed of a large glacier, into which smaller glaciers flowed, cutting such deep channels as that known as the Deep Stream out of the solid rock. The Blue Spur is another example. Hutton says in his report on the Tuapeks District:—

"Seated on the top of the saddle that divides Monro's from Gabriel's Gully is a deep, cup-shaped hollow in the schist rocks, which has been filled up, much higher than the present lips of the cup, by gravels cemented into a hard blue conglomerate. This is the Blue Spur, famous for the immense quantities of gold that have been derived from it. On close inspection, this hollow is seen to have been an old mountain tarn with smooth polished sides, which have, however, now decomposed into blue clay to a variable depth of from two to six inches Although I could detect no striae on the sides of the hollow, I have no doubt but that it was excavated by a glacier. This old rock basin is filled up with beds of conglomerate that dip to the east, and, as a rule the stones in the conglomerates get smaller towards the east, which, together with the direction of the dip, prove that the old tarn was filled up from the west. The conglomerates consist in great part of pebbles and sub-angular blocks of green quartzite and a dark purple jasperoid slate with quartz veins, which rocks do not exist nearer than the Tapanui Mountains, west of the Clutha River, south-east of Lawrence; also, several other patches of conglomerates are found at the Blue Lead, Waitahuna, at Manuka Creek, &c., all of which probably mark the position of an old valley which extended from the Tapanui Mountains through the Blue Spur to Kaitangata. No appearance of such a valley can, however, be seen at present, and its supposed course is now

crossed at right angles by the Clutha, and by the Tuapeka and Waitahuna Rivers. Consequently, this old valley must date back to a time previous to the formation of the present rivers, and, as we have already seen that the Clutha received the drainage of the pliocene glaciers of Maniototo, ldaburn, and the Manuherikia, we must place the existence of the Blue Spur glacier during a still earlier upheaval—that is to say, we must refer it to the Eocene Period."
—Hutton, page 93.

I shall only quote one more authority—Dr. Archibald Geikie, L.L.D., F.R.S., in his "Class Book on Geology," page 458:—"From this kind of evidence it has been ascertained that the whole of Northern Europe, amounting in all to probably not less than 770,000 square miles, was buried under one vast expanse of snow and ice. The ice-sheet was thickest in the north and west, whence it thinned away Southward and eastward. Upon Scandanavia it was not improbably between 6,000 and 7,000ft. thick. It has left its mark at heights of more than 3,000ft. in the Scottish Highlands, and over North-Western Scotland it was probably not less than 5,000ft. thick. Where it abutted upon the range of the Hartz Mountains, it appears to have been still not far short of 1500ft. in thickness."

It is supposed that there are at least two distinct periods of glaciation, and one writer suggests that during the great Glacial Period the sea, by reason of the locking up of so large a quantity of moisture in the form of ice and snow over a large portion of the globe, was 2000 feet lower than its present level, which depressed the snow line to a similar extent. My learned friend, Mr. F. R. Chapman, has, however, produced some cogent arguments which cause me to doubt this, as for one thing the saltness of the sea would be so greatly increased by such a change that fishes could hardly exist. It is evident, too, that vast masses of rock have been cut down from the mountain tops by snow and ice, and their crests lowered. It is not too much, therefore, to say that at the beginning of the Ice Period our mountains were several thousand feet higher above the level of the sea than now, carrying a vast deal more snow on their crests and sides. Let any-one who is curious on the subject make a calculation of what quantity of material—say 1000 square miles, 2000ft. thick—would amount to in tons, and you will have some idea of the enormous quantity of solid rock which has been broken up and carried forward. A vast deal has turned into clay and sand and been carried out to sea, as over 90 per cent, of schist rock Would thus dissolve away; but still enormous quantities re- main in our valleys, old and new, river beds, old and new, terraces, and lake beds; and as the mountains from which these deposits come are auriferous, so must the detritus be. You have this in the form of large blocks, cement boulders, mullock, quartz, stones, and pebbles, and so on down to the black sand on our beaches. But there is evidence here in New Zealand, as there is at Home, of several advances and retrocession of the glaciers. There may within hundreds, or perhaps thousands of years have been periods of warmth, during which a vast melting of ice, and rush of floods of water towards the sea, would take place, and then periods of comparative quiet. The evidence of that state of things in New Zealand is to be found in the successive layers of lignite found at different depths. The vegetation from which these are formed must have had time and rest to grow to the thickness to which we know they have grown. The following bore taken at Clifton, near Invercargill illustrates this. There are six layers of lignite at different depths down to 105 feet, and an immense deposit of fine sand lower down, indicating a time of flood:—

Now, the same state of things which would produce lignite seams, would produce leads of gold along the courses of streams, while during the heavier floods the stone would be more broken up that produced them, but the leads would be more concentrated at points where some hard bar or obstacle temporarily arrested the heavy rush of water and caught the gold in hollows. This, no doubt, was the case at Blue Spur. At Ross Flat, West Coast, six successive leads at different depths were found on sinking the main shaft down to 360 feet. I think, however, some mistakes have been made in predicting where leads would probably be found. No doubt, where a stream tipped its contents over into a lake, a catch would be established, and the free gold would not be carried far out towards the centre of the lake; but it must be remembered that besides the tree gold large quantities of slate and stones containing gold were carried forward, and gradually filled up the lake bed, and these, by their decay, have dropped their precious freight long after their deposit. Thus, as at Ross Flat, considerable quantities of gold may be found at successive levels over a large area of ground, and where a "face" can be got at a sufficient elevation to get a fall for the tailings, such ground will pay well for hydraulic sluicing on a large scale, as even a few grains to the load would leave a handsome result. There is room for much engineering skill in dealing with these various deposits, and much research by the practical geologist in determining the probable whereabouts of the best and most economically-worked ground. The young mining engineer of ability has a great future before him in this country, especially if he possesses, as he ought to possess, some knowledge of geology, mineralogy, and mechanics.

Generally speaking, Southland is a depression filled up in this way. Hence my belief that there is gold under your feet; where and how much can only be established by judicious and systematic prospecting and boring. But, generally, we may say that if the existing creeks and rivers contain gold, the terraces at their sides and the old river beds below will contain as much or more. There is here a field for a new department of the

great science of geology. I may be permitted to coin, and call it "Glaciology." I admit that there is much for the geologist, and the mineralogist, and the chemist to do in other branches of historic and descriptive geology, but I think some men of ability among us should devote themselves specially to Glaciology, and I am sure its careful study would be fruitful of results, and principles knight be laid down of immense value to the hydraulic miner of the future. At present we can only deal with the poorer drifts by the use of immense quantities of water, and the creation of a vast quantity of waste material known as "sludge," which requires expensive channels I to carry it off. I am not at all certain that our present rough-and-ready system—which undoubtedly loses a great deal of gold—cannot be improved upon so as to economise water, and by mechanical appliances to keep the larger stones out of the channels—perhaps to crush them. The only limit at present to this class of mining is the water and the outlet fall, and Mr. Perry has, by his ingenious system, already overcome some of the difficulties of the latter by using water pressure to lift the materials to be washed to a considerable height. One good feature of hydraulic mining is that it is a steady industry, going on from year to year with few sensational results, but with a good return for capital and labour; and there is an immense field for it in Otago and parts of Southland. The use of thin steel plates for pipes is a great improvement.

And now I come to answer the question—

III.—What May the Future be Expected to Disclose?

I may answer this in one sentence: It may be expected to disclose where the gold which has been cut out of the mountains and distributed in the drifts, from glaciers and rivers, has got to Hill tops, terraces, old and new, river beds, old and new, lake beds old and new, will yet yield up immense quantities of the precious metal to the intelligent miner, to say nothing whatever of our quartz lodes, which exist in great numbers and great richness all through our schist mountains. The £18,000,000 worth of gold we have already got is, so to speak, but a certificate of the great richness of the parent rock—there is plenty more where that came from. We have only got samples as yet, here and there from the surface, and if we think of the vast quantities of gold which have been washed out to sea through thousands of years, what must have been the wealth of the rocks which have been squandering gold for ages, and still leave us plenty to spend? We cannot break that bank—its riches are practically inexhaustible; the only difficulty we have is to induce it to honour our drafts. But having discovered where the gold has got to, I think we shall soon discover how to get it out of its hiding places. I believe the future will disclose far more gold than we yet dream of, but not without losses and disappointments. On the average, the return to the miner is not greater than to the agriculturist; but the world has need of gold as it has need of corn, and as a great deal of our mining can be done above ground and in the light of day, and the miner can not live in his hut fairly comfortably on about ten shillings a week, I wonder many more do not turn their attention to this fascinating pursuit. It seems the design of Providence that no community should grow even moderately rich without "labour and thought, and skill and persistence," but I believe few peoples in the world have a finer inheritance than we have in this wonderful country, which, while it supports on the surface its flocks and herds, and displays its little hills and valley waving with corn, contains metals of the most precious character down fathoms deep in its valleys, and up up to its high mountain tops, and in the hearts of these mountains themselves, to be hereafter secured for the uses of man. I have spoken to you hitherto mainly of gold, but we have recently made important discoveries of tin and manganese and we are known to have in various parts of New Zealand silver platinum, mercury, lead, zinc, titanium, tungsten, antimony, copper chrome, nickel, graphite, magnesium, in ores of greater or less richness and heaven knows what besides, as all our West Coast ranges have yet to be explored. But time would fail me to speak of all these. Year by year fresh uses are being found for, and fresh means of utilising many of these valuable metals. Only recently means are said to have been discovered of producing at a less cost that valuable metal aluminum, of which our very clays and slates contain vast quantities the form of oxides; and this metal may hereafter become as common as some of our cheaper and less durable metals are at present. The manganese which I produce is an exceedingly rich peroxide, of which there are thousands of tons at Taieri Mouth, now just beginning to be worked.

I have now come to my last head, which is—

IV.—What are the Principle Obstacles in the way of Development?

Given in brief, the answers are:—

A. Want of population. What are our 4000 miners, one-third of them Chinese, to deal with all the auriferous material in the mountains and valleys, the rivers and beaches of Otago and Southland, which will only reveal their riches by the application of labour?

B. The want of knowledge and skill which has, with a few bright and conspicuous exceptions, characterised

our past mining operations. Our agriculture is far in advance of our mining. We are in the primitive stages of mining, which might compare with the early efforts of the farmer with wooden ploughs and yokes of oxen. Qualified young mining engineers will be the great want of the future.

C. Want of common honesty, which has so many illustrations in the sharejobbing and company-mongering of the past. The working miner has to carry an old man of the mountains on his back.

D. Want of the best machinery designable for quartz crushing, pumping, dredging, hydraulic mining, gold saving, &c. In this department we are, however, making progress. Lastly—

E. Want of hope. One actually meets men who will talk of the Colony being played out; of gold costing more than it is worth to get it; of want of employment, in a country like this, destined undoubtedly to be the home of millions! Why, it is enough to make us quote Carlyle when he says the British Isles contain 35 millions, *mostly fools*, and to apply it to our own case. I am a sanguine man, and like most sanguine men have had to pay for experience, but after 26 years' residence in the Colony I say unhesitatingly, that in spite of all draw-backs, our borrowing and our squandering, the progress of the Colony in that 26 years has exceeded my most sanguine expectations, and I am very sure that the progress of the next quarter of a century will be still more remarkable. I say to you to-night, have hope for your adopted country, and you have ample ground for it. Do not hope for sudden riches; they might be like Dead Sea fruit, which turns to ashes in the mouth, but hope for a fair reward for honest labour whether of brain or hand. We have done much in the past, in spite of many mistakes, and we have a grand future before ourselves and our children. Have hope not only in yourselves, but in that beneficent Creator who who not made this wonderful country for nothing; and as you stand in fancy or in fact on some lofty elevation, gazing on the magnificent panorama of mountain and lake, of glistening glaciers and stupendous waterfalls, of woods and pastures nestled in valleys at the foot of hills laden with gold, say with Milton, as he impersonates our first parent, with bowed head and reverent heart:—

These are Thy glorious works, Parent of Good!
Almighty! Thine this universal frame
Thus wondrous fair; Thyself how wondrous then
Unspeakable, who sitt'st above these Heavens,
To us invisible or dimly seen
In these Thy lowest works, yet these declare
Thy goodness beyond thought and power divine.

I know of nothing more ennobling than the gradual realisation by the student of Nature of the Reign of Law. Young men, study Nature for it will lead you nearer Nature's God. Do not aim at the mere sordid pursuit of wealth, but seek to add to the common stock of knowledge by discovering of yourselves some of Nature's secrets, and so benefit, not only yourselves, but others. Tell us something, as Hugh Miller has done, of the "testimony of the rocks," and while you are filling your mind with grand ideas, you will be helping on the progress of the race, by preparing the way for future millions in this Greater Britain of the South, than which there is not a finer country on God earth. Of it may be used almost literally the words of Moses—"For the Lord bringeth thee into a good land: a land of brooks, of water, fountains and depths, that spring out of valleys and hills—a land of wheat and barley, and vines and fig-trees and pomegranate—a land of oil, olive, and honey—a land wherein thou shalt eat bread without scarceness, thou shalt not lack anything in it—a land whose stones are iron and out of whose hills thou mayest dig brass."

Moses knew nothing of the discoveries of modern science, or of the wondrous laws by which Nature is governed, but surely these, too, are of God; and we cannot suppose that all the profuse provisions of a bountiful Providence are without design for the ultimate good of man But rather may we believe "that through the ages one increasing purpose runs." While, then, we pursue our avocations and increase our knowledge and avail ourselves of all the good provided for us, there no need for us to forget that, in the grand words of the Presbyterian Catechism—"Man's chief end is to glorify God, and to enjoy Him for ever." We are stewards of all this wealth, and will one day hare to give our account.

And now for a few practical observations. First, with reference to the district of Southland. On the geological map of Hutton, a great part of Southland is described by the one word "Alluvial," Yes; no doubt. The low-lying country which you see on this part of the map, between the Waiau and New Rivers has undoubtedly been largely deposited by water, but though on the surface, you have fertile soil and many square miles of forest, what is underneath? Here comes in the importance of bores. There may be various geological formations of different ages underlying the surface soil, and there certainly a large quantity of glacial drift which has come down from the gold-bearing rocks of the interior, as shown by the Clifton Waterworks bores.

I have some distinct evidence of auriferous drifts near Gore, and on to Edendale. You have to the westward

Round Hill and Orepuki, and on your coast auriferous beaches, formed, as I believe, by the sea washing a face of deposits below the sea level bearing gold. I believe such deposits underlie, perhaps at considerable depths, a great part of South land. At Clifton the bore disclosed 4 feet of black sand over 50 feet from the surface, but some of the rocks, *in situ*, belong to a different geologic age; and in these, though gold may not be found, coal may. But how to search? Examine drift in river beds and in cuttings, collect and preserve specimens, be particularly careful to record and study your bores. I think you should form an Amateur Prospecting Association— not, perhaps, with any immediate hope of gain, but to advance the general stock of knowledge.—and you will then discover how large a fund of interest you have in every journey. If any unusual specimen is discovered preserve it, discuss it, if possible get it examined by an expert or analysed. As one means of obtaining an idea as to there being anything of unusual character in any specimen examined, the fixing of its specific gravity, *i. e.*, its weight in water compared with its might in air would be useful when brought to a table of the true specific gravities of substances of a similar character. It was by this means that Archimedes tested the royal crown which was suspected and found to contain silver when it professed to be entirely of gold, and thus an important law was established. A simple apparatus might be devised for carrying out this suggestion, and the arithmetical formula for recording the results is comparatively simple.

Set yourselves to discover facts and to record them. Here a fossil, and there a mineral, may be of great use to the geologist in establishing the age of a particular formation, and, if no other result follows, the louse of science will be advanced. I shall be happy to correspond and to give or get any information within my power respecting specimens that may be submitted to me. In recent journeys my notes record no fewer than twenty-one facts of more or less importance snbmitted to me.

As to machinery vast improvements may be expected.

In hydraulics we have Perry's remarkable improvements He is now engaged in a large scheme for the United Hercules Company, where a mile of 20-inch steel pipes will be used, and the material will raised from a bottom below the level of the river to a sufficient height to obtain a fall. The head of water is about 700ft, and the pressure will be enormous. To show at what a small cost hydraulic works can be carried on I quote the following telegram received by me in answer to an enquiry from a gentlemen at St. Bathans:—"With Improved hydraulic appliances in use here gravel formation at depth of 100 to 150ft. profitably treated at return of 2d. per cubic yard." This is marvellous. If I were asked how much material we had in this district which would pay far more than this, I would say billions of

Mr. M'Queen has designed, under the supervision of Mr. L. O. Beal, jun., C.E., a dredge for working the deposits of Arthur's Point, shotover. It has a draught of 2ft., and cuts its own channel. It started exceedingly well, but needs some slight alteration. It is calculated that working three shifts night and day it will lift 3,000 tons in 24 hours, and in the first half-hour two ounces of gold was got. The cost of raising on this basis will be about 2½d. per ton, and as there is an 120 acre claim, there is work for years for it. The large Welman Dredge at Waipapa Point is about starting to work the auriferous black and there. It will doubtless lift large quantities. The difficulty will be to save the fine gold from such a quantity of sand as 100 tons an hour.

There is great need for improvements in quartz-crushing. Mr. Gordon, the Government Inspector of Mines, contributes an article on the American Steel Rolls to the Government Book of Mines, to which I am considerably indebted. It seems that two sets of these rolls will crush 100 tons of quartz a day at less cost than stamps, and more effectually; this invention is at least worth enquiry. There are varied schemes for gold-saving. I have considerable hopes of the air blast We certainly lose a great deal of gold, but partly from insufficient crushing appliances and the want of a proper system of treating pyrites The whole question needs careful investigation.

I think the following are desiderata which we may expect the genius of our young mechanics to supply:—

- Handy quartz crushers on wheels for prospecting.
- Pumps on frame and wheels, with lifting gear attached, for prospecting deeper ground with the assistance of a portable engine.
- Magnetic machines for dealing on a large scale with black sand
- The use of air blasts for separating tailings of different specific gravities and sorting them, so as more readily to extract fine gold.

These two last ideas are now under consideration by some mechanics in Dunedin under my advice.

- The application of electricity as a motive force in various forms

I cannot be classed entirely with the man of one idea who, when he remarked to a companion, "Tom, I've got an idea," received crushing reply, "Keep it, my friend, you will never have another." I have lots of ideas, the only difficulty is the want of sufficient ability to put them in practical shape. But there is much latent talent in an intelligent community like this, and if I set you thinking I shall not despair of some results. But I might go on all night. The field is a wide one, and I hope others more competent than myself will be found to work in it.

Just a word to the ladies present. We have the example in Australia of a lady miner, Miss Alice Cornwell,

who qualified herself for the management of large mining pursuits, and is now engaged is large financial schemes, to which I am sure you will wish success, This lady took up mining pursuits to benefit her family, and succeed remarkably. She has recently bought an estate valued at £250,000, and is forming a company with £1,000,000 of capital to take up Mining Agency throughout Australia and New Zealand.

I close with a few pregnant words of Carlyle:—"Produce, produce were it but the pitifulest infinitesimal fraction of a product, produce it in God's name. 'Tis the utmost thou hast in thee; out with it, then Whatsoever thy hand findeth to do, do it with thy might."

After delivering my lectures my attention was called to an article by Douglas W. Freshfield, Secretary Royal Geographical Society, in the December number of the Society's Journal, on the "Conservative Action of Glaciers." Mr. Freshfield differs from all other authorities I have consulted in questioning the grinding power of glaciers, and he regards them rather as ice sledges that bring down materials deposited on them He adduces a good deal of evidence in support of his theory, but the points at issue are not material to my conclusions that ice has in some way had much to do with eroding the valleys and carrying forward broken rock. Regarding the precise mode of operation we have no doubt still much to learn.

Appendix.

Tin.

The discoveries near Port Pegasus, Stewart's Island, consisted at first of stream tin, which was found in considerable quantities with a little gold in the sand. Since the discovery of small lodes of valuable are the matter has assumed great importance, and there now seems every prospect of a most important industry being established. There is an excellent port at Pegasus, and excellent timber, but the density of the bush will somewhat delay the development of the alluvial finds, which are extensive, but vary in depth from several feet to a few inches. We can hardly hope for another Mount Bischoff, which has paid 142 dividends, amounting to £952,500, but there is a fair prospect of profitable returns. Professor Black deserves great credit for his energy in developing this new mining field.

Manganese.

This is a mineral of less value (under £5 a ton at Home), but at the Taieri Mouth the deposit is very large, near the surface, and easily worked, and the quality is remarkably good, the per centage of oxide far exceeding the average return. 12,000 tons of manganese had been shipped from New Zealand, chiefly the Bay of Islands, up to the end of 1885, and it is believed that the Home market will take all we are likely to send. The limit of the industry is the quantity which can be taken Home at ballast freights. There is a good margin for profit at present, but high freights would greatly reduce this. The mine is under the management of Mr. F. Wayne, of Milton, and the first shipment will shortly be made.

Promising Gold Ventures.

The newly discovered Nenthorn Reefs, 24 miles from Dunback Railway Station, Otago, show very rich indications, and their accessibility is in their favour; but it will take some months to fairly test them.

The working of the Island Block, Clutha, is in the hands of a Victorian Company, and extensive water appliances will be needful.

Black sand will be extensively worked at the Clutha and elsewhere as soon as a satisfactory method of dealing with it is discovered. As such as 15dwt. to the ton has been taken out of thin layers near the Clutha, and it is found in various spots from Catlin's to the Bluff. It [*unclear:* as] been worked off and on for a length of time in small quantities, the problem now is to deal with it by machinery on a large scale, and the [*unclear:* results] of the Welman Dredge are looked for with interest.

Hints to Prospectors Alluvial.

If gold is found in or near an existing creek, though it may not be rich, it is worth while to cross-cut to the terrace on either side of the valley in which it runs to discover the former bed, and richer deposits may be found under the terrace. Sometimes there are indications of the old river high up on the sides of the valley; these are worth testing If water and fall are available, much ground may pay for hydraulic sluicing, which would not pay the individual miner. And even poor prospects should be recorded.

To get a fall, it may be well to begin at the embouchure of the creek into the larger river, and work up it. There may also be deposits underneath—*i.e.*, at lower levels—but these would require pumps to prospect.

Rich, flat ground would be best prospected by sinking a cylinder by the air-lock, but this involves

considerable expense.

Bores are often choked by the water driving up sand.

If a hole is dug for any purpose, wash a dish of each of the various layers for prospects and record.

The terraces on the western or north-western sides of old lake-beds would probably be the richest in gold.

Pyrites and other material washed out should be saved and tested

Platinum, which has a silvery appearance and is heavier than gold by about 10 per cent., is sometimes found in the dish (Orepuki). It is worth about 30s. to 40s. an ounce.

Cinnabar, a heavy red substance, the ore of mercury, may also be found. Also, tin ore—which, however, is usually found associated granite,—and if crushed between two dinner knives, should give a whitish grey powder.

The magnet should test most iron sands and ores, but I am informed there are some which are not touched by the magnet. Have any unknown material tested. I shall be glad to receive samples.

QUARTZ LODES.—A rough test may be got by crushing fine and blowing carefully with a bellows, if water is not handy. An iron pestle and mortar and small bellows would be useful in dry testing, where water is not readily available. There are certain hard ferruginous quartz cements, which are worth crushing fine and testing. I believe also, some schist rocks with numerous small veins of quartz through them are worth testing, if such rocks contain 4dwt. or 5dwt. to the ton they would pay for crushing with steel rolls on a large scale on a face and reefs might be disclosed in the working. I believe where the schist is much contorted—*i.e*, corrugated in the folds, the reefs will be broken; but I should be glad of practical opinions on this point.

Front Cover

George Augustus Selwyn. decorative feature

By J. G. S. Grant,

First Rector of the High School of Otago, and Founder of the Eight Hours System of Labour.

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George Augustus Selwyn.

Tucker's "Life of Selwyn"—in two octavo volumes—is a pure compilation from the Bishop's own letters, journals, and correspondence. It lets the man speak for himself, and takes the testimony of his intimate friends and colleagues by way of mirroring forth his real character. He was born at Hampstead in 1809. He was educated at Eton, and was a graduate of Cambridge, his special college being St. John's. He was consecrated Bishop of New Zealand in 1841. He sailed from England on December 26, 1841, in the Tomatin. Tucker justly says : "Surely no ship since that which carried St. Paul has ever gone to sea with a holier or more precious freight." His party numbered Mr. Cotton, a student of Christchurch; Mr. Whytehead, fellow of St. John's College, Cambridge; Messrs. Cole, Dudley and Reay, missionary clergy; three catechists—Messrs. Butt, Evans, and Nihill; and a schoolmaster and schoolmistress, and his two chaplains. Rupai, a Maori lad returning to New Zealand, was on board. Selwyn learned his language on the voyage. Cotton and Reay made a concordance of the native Testament, and the Bishop made a comparative grammar of Raratonga, Tahitian, and New Zealand translations of the New Testament. On May 19, 1842, the Bishop landed at Auckland. Characteristically enough, he preached, on May 31, a sermon in the Maori tongue. His first visitation of his diocese "extended over 6 months, in which 2,277 miles were traversed, 762 on foot, 86 on horse-tack, 249 in canoes or boats, and 1,180 by ship."

In 1843 he started a college at Waimate. It was literary, religious, and industrial. His own stipend was £1,200. But in 1852, when the Colony received an independent legislature, the Crown ceased to pay its moiety, His spirit was sorely exercised in 1843, on the occasion of the outbreak at the Wairau. When he landed in the Colony there were about 100,000 natives. He laboured zealously to Christianise and civilise them.

In 1844 he married 25 couples in Foveaux Straits, and baptised their 61 tchildren. "The fathers and mothers had been living together for some years" before his visit.

After returning from his tour of the Middle Island and Stewart's Island, where he baptised 71 children, in places hitherto unvisited by a clergyman, he writes, in April, 1844, to the Countess of Powis :—"Have now a bird's-eye view in my mind of my whole diocese, and a beautiful mental map it is, it looked upon, as it may be, at the distance of fifty years; peopled with an orderly and Godly race of settlers, residing in the hundreds and thousands of fertile valleys watered by the clear and sparkling streams, which flow from the fine wooded hills with which the neighbourhood of the coast is bounded." Heke's insurrection at the Bay of Islands was a sore blow the Bishop. But according to the noble philanthropist, "there is something in the native character which disarms personal fears in those who live among them, and are acquainted with their manners. All suspicion of treachery seems to be at variance with the openness and publicity of all their proceed- ings. Heke published

beforehand his determination to attack Kororareka the day on which it was to be made, and even the particulars of his plan for the assault. He, being a just man, was, of course, exposed alike the suspicion of the natives, and to the animosity of the colonists. In 1845, Bishop Selwyn "sought to allay the heat of the blood, and to arrest the fury of the fight; he was also seen bearing the wounded from the field; afterwards unwearied at the bedside of the dying; he was the nurse, surgeon and servant of the sick, as well as their spiritual attendant." The great Bishop, in the midst of turmoil and mutual animosities, is full of sympathy for the English Church : "When I look upon the immense dormant powers of our Church, which for secular reasons are inoperative, its convocations, its synod of bishops, its cathedral system, its diocese organisation, all of which powers are at real work in the Church of Rome, and might be brought into use with us, I cannot doubt that it is our duty to develope all the energies of our own Church before we pronounce upon her insufficiency. My desire, is, in this country, to try what the actual system of the Church of England can do, when disencumbered of its load of seats in Parliament, Erastian compromises, corruption of patronage, confusion of orders, synodless bishops, and an unorganised clergy." When he became Bishop of Lichfield he actually showed how practicable all this was, for he infused life and soul into its dead organism. He did on a large scale what he accomplished on a small scale in New Zealand. "To move my diocese in any perceptible degree I must multiply my own single force through a multitude of wheels and powers; alone, I am powerless. Before me lies an inert mass, which I am utterly unable to heave, and there is no engine ready by which I can supply the defects of my own weakness."

He himself created a system, which became subsequently a model for English dioceses.

In 1846 he transplanted his college from Waimate to Auckland. By the generosity of his English admirers, "a happy party of all ranks-Bishop, Arch-deacon, priests, students and boys" was housed in elegance and comfort. Gradually an "hospital, native schools, servants' houses, and a temporary chapel" were erected. He hunted all over New Zealand and the Melanesian Isles for "hopeful plants" to stock his educational nursery. One hundred and thirty souls—English and aboriginal—"laboured at the cultivation of the college estate, and no task was considered menial." The natives were also taught "to spin and to knit" by means of machinery, so that the Bishop was the pioneer promoter of woollen factories in New Zealand.

In his voyages to Wellington, Otaki, Nelson, Akaroa, Otakoa, the Chatham Islands, and Foveaux Straits, the Bishop enjoyed "the charms of New Zealand air and scenery," and his faculties were quickened by "the well-known effect of salt water."

The Bishop frequently came across a "number of young men of good family and education who had been thrown away "in New Zealand. He had, however, no sympathy with "the demon of whist and science—that false science which was the bane of Cambridge, where second-rate men spent all their time in hearing or telling some new discovery, while the true knowledge of the real interests of mankind were little regarded."

Bishop Selwyn himself always acted upon Christ's example-"Who gave much and received nothing in return." This motive urged him "to pace over thousands of miles of woods, mountains, and swamp," in his great labours of faith, hope and charity. He was a doer, not a mere talker. "We have been cursed by a more than usual share of speculative talk ending in nothing; more philanthropy has been written about New Zealand and less practised than about any other country in the world. If people will now talk less and do more, we may still have the happiness of adding another noble people to the family of civilised men." In his case Bede's definition of the Episcopate was realised—it was a title, not of honour, but of work. His charges to his Synods breathed learning, sound doctrine and common sense. New Zealand he regarded as a central missionary point, whence he could evangelise the Pacific isles. Here is a pill for our godless professors. "A college without a daily service is like a body without breath or circulation of blood." His great aim, in all his voyages, was "to bring back some promising boys to associate with his native scholars, as a beginning of the Polynesian branch of St. John's College." He greatly loathed the "floating body of rogues and vagabonds who wander from island to island successively, as British justice overtakes one place after another; setting up their grog-shops just outside the pale of civilisation, and there poisoning the work of the missionary and breaking his heart. Such was Kororareka before the country was colonised."

In 1848, "from Kaitaia at the North, to Stewart's Island at the South, over the length of a thousand miles, there was not a village in which the Scriptures were unknown. Out of a native population of 100,000, more than one-half had embraced Christianity."

Peace being secured in New Zealand, after "the fatal affray at the Wairau, the burning of Kororareka and the subsequent wars at the Wairate, at Wanganui and at Porirua," the Bishop made his first voyage to score of the Polynesian isles, for the purpose of "acquiring some practical Knowledge of the vast and almost unexplored field of Melanesia." The result of his voyage of observation was the practical knowledge that "the infamous conduct of unprincipled English traders was sowing those seeds of ill-will and of righteous retaliation, the full harvest of which was reaped in 1870, when Bishop Patteson was massacred at Nukapau." The aboriginals of New Zealand felt that they had been "treated like pigs and slaves."

By the counsels of the missionaries peace had been preserved for a long time. In 1848, in his twenty-ton

boat, Bishop Selwyn visited Otago to [*unclear:* nsel] and help the first settlers. On this occasion the Bishop addressed "the tribe that had assembled to receive," from the Government agent, the sum of £2000, the purchase money of the Middle Island lands not yet alienated. "They had given plains, mountains, rivers, etc., trusting to the good faith of the Government to make suitable reserves for their use." Thus it appears "that lands which would have cost millions to take and beep by force, are quietly ceded for less than a farthing an acre. "

On July 4 the Bishop returned to Auckland, "after a voyage of 14 veeks, having sailed 3000 miles and visited 13 places." He was, indeed, a Cerberus in the Colony, and would not "resign" the New Zealanders to the tender mercies of men who avow the right to take their land, and who could not scruple to use force for that purpose." Avarice prompted this afterwards.

Hence, all over the Pacific Isles, "the most frightful crimes of rapine and massacre are now being committed by the people who received Captain Cook, 70 years ago, with a friendly disposition. The change must be attributed to the fact that we have followed up our first knowledge of New Caledonia, with the most sordid and unscrupulous schemes of avarice, instead of sending out men with the heart of Cook, and with the powers and graces of the ministerial calling." The good Bishop, therefore, "searched at the choicest youths among all the islands, and brought them into his College; and with this centre once formed, the work of grace began to [*unclear:* gread] to all the regions beyond." The Bishop, in 1849, established Trinity College, at Porirua, for the education of the natives of New Zealand, and Melanesia. He always condemned the *greed of land*, and for the first ten years he was very unpopular in Wellington. His was "a work of [*unclear:* unweary-] patience," but he had "courage of the highest type" to sustain him in [*unclear:* image not readable] work of faith and labour of love. Believing that "New Zealand would [*unclear:* ecome] the Britain of the Southern Hemisphere," he desired to make his diocese "the first missionary centre of the Southern Ocean." He was an adept in mastering quickly "the elements of a new language sufficiently to enter at once into communications with the native people, and thus to secure a further progress every day by the removal of the first difficulty." His two colleges he regarded "as the central reservoirs into which all his phials could be poured from the wells and springs of many nations." The confusion of the tongues was very great. "In islands not larger than the Isle of Wight we find dialects so distinct that the inhabitants of the various districts hold no communication with one another." He characteristically asks: "What would you think of an Eton of the Antipodes, in which a different language was spoken at every master's house?" He adds the wise reflection: "No one can go through these seas without finding with humiliation how the martyrs of the Cross fall short, both in number and in energy, of the martyrs of the world." He brought from those emerald isles wild little boys to be educated at the colleges and to be "the forerunners of the indigenous clergy of Melanesia." Williams, he believed, "was sacrificed to an indiscriminate thirst for vengeance provoked by wanton and barbarous aggression" on the part of certain white "miscreants who have disgraced their country and belied their religion by their evil deeds among these islands." He believed in the general honesty of the unsophisticated natives; for, "it is impossible to believe that men who trust themselves so confidingly with strangers are in their own nature treacherous and cruel." His matured plan for the conversion of the Melanesian tribes was "to select a few promising youths from all the islands, to prove and test them first by observation of their habits on board a floating school, then to take them for further training to New Zealand; and, lastly, when they are sufficiently advanced, to send them back as teachers to their own people, if possible, with some English missionary, to give effect and regularity to their work."

The Bishop's thoughts "revolved in an orbit from New Guinea to the Auckland Islands." The Bishop was not only a practical man, but was also a good scholar. He prepared an analysis of the Bible as "a royal road to learning it" by his boys. "It was found that all the words in the Bible could be classified under about 250 heads, and under these, by following the root of thought rather than the root of language, the delicate lights and shades of each idiomatic expression were fought out."

Writing in 1850 to a friend at Eton, the Bishop urges upon him to "dedicate his very best boy to the mission work. Lead him steadily to look upon a wild hill in New Caledonia as a more noble post than a fellowship at Eton, or even the provostship of King's." New Caledonia he describes as a "lovely country. Such waterfalls! Such rocky piles and minarets of dark grey stone! Such a river as I have rowed into this afternoon, with tufted groves of cocoanuts sheltering the neatest beehive houses, and hanging gardens of yams and taro on the heights, and dingles of dark wood, which tell where the hidden water-course has fed the trees during the scorching heat and bright green mountains towering over all, and running up into the deep blue sky, as if to teach us how prodigal nature is of her charms to waste them thus upon eyes which cannot discern beauty and hearts which cannot admire it. But believe me that it is not true that *only man is vile*. This race a men are not vile, but, as Cook found them, the most friendly people in the world." On board his 20 ton boat he had "the representatives of ten different languages in dialects." Bishop Selwyn had "a singleness of purpose, the entire devotion of himself, and all he is, and all he was—the entail renunciation of self and all belonging to him in comparison with the duty and the object of the present moment." He believed that "the chief and most influential means for

the accomplishment of his object, is the education of youths from these islands at the College, and not the planting of mission stations in the islands themselves. The great variety of languages amongst them is a bar to this, and points rather to the need of gathering them together from all parts and teaching them English, and so making our tongue the missionary language, as the Roman was in former days." He had fifty boys of first-rate natural parts in his College of St. John. They were taught to work at different trades, as well as to read, write, cipher, and sing, etc. He had 1000 acres of land at St. John's College, and buildings worth £5000. His Colonial and English friends supplied the funds. "The scholarships at St. John's College are now—1850—ten in number, endowed with sums of from £500 to £700 each." When he took his boys back to their parents, he felt, from their joy and greeting, that he "was free of the islands, and could walk where he pleased."

On April 15, 1851, he wrote to Lady Powis :—"I am just returning from a voyage of 4000 miles to Stewart's Island, Otakou, Canterbury, Chatham Islands, Wellington, Nelson, and New Plymouth, and am now Within 100 miles of home, after an absence of four months." The Sydney people gave him a longer boat than the Undine, "which has now carried me 24,000 miles, a space equal to the circumference of the whole globe."

Bishop Selwyn, like all great men, was a good physiognomist. "His quick-sighted reading of countenance and apprehension of gestures; his habits of order and forethought, besides his calmness and courage, contributed to his safety, and enabled him to walk unscathed where others would be in danger."

In the Border Maid, which cost £1200, he, during his first voyage of three months, brought back 13 scholars from 6 different isles, and speaking [*unclear:* image not readable] different tongues. He had spread the Gospel "over a range of 4000 miles, to islands of which even the names are almost unknown in London." He had six youths at his college from the Chatham Islands—"the actual antipodes of Greenwich." His diocese extended from "the Auckland Islands to the Carolines—*i.e.*, from 50 south latitude to 34 north latitude, upwards of 80 degrees of latitude by 20 of longitude." In short, he surveyed "the progress of religion in the coasts and islands of the Pacific."

In 1851, in the tenth year of his episcopate, he held a confirmation in the college chapel. The candidates, "clothed in white robes, represented people speaking ten languages, gathered from one-fifth part of the earth's circumference from east to west, and one-tenth part from north to south." He had established St. Stephen's school for native girls." There suitable wives were trained for his native teachers. It was grand and thankworthy to walk through the fields which he had sown, amid trees which he had planted, towards a church which he had built, and filled with scholars whom he had reared, whose mouths he had fed, whose bodies he had clothed, whose minds he had taught, that they might do the same for others after them, by the labour of his own head and hands, and through a vast amount of opposition and lack of sympathy."

In 1847-8 a body of military settlers arrived in the Colony, and "increased the college work greatly. The Government imported several bodies of pensioners, with their families, from England, and planted them in 4 vilages, within 6 to 8 miles of St. John's College, without making provision in the way of chaplains, or a salary for such. The Bishop, at his own expense, erected little churches at Panmure, Otahuhu, and Onehunga, all at distances from the college varying from 3 to 6 miles. He and his young clergy ministered to the spiritual wants of these pensioners. In 1850 he was recruited in his college work by the arrival of Messrs. Lloyd and Abraham. In 1853 the native industrial school ceased; for "industrial schools on the same principles were now at work in several parts of the islands, where boys could be fed and taught at half the expense." So that Bishop Selwyn was the real founder of industrial schools.

In 1852 Bishop Selwyn saw that "the careful superintendence of this multitude of islands will require the services of a missionary bishop, able and willing to devote himself to this work." After his return voyage, 25 youths and 2 young women—"the representatives of almost as many languages"—were added to his college. "The Bishop seemed to realise the true conception of the great Apostle of the Gentiles." These Polynesians had, indeed, their minds often dim and unused to exertion, but with every perceptive sense and faculty quickened to a degree of which we have no conception—the eye accustomed to track the step of every living creature, the flight of every bird in the air, the gliding of the many-coloured fish within their coral caves; the car, awake in the dead of night to the slightest sound which might warn them of the approach of an enemy." In 1852, he writes: "One whole year I have spent at sea between the English settlements, distant 1000 miles at their extreme points, and requiring a voyage of 2,500 or 3000 miles to visit them all. In that time my charge, journals, study of languages, navigation, and the chief part of my correspondence have been accomplished." The Bishop was a philosopher, for, writing to his son at Eton, he said, *inter alia* : "We can form some faint idea of spiritual agencies by comparing them with the discoveries of science, and then observing how far the most wonderful law of matter falls short of the simplest exercise of mind. The thoughts of time and distance are closely connected: the caravan in the desert measures its journeys by days and hours, according to the steady pace of the camel or ass; the earth's surface is measured in longtitude, either by degrees or hours, but the electric telegraph changes the usual course of our thoughts and daily experience by disconnecting distance from time. Still we have the wires to stand in the way of the pure conception of a spiritual agency, independent alike of

distance and of time. The polar system carries us a step nearer, where we become acquainted with a force by which all the planets are bound to the sun, and one to another. The amount of this force can be calculated with the strictest accuracy, but the nature of the force itself is beyond our comprehension. We simply give the name of gravitation to a power which we cannot explain, and which is so entirely independent of matter as to act equally through a *vacuum*. But we are conscious of a power within ourselves far more wonderful and inexplicable than any of the forces by which the universe is governed, because they are all reducible to some fixed and, for the most part, uniform law; but the power of thought within us, with all the rapidity of light and of electricity, and with the same power of passing, like gravitation, from earth to heaven, has an infinite versatility, which defies all calculation." The Apostle-Bishop spent a great part of his life "riding over the waves," sometimes "in a boisterous gale," in order to waft the Gospel news from isle to isle. In 1853 he was able to write: "The dim and visionary idea of New Zealand, which I used to brood over in 1841, before we left England, is changed by God's blessing to an accurate knowledge of every accessible part of the coast, and of almost every inhabited place in the interior." He had made seven voyages among the Pacific Isles, visiting more than 50 isles in perfect security, having disarmed the suspicions of the natives, which had been raised by the rapacity of so-called Christian adventurers, and had 25 scholars entrusted to him in 1852, so that they might pass a season under his hospitable roof. In 1854 he sailed for England. He declared at the Mansion House that "if the Church of England had £500,000 a year to spend in missions she could not do better with half of that sum than spend it on 500 Bishops with £500 a year each." Out of his own salary of £1,200 a year he only drew £500, and he devoted the £600 per annum, which the Church Missionary Society gave him, for the support of new sees." In 1854 he secured the services of Bishop Patteson to be Bishop of Melanesia, and raised an endowment fund of £10,000 for the new see. In the cause of missions he delivered four sermons before the Cambridge University. The Bishop of "the unnumbered isles of the Pacific" sent a thrill of enthusiasm all over England. In August, 1855, the Bishop boldly rebuked the murderer Katatore, and told him to his face that he "killed an unarmed man in cold blood for the matter of land. You repeated the act of Cain towards Abel, and in the sight of God and man you are a murderer." It was Selwyn's constant practice to "boldly rebuke vice, constantly speak the truth, and patiently suffer for the truth's sake." As a matter of course he was frequently "at varience with the civil authorities, and was bitterly misrepresented by the Press." During the first quarter of 1856 "he had walked 550 miles and ridden 450, having examined and confirmed 1,500 people."

His college was emphatically *the seed-plot of the ministry*. He was this year sailing in his new yacht, the Southern Cross, over the Pacific Ocean, and he visited Norfolk Island, which he thought a fine centre for his Melanesian scholars. He visited the Solomon Islands, the New Hebrides, and New Caledonia groups, 50 in number.

Norfolk Island he contemplated to make the head-quarters of the Bishop of Melanesia. Speaking of the Pitcairners—whose friends objected to the introduction of the coloured race amongst them—the Bishop justly writes : "What the community will want is a high and practical tone of feeling and sense of duty; something to energise a nature which partakes largely of tropical inertness; some higher stimulus than the wool, beef, and arrow-root with which their thoughts will be speedily absorbed." During this voyage be landed on 60 islands and brought 33 scholars to New Zealand. He administered the Communion to 85 persons on Norfolk Island, including a Septuagenarian woman, a daughter of John Adams, the last survivor of the mutineers of the Bounty. On Christmas Day, 1856, Dr. Harper was installed into the Bishopric of Christchurch.

Along with Patteson, in 1857, he visited 52 islands in the Pacific. Patteson had a special aptitude for learning the different languages of the isles. He gloried at the idea of the establishment of bishoprics in New Zealand, so as to leave him more time for missionary work. The vision of the bishopric of Norfolk Island, with "its train of 100 islands," rose before his fervid imagination. The Southern Cross was slightly "damaged by six hours' bumping on a reef in New Caledonia." The Bishop dived beneath her and "felt over the whole of the keel and forward part of the vessel, and ascertained the exact condition of her bottom, and the nature of the injuries sustained." He left New Caledonia with a salute of 11 guns from the French officers. This was in 1858 : "A year of blessings—two prosperous voyages to the islands; one prosperous voyage to the southern settlement; one-third of the visitation tour by land accomplished; the consecration of the Bishops of Wellington and Nelson." In 1859, first General Synod was held, and Archdeacon Williams was consecrated Bishop of Waiapu. This year he took his farewell of the Melanesian Islands, accompanied by Bishop Patteson. The Rev. S. Blackburn, the head master of St. John's College, justly said : "Bishop Selwyn I always regard as the greatest man this age has produced. A king, every inch of him; he would rule by a look, but stoop to perform the most menial office without the slightest loss of dignity." He had great energy, "a love of work, and great power of endurance. I have heard of his taking eight services in one day," when there were 10,000 soldiers in the North Island, and no chaplains. He was a great favourite with the soldiers. They admired him as a man, a bishop, and a potential soldier. He would have made a grand general. His seaman-like qualities were equally admired by the naval men. They thought he would have been a first-class admiral. He had a marvellous "acquaintance with

Holy Scripture." He was a sort of universal genius. The trials of colonial bishops—according to the testimony of his own fellow-labourers—"do not so much consist in the pleasant excitement of walking through the glorious forests, and swimming the rivers of New Zealand, nor in the novelty and refreshment of missionary work among a simple or savage people, but in being brought into contact day by day with the rudest and coarsest spirits of unrestrained colonialism, which vaunts itself and prides itself most especially in saying and doing the most offensive things in the most offensive way." The Bishop's address, at the opening of the triennial General Synod of New Zealand, delivered on March 9, 1859, was certainly a most masterly production. He then and there handed over Crown grants of 14,000 acres of land for the support of religion and education. He told the Synod that its "field of view extended over 80 islands; and our work will not be done till twice that number of heathen islands shall have received the message of salvation. The Synod consecrated the Bishop of Waiapu—"four Eton bishops lighting a fifth candlestick to be a light to lighten our native Christians." The organisation of the Church was approaching to a state of comparative perfection. "The end and aim of this spiritual organisation is *work*, greater, better, more effectual work. Every object in the world around us suggests the thought that single-handed work has passed away, as belonging to an age of barbarism. The spade has given way to the plough; the scythe, the sickle, and the flail are being superseded by machines for mowing, reaping, and threshing. The single arm is reinforced by combinations of wheels and levers to raise a weight far beyond its own unassisted strength, and as man associates with himself the beasts of burden, and the mechanical powers to multiply his strength, so for the same purpose he unites himself with his fellow men. The first thought of the projector of any great work is to form a company." The Bishop was forming around him a noble company for the noble work of evangelisation. He was always a great and "eloquent advocate and convincing defender of synodal action."

In 1867, at the Church Congress held at Wolverhampton, he made an eloquent speech on the necessity of Synods being fully established in England. He hoped "that the day would shortly come when every diocese should have its own synod, where the clergy and laity would be presided over by their own bishop.

In 1868, he took his seat in the Convocation of Canterbury, and the Archbishop declared that "the bishops received very great benefit from the electric force which attended his presence, and which was certainly something new amongst them at the time when he became a bishop at home." And now that synodal organisation began in New Zealand, and deemed quixotic in England in 1868, is the general order throughout the dioceses of England. His exertions led to the restoration of diocesan synods. From his first synod at the Waimate in 1844, flowed a wave of reformation and regeneration over the whole stagnant sea of the English Episcopalian Communion. Bishop Selwyn possessed a great "talent and passion for organisation," and his example became contagious. The treaty of Waitangi was signed on February 7, 1840. But for the missionaries it could not have been signed. It provided for the continuance of the power of the Maori chiefs and their tribes. All their rights of property were reserved. The Maori war was the result of a disregard of tribal rights. Te Teira's "right to sell was disallowed by his tribe," in 1859. The title was afterwards found to be defective, and in 1863 the Government "resigned the Waitaru to its lawful owners." The courage and disinterestedness of the Bishop shone out at this troublesome epoch in great splendour. He claimed for the natives "all rights and privileges of British subjects, as guaranteed by the treaty of Waitangi." Bishop Selwyn testified to the "good sense and right feeling of these maligned people." At this time, 1861, "a fanatical prophet persuaded the people in a certain village not to receive the Bishop into their nouses, but to offer him a pig's-sty for his night's shelter. The Bishop accepted the churlish accommodation, set to work and cleaned out the pig's-sty, turning out the pigs, and then cut some clean fern, and littered it down for his bed. His conduct astonished the Maoris and made them say—*You cannot degrade him from the character of a gentleman."*

Governor Brown made a precipitate blunder. He should have "tried the Waitara question by law" before proclaiming war. Te Teira had no right to the land, which was subsequently relinquished by the Governor. The war was, therefore, unjust. Ten thousand soldiers took the field to prosecute a bad cause. The Bishop acted throughout as mediator, pacificator, and chaplain. While some soldiers were carrying a wounded man to the camp, the Colonel and the Bishop carried their rifles. "Some natives saw the Bishop carrying a rifle, and spread a report that he had fought against them. This poisoned their minds against him for two years. At last, on the occasion of a great meeting of natives, some speaker denounced the Bishop as one of their foes, when up got the wounded Maori and told his people the true story; and then all the bitterness and hostility turned to admiration and gratitude. It needed but time to reveal the whole integrity of the Bishop's motives, but all he did for both races during that disastrous period will, probably, never be known in this world.

Bishop Patteson said of him : "How often do I think with reference to him of a 'prophet is not without honour,' etc. Little did the Auckland settlers know of the man 'that standeth among them'; but let them say what they may, even they respect and admire him so greatly that his name must ever be a power in the land." In 1864 the Paimarire superstition broke out, after the departure of the troops. A lunatical prophet "professed to have received revelations from the angel Gabriel." It was an eclectic sort of worship—compiled from different sorts.

Like Mahometans they propagated it by the sound, "and no restraints were put upon the worst passions of our nature. Under the influence of visions, some reverted to cannibalism. Something of every creed they adopted; they adopted the name of *Universal;* called their doctrine Paimarire (all holy), and their Hawhaws (or barkers), from their habit of repeating the sound 'haw,' accompanied by a deep breathing from the chest." Horopapera Te Ua was the name of the insane seer.

His native clergy remained loyal throughout. "The real cause of the war has been the new constitution; and the cause of the greatest bitterness of the strife has been the new element of confiscation introduced by the colonists, against the will and express orders of the Home Government." The colonists were entirely in the wrong in this business. "Certainly nothing could look more like a determination to provoke a quarrel than the Waitara business; where the natives had been allowed to kill one another for two years in civil war, on land questions, raised by our eagerness to buy upon disputed titles. And then the sword, which had been never drawn to vindicate the law, was drawn to break it, and war made in the name of the Queen upon her own subjects on a question of civil contract on the very spot where murders remained unpunished, and the chief murderer became the ally of the Queen's representative." The cursed greed of *earth* was the cause of it all. We acquired "one or two million acres of very indifferent land, acquired at the cost of per acre and many priceless lives; and of the entire repudiation of the Queen's authority over the whole interior of the Northern Island." Up till that time the natives were quite willing to sell their land faster than we could pay for it at from ¼d to 10d per acre, wishing nothing more than to have houses built, roads laid out, and Englishmen settled amongst them. But our war-cry was, "O earth, earth, earth." The good Bishop bemoaned the lamentable state of New Zealand in 1864. He, however, again began "to build the tabernacle which had fallen down." We neglected the natives, and they "choose for their own chief magistrate the old friend of Governor Hobson, and the constant supporter of order and peace. He soon died, and we took the earliest opportunity of quarrelling with his son, because he did not, or could not, coerce the island chief Rewi, who has been the chief, if not the sole cause, of the renewal of the war. All the young king's land has been confiscated, but little or none of Rewi's."

This war cost England seven millions, to gratify the lust of land on the part of avaricious settlers.

In 1861 Patteson was formally consecrated first "missionary Bishop for the western islands of the South Pacific Ocean." Bishop Selwyn, in the course of his sermon, said that he had regarded, for the past 20 years, "New Zealand as a fountain to diffuse the streams of salvation over the coasts and islands of the Pacific Ocean, and that supplies had been furnished by the Church at Home with no sparing hand, to enable him to begin the work." Bishop Patteson would "go forth to sow seed beside many waters, to cultivate an unknown field, to range from island to island, himself unknown, and coming in the name of an unknown God. He will have to land alone and unarmed among heathen tribes, where every man's hand is against his neighbour, and bid them lay down their spears and arrows, and meet him as a messenger of peace. He will have to persuade them, by the language of signs, to give up their children to his care; and while he teaches them the simplest elements which are taught in our infant schools, to learn from them a new language for every new island. Already 60 islands have come under his care, and at least one hundred others, stretching westward as far as New Guinea, are among the number of the islands which are waiting for the Lord." In 1865 H. L. Jenner was selected for the new see of Dunedin, by the Archbishop of Canterbury, at the instance of Bishop Selwyn. He made a tour through Otago to raise funds for the Bishopric. This "thorny subject" reflects disgrace upon New Zealand. It was clearly a case of breach of faith. The fact is, Jenner was a poor man, and the Otago Episcopalians wanted a rich man for their Bishop. In 1872 and 1875 the English Bishops decided "that Bishop Jenner was the first Bishop of Dunedin, and that his claim to be so recognised could not in justice be withheld." Bishop Selwyn was of the same opinion. He collected the fund for his benefit. "I propose, therefore, to the donors, that I should be allowed to pay to Bishop Jenner, on his resigning his claim to the Bishopric of Dunedin, the interest which has accrued from the opening of the fund to the time of the meeting of the General Synod of 1871. My own contribution of £100, with interest, will be paid to Bishop Jenner, for whose use it was given." The Bishop of Quebec, in his address to his Synod in 1878, said that Selwyn was the most conspicuous figure, certainly the most active spirit, "in the first conference at Lambeth in 1867. The Quebec prelate also heard him deliver, in New York, before the grandest of missionary meetings, an eloquent speech which "held his audience under the spell of his burning thoughts. At the Church Congress of Wolverhampton, Selwyn was eloquent on "the necessity of synodal action working upwards from local to provincial Synods, thence to national, general and œcumenical. He predicted "that the time must come when the mother Church should have her duly-constituted Synods, and her laity taking their full share in their management," as was the case in New Zealand.

After 26 years of missionary labours the great prelate accepted the Bishopric of Lichfield, a diocese embracing Staffordshire, Derbyshire, and half Shropshire,—"three archdeaconries, forty-eight rural deaneries, 661 parishes, and 1,200,000 souls." Immediately he set about raising an endowment fund for the Bishopric of Auckland. He agreed to "guarantee £600 a year as long as he lived" to his successor, and one lady "promised to leave £5,000 by will." His furniture and library he bequeathed to his late diocese. "A near relative, who was

anxious that he should remain in England, offered to provide by will for ever for the maintenance of the Bishops of Auckland, and he gratefully accepted it." So the great Bishop who had "rough-hewn the institutions of a nascent Church and a future empire, and stamped on both the impress of an original mind," began a reformation of the mother Church in England. He returned to New Zealand to set his house in order before finally cutting connection with the Antipodean Church. Bishop Selwyn was, on January 9, 1868, enthroned as prelate of Lichfield. For about a year "he was the occupant of two sees, 15,000 miles apart." He resolved, contrary to the immemorial practice of his predecessors, to reside in his Lichfield palace, and "to abandon Eccleshall Castle." Wherever he went, as the Archbishop of Canterbury said, "an electric force attended his presence." At once he began to agitate for "the division of populous dioceses and the creation of Diocesan Synods." The man who laboured so zealously for 26 years in Australasia, now turned his herculean energies in the direction of throwing life into the almost defunct organism of Anglican Episcopacy. In six months a "synodical organisation, similar to New Zealand," was established by the wise and "great master-builder." In October the New Zealand General Synod assembled at Auckland, and Bishop Selwyn, on the 5th, gave them a characteristic address, replete with prudence and wisdom. The Synod, in return, gave him a valedictory address.

There are now seven Bishops in this ecclesiastical province. He had acquired "wide and varied experience of many forms of human life." He was brought into personal "contact with men in every stage of barbarism and civilisation, on lonely journeys in the solitude of New Zealand forests, and on the waves of the West Pacific." Trained thus, God now called him "to quicken the very heart of the dear mother Church, so that the life-blood might circulate with fresh vigour throughout the body." They could not possibly forget him, for "every spot in New Zealand is identified with him. Each hill and valley, each river and bay, and headland is full of memoirs of him; the busy town, the lonely settler's hut, the countless islands of the sea, all speak of him." It may be truly said that he has stamped his mind and spirit upon New Zealand, and, in years to come," the multitude of the isles may learn the name of their first great missionary and rise up and call him blessed." The Maoris, also, offered him a grateful and generous farewell. On October 20 he left Auckland—which kept a general holiday in his honour—and went to Sydney, where he received an enthusiastic reception. Towards the close of 1868 he again reached England. He selected the Rev. W. G. Cowie, rector of St. Mary's, Stafford, to be his successor in Auckland. "During the ten years of his Lichfield episcopate, he confirmed, singly and carefully, 100,000 souls."

He raised the standard of Clerical Education in his diocese, and made his Theological College a real nursery of the Church. Bishop Selwyn, in 1871, visited, by invitation, America, and was present at the Baltimore Convention. He had done much to girdle the globe with a "circle of light." He was a truly representative man, "around whose name a halo of romance had for years been cast."

Bishop Stevens, of Pennsylvania, as President of the Jubilee Meeting of the Board of Missions, eulogised Selwyn in glowing terms. His diocese had "grown into seven dioceses, with their bishops and clergy, and that land which he found in a state of semi-barbarism, just, as it were, coming out of the benighted state of heathenism, he has left nominally a Christian land." Bishop Selwyn replied in a glorious speech. The man who had "planted in the most distant part of God's earth, in New Zealand, the Banner of the Cross," urged his hearers, with their "nine millions of square miles, with their vast population increasing every decade of so many millions of souls, to undertake the charge of the larger nations of the earth."

In 1871 Bishop Patteson was massacred. A man of culture, meeting such a fate, silenced and rebuked the sneers of anonymous scribblers against missions. Bishop Selwyn mourned his death and his irreparable loss to the mission. "He seemed to have suddenly become ten years older." Lichfield was the centre of missionary activity. All eyes were directed to its Bishop for help and advice in cases of emergencies. Beneficent clergymen of its diocese became Bishops of Sierra Leone, Auckland, Trinidad, Dunedin, and Argyll. When he became a colonial bishop there were only 9, and in 1873 the number had swollen from 9 to 53.

Bishop Selwyn was deputed by the Canadian Bishops to present their memorial to the Archbishop of Canterbury, praying his Grace "to undertake an office equivalent to that of patriarch in the ancient Church, and to convene a general conference of the Bishops of the Anglican Communion to carry on the work begun by the Lambeth Conference in 1867." On the presentation of that document in 1873 to the Upper House of the Southern Convocation, Bishop Selwyn delivered a really splendid speech, "fresh and unconventional, but aiming at nothing save the adaptation of ancient principles to new circumstances." He tola convocation, from personal sight and Knowledge, that the "seventy or eighty Bishops" in Canada, the United States, New Zealand, and Australia, cherished "an earnest desire to be united in brotherhood with the Church of England." As head of 150 Bishops, he wished the Prelate of Canterbury to "construct a system" of confederation by the advice of the members of these various churches. In his own diocese he had established missionaries and probationers for the evangelisation of the ignorant masses of the Black Country.

In 1877 "the Bishop appointed a Barge Mission chaplain, who endeavoured to collect the bargemen for worship at their loading places. Every spare Sabbath the Bishop gave up to this work, so congenial with his spirit; but he saw that to really influence the canal population, a canal floating church must be provided, and he

built a diocesan barge, which should move about freely, and in which he determined himself to navigate the grimy waters of the Midland canals with the same cheerful devotion which had carried him over the laughing waves of the South Pacific." He infused into his clergy a spirit for carrying on foreign missions.

In 1873 his younger son offered his services for Melanesia, and in 1874 left for his sphere. In 1877 he was consecrated at Nelson—a simultaneous service being held at Lichfield at 11 p.m.—Bishop of Melanesia. In 1874 he revisited America, and "attended the General Convention of the Church of the United States in New York." On that occasion he journeyed over Canada, and at Montreal he was present at the Provincial Synod of Canada. He preached the opening sermon at the Convention. In 1877 he was appointed prelate and chancellor of the Order of St. Michael and George—last held by the Archbishop of Corfu.

In 1877 he held his fourth Diocesan Conference. Here, at Lichfield, "he insisted with more than his ordinary vigour on the subdivision of dioceses as the first means of remedying evils and promoting efficiency in the Church." He had no misgiving as to the supply of clergy—ever) way adequate to the demand. The Bishop saw a source "plain as the progress of the rivulet, which, issuing from the little spring in the mountain side, is guided into the reservoirs, whence the water is distributed from house to house." The source of supply was Sunday-schools, pupil-teachers, Biblical and confirmation classes. He urged his clergy to "encourage the more promising of the young men who attended their ministrations, welcome them in their homes, watch over their habits, form their characters, and assist them in their studies." Then the "probationer system and the theological college would take up their work and do all that was necessary to send them forth well-furnished and equipped for the work of the ministry." Selwyn was an overseer, indeed! Such a Bishop we want in Dunedin.

Let us now, in the words of his biographer, "look at the principles which underlay the whole of that many-sided activity in the service of God." His convictions as a Churchman were thoroughly Evangelical. He led no party and enunciated no shibboleths, and, possibly, he satisfied neither Low, High, nor Broad Church. He was no passive follower of any man or faction. He loved the Church, detected her errors, and proposed remedies. For morbid and dissatisfied spirits, he recommended active service as missionaries. Had Manning done so, he might have been "the Xavier of the present age, and I could nave ceded to him at once one of the two signs of the terrestrial zodiac which have been assigned to my nominal charge. Among those fertile islands, crowded with living souls, and altogether untouched, we might, with such a leader as Manning, under God's blessing, have built up such a mission work as the Church has not yet seen." But, in place of acting thus, and "seeking the mind of the Spirit in councils of the whole body,' and remedying the English Church's "deficiencies, which are accidental and not organic," poor Manning fled to Rome. The "doctrines which divided less learned men and less humble souls into rival camps were discerned by him as being in harmony. Truths which to shallow, uninstructed minds appeared to be antagonistic, were in his eyes so nicely measured out as to produce a perfect equilibrium, like the physical forces which guide the planets in their orbits." He attached little importance to Ritualism. "I cannot think that candles, or vestments, or incense are matters which touch the conscience, because nothing can be necessary to salvation which is not contained in Holy Scripture." A conspectus of all the creeds—that of Athanasius included—clearly shows, according to Bishop Selwyn, that a definite faith is necessary, and that the maintenance of that faith to the end is a condition of salvation. Universal salvation and the temporary duration of future punishment he reprobated.

He judiciously held that "the experimental knowledge of the heart cannot be learned from books, or from meditation, nor even from the Word of God, unless the commentary be sought by self-examination, tested and corrected by close acquaintance with the hearts and feelings of other men. The death-bed and the school, the end and the beginning of life, are the seasons most full of instruction, for the simple reason that the mind in both states is least under disguise. Middle age is the season of self-deception. I think that I have found a hospital the best school of human nature. The more diversified the range of characters, so much the more complete is the lesson." He was both tolerant and courteous to others, but uncompromising in his own personal maintenance of truth. He always insisted on the paramount "value of religious instruction" in schools. The increase of the episcopate, the division of dioceses, and the consequent decrease of salaries, were always advocated by Selwyn. He himself began his episcopal functions with £1200 a year. "After thirteen years it was reduced to £600; after eighteen years it was reduced to £400; at the end of twenty-six years it was raised to £4,500. But amidst all these changes I never found the slightest difference in position, in influence, or my means of exercising hospitality."

According to Selwyn, "no Bishopric, as a rule, ought to contain more than 500 parishes, or more than 500,000 souls." As a citizen he was quite as consistent, fearless and independent, as he was a Churchman. "He had lost all faith in lawyers; all hopes of any politician caring for the interests, spiritual or temporal, of the Church, where such care imperilled the success or the power of his party." Consequently no party could claim him. On the burials question he would make no concessions, no compromises: "I hold that our burial grounds belong to the national Church, to be governed by its laws." Let Parliament, if it will, take them forcibly, it will be then our duty, "as loyal citizens, to submit." "He was not enamoured of the scheme of controversial

lecturers, and hated the discussions by which nobody was convinced; and he held that the attacks of the secularists, and of the Liberation Society would be best met by a Church united for action by previous counsels and deliberation." As was to be expected in the case of such a great man, "there was the profoundest humility and sense of personal un-worthiness." For 50 years his life "had been incessant toil and self-discipline." In his last illness, "amid the wanderings caused by bodily weakness, his thoughts were with the distant islands of the Pacific. On April 11, 1878, the great Bishop died. His body, by his own request, was laid in a grave "dug out of the rock, on which the Cathedral of St. Chad is built." His gifts and virtures were various and resplendant. He was simple in his deportment, hated "all double-dealing, and his mind and conscience recoiled from diplomacy and *finesse*; he had the courage of his opinions, and was fearless and outspoken," but gentle as a lamb.

All testify to the "uniform nobility of his life, and the healthy, vigorous manliness which characterised his every action. Everything that is generally associated with true heroism, contempt of softness and comfort, indifference to applause or censure, chivalrous defence of the oppressed and weak, hatred of aught that is mean and sordid, resolute devotion to duty, obedience to discipline so implicit as to seem to be without effort, unquestioning recognition of the claims of duty in the smallest things as well as in the greatest." His character was "myriad sided."

The zeal of Paul; the tenderness of Barnabus; the asceticism of the Baptist; the beloved spirit of John; indifferent to wealth; parsimonious in the expenditure of charities; "shrewd and thrifty in building up the endowments of the Church"; a born leader of men, yet humble and obedient to his superiors; "with much of combativeness in his spirit, and resolute will, he contended never for party ends or opinions, but always for the truth, and even the very existence of controversy gave him pain." He sowed the good seed, in much patience and suffering, looking forward to a rich but distant harvest.

He was an eloquent scholar, and might have shone in literature. "He was hard and exacting, never praised men for doing their duty, and to none was he harder than to himself." So unselfish was he that "he never owned an acre of land in New Zealand; yet so keen was his artistic delight in beautiful scenery that he may be said, while "having nothing," to "have yet possessed all things." His character was so lovable as to attract the purest; souls, such men as Whytehead, Patteson, Coleridge, etc. People supposed that "his physical courage was very great," but it was not so. "He was naturally nervous. It was moral courage that overmastered his natural fear, that made him the undaunted champion of what was right and true, fearing nothing so much as the reproach of his own conscience." George Augustus Selwyn had a "commanding intellect and humble faith, unswerving obedience and inexhaustible charity, a tender heart and dauntless] courage." Such gifts, virtues and graces render "his memory and example a precious inheritance for all time." Bishop Selwyn was an aristocrat by birth, and educated in the lap of luxury and affluence; but he forsook all and followed the example of Christ. "What is the cure for Socialism? Surely it is the return to the true spirit of the Apostolic age, of which Socialism is a godless counterfeit. It is to take care that no child, no widow, no orphan, no emigrant, no heathen shall be neglected in the daily distribution of all things needful, both for soul and body." Such utterances outweigh all the arrant nonsense and magniloquent platitudes of modern Socialists, infidels, and revolutionists. So much for George Augustus Selwyn, the Apostle-Bishop and the "first illustrious Bishop of New Zealand," as Gladstone recently said. The two most illustrious colonists of New Zealand are unquestionably Bishop Selwyn and Sir George Grey. Both have been signal benefactors to New Zealand, and both have been animated by noble, disinterested, and high-minded principles, aspirations, and motives of action.

Land Ho!! decorative feature
By Alexander Joyce.
Published by Simpson & Williams Christchurch

A dedicate

This Small Pamphlet
To my Fellow Colonists
In the Hope That its Circulation May Promote the
Settlement of the Colony.
Alexander Joyce,
LYTTELTON.
March 26, 1889.
decorative feature

In departing from the usual rule, and addressing the public by pamphlet instead of by means of a public meeting, I may say I do so for several reasons. The particular subject which I wish to bring before you is, to my mind, of too great importance to be brought forward first at a public meeting, where the words of the speaker

may be either imperfectly heard or imperfectly understood, and where it is inevitable that the mass of the people would be dependent upon the report of the meeting in the columns of the newspaper. Being politically a stranger amongst you, I could not expect a verbatim report, and lit is certain that in reducing the matter to publishing dimensions, it would hardly be possible to avoid at least some misconceptions and errors, which would probably create a mistaken and perhaps unfavourable view of my meaning.

It appears to me that the time has arrived liken we may, by the adoption of a bold and just policy, ensure an early and enormous extension of the settlement of the colony, and in laying my views before you as to the lines upon which I believe this policy may be conducted, I do so with the view of calling attention to the advantages to be secured to the colony by the repurchase and settlement of the large freehold blocks.

New Zealand possesses every capability for supporting a population of several millions, and if a policy of progress, a policy of settlement is adopted, we shall, within a few years, find the colony with a population of three or four times its present number. In addition to the natural capabilities of the colony, we have a magnificent system of public works; a system of roads, bridges, and telegraphs, sufficient for the service of a far larger population than the colony at present contains. These public works have been constructed at great public expense, with the result that New Zealand is one of the most heavily indebted countries of the world in proportion to its population, and as a natural result, it is one of the most heavily taxed countries; indeed, so great is the pressure of taxation, that unless some means can be found to reduce it, we shall soon find the taxpayer repeating the sentiment of the poet (in the present instead of the past tense), and crying "the burden laid upon me" is "greater than I can bear;" but this pressure may be lessened, this taxation may be reduced by an increase of the settled population of the colony, and by no other means can it be reduced to any appreciable extent; but I believe that by the exercise of our just, legitimate, and necessary rights, we may, without injustice to any, and with speedy relief to the taxpayer of the colony, adopt a policy which, within a few years of its adoption, will double the settled population of the colony, halve its taxation, and create such a market for our local manufactures that the necessity for protective tariffs shall no longer exist.

The policy which I advocate is the policy of settlement by means of the re-purchase of the large freehold blocks of land, their sub-division into suitable areas, and their being let to tenants upon a leasehold tenure—atenure under which the tenant shall have absolute ownership of all his improvements, under which he shall have a perpetual right to the renewal of his lease; subject only to the payment of a fair ground rental, (or land tax, if you prefer the term), to the State as representing the community. This I maintain is the only just system of land tenure.

You are frequently told at public meetings feat the freehold tenure of land is the best, that the freehold tenure of land is the only tenure which will be acceptable to the people of this colony; but when you are told this, I will ask you to consider the position and interests of those persons who are so anxious to impress you with the advantages of the present system, I think you will find that they usually belong to one of three classes; large landholders, lawyers, or persons interested in the large mortgage and financial companies which flourish so rankly in the colony.

We will consider in a few words the interests of these persons, and I think we shall then understand why they are such strenuous advocates of the freehold system.

The large landholder advocates the system because he plainly sees that the time must come when the increase of population, and the progress of the colony, will enable him (or his descendants) to either let the land, thereby placing him or them on a footing with the large territorial proprietors in the older countries of the world, or else to sell the land for a good price, and frequently on terms which leave the seller still virtually the possessor. The terms upon which land is generally sold are something like the following :—A deposit of one-fourth or one-sixth in cash, the remainder upon mortgage for a term of years, with periodical payments. Under the persuasive eloquence of an able auctioneer, and induced by the apparent easiness of the terms, a high price is obtained for the land; with the result that the purchaser is unable to complete his payments, and the land with all its improvements reverts to the original holder, who is then able once more to sell it with probably the same result. We cannot be surprised that the large landholder believes in the freehold system.

Another class whose members, with one notable exception, are earnest upholders of the system,' are the lawyers, but when we remember that by far the largest, portion of their professional income is derived from conveyancing and mortgaging, I think we must allow that their advocacy is not to be wondered at.

The officials and shareholders of the large financial companies are also found very anxious to maintain the freehold system, but as it is by means of it they are enabled to draw their salaries or receive dividends of from ten to twenty-five per cent. we cannot be surprised that they are averse to any change. For these classes undoubtedly the freehold tenure is the best.

If the object of our social system is to create, maintain, and perpetuate class distinctions. If the object of our social system is the existence a society in which there shall be a few rich, and a large majority poor or working for a bare existence, then without doubt freehold tenure is the best, but if the object of our social system is the

existence of a large, contented, and independent population, then the freehold system has proved a decided failure, and is the principal cause of a state of society which in the older countries of the world threatens to eventuate in a fearful revolution.

The reason there are so many supporters of freehold tenure among the mass of the people is because they look upon it as the only secure tenure, the only tenure under which a person can depend upon enjoying the full results of his labour. If we can substitute a system under which a person has a perpetual right to the renewal of the lease, under which the tenant may safely build, cultivate, and improve the land with absolute personal ownership of the whole results of the labour expended, a tenure, in fact, which while securing to the tenant the whole of the improvements, will secure to the people the increase in the value of the land, so far as it is caused by the progress of the colony, the increase of population, and the expenditure upon public works, we shall have instituted a tenure which will be beneficial to the tenant, and also to the community. This tenure would be a just tenure. It would be just to the tenant and just to the people.

Perhaps you will reply—"But under this tenure we shall have to pay rent." True, you will have to pay rent, and if you do not or cannot pay rent you will lose your hold upon the land; but I think a few minutes consideration will show you that under the freehold tenure you also pay rent, that you cannot avoid paying rent, and moreover that under the freehold system, if you cannot pay rent, you lose not only your hold upon the land, but also run a very great risk of losing a large portion of the capital value of the land, and of the money you have expended upon improvements.

Now as to this question of rent. If you hold a piece of land under the freehold system, you must occupy one of two positions, either you hold the land free of encumbrance, that is, the land represents capital, or you hold it subject to a mortgage.

In the first case, the rent of the land is the interest of the capital value of the land. For instance, we will suppose that you hold a piece of land worth £500, and that money on investment will return seven per cent interest. Your £500 if invested, would give you an interest of £35 a year, but you forego this interest in exchange for the use of the land, which, if there is any logic in figures, is equivalent to paying a rental of £35 a year. To make the matter plainer, we will suppose you invested your £500, receiving £35 a year interest, and then pay that amount for the use of the land. I presume you would then allow that you were paying rent. In this latter case, you would frequently be in a better position than than if you held the freehold; for, supposing your occupancy of the land to be unprofitable, or, should you from any cause wish to leave it, if you were a tenant you could do so on giving a reasonable notice, but if you were a freeholder, you would have to find a purchaser for the property, and probably, if you were compelled to force your property on the market you would find the nominal value of £500 considerably reduced, and you would lose the difference.

In the second place, where you hold the property subject to a mortgage, the interest of the mortgage is the rent you pay for the land, but it is not the whole of the rent. The mortgagee always endeavours and generally succeeds in retaining a margin between the value of the property and the amount advanced upon mortgage. The interest of this amount has to be added to the interest paid on the mortgage, the whole amount being the rent paid for the land.

To the person holding under this tenure, the term freeholder is a sarcasm. The only freedom he has is the freedom to work for the mortgagee, the margin between the value of the property and the amount advanced upon mortgage, together with the money which, under the fond delusion that he is a freeholder, he has expended upon improvements, chain him to the land.

The principal of the mortgage is as a millstone round his neck, a weight from which he is unable to free himself, and which frequently, after a few years struggling, drags him to the bottom of a sea of debt. The mortgagee either for closes, in which case, the land submitted to a forced sale barely realises sufficient to pay the mortgage and expenses, leaving the so-called freeholder ruined and helpless, or else the mortgagee suiters him to remain in possession a freeholder in name, but a tenant in reality, a tenant without the option of relinquishing his tenancy, except under the penalty of absolute ruin.

Before I proceed to detail the plan I propose, I wish to devote a short time to the consideration of an objection which has been and doubtless will again be raised to the proposal for the re-purchase of the large freehold blocks by the State. It has been alleged that the proposal is unjust, that the State having parted with the land is not justified in resuming possession. If this contention can be proved, if the proposition is unjust, then we must look in some other direction for relief from those social dangers which threaten the community, for I am convinced that the people will never support an injustice, nor would anyone who has the welfare and the honour of the country at heart wish them to do so.

But I think those objecting to the proposal on this ground do so because they do not realise the difference, the essential difference, between land and personal property, they have not given sufficient attention to the writings of political economists, the utterances of statesmen, or the tendency of modern legislation upon landed tenure.

The difference between land and personal property is a difference not of degree but of principle. The land of a country is for the use and support of the inhabitants of the country, not as a matter of absolute ownership and property, but for their use and support, a life interest in fact, to be held in trust and handed down without restriction or reservation for the use and support of succeeding generations.

What moral right have the people of the present day, much less the first comers to a new colony, to allot and apportion the land, as absolute personal property, which must be the only means of support of all succeeding inhabitants of the country. There is no moral right, strictly speaking, there is not even a legal right, but were the legal right undoubted it could be legally altered, and where the legal right was a moral and a social wrong it would be the duty of our legislators to amend the law. But it is not my intention to take up time with any abstract arguments upon the question. I think it is better for me to quote a few extracts from the writings and speeches of those who have considered the subject, and to whose opinions, being those of men of acknowledged authority as political economists, statesmen or politicians, you will naturally pay more attention than to those of an obscure individual like myself.

Mr. Joshua Williams,

Who is considered the most eminent land conveyancer of modern times, in his standard book "Law of Real Property," says :—"The first thing the student has to do is to get rid of the idea of absolute ownership of land. Such an idea is quite unknown in English law. No man is in law the absolute owner of lands, he can only hold an estate in them."

Mr. Froude,

A most conservative writer, says :—"Land is not and cannot be property in the sense that moveable things are property. Every human being born into this planet must live on the produce of the land if he lives at all," and "the land in any country is really the property of the nation, and the tenure of it by individuals is ordered differently in different places."

Professor Newman

Says :—"To make away into mercenary hands as an article of trade the whole solid area upon which a nation lives is astonishing as an idea of statesmanship."

John S. Mill

"No quantity of moveable goods which a person can acquire by his labour, prevents others from acquiring the like by the same means; but from the nature of the case whoever owns land keeps others out of the enjoyment of it. The privilege or monopoly of land is only defensible; as a necessary evil, and it becomes an injustice when carried to any point to which the compensating good does not follow it." "The claim of the landowners is altogether subordinate to the general policy of the State. The principle of property gives them no right to the land, but only a right to compensation for whatever portion of their interest in the land it may be the policy of the State to deprive them of."

Herbert Spencer.

"Equity does not permit property in land : For if one portion of the earth's surface may justly become the property of an individual and may be held by him for his sole use and benefit, then other portions of the earth's surface may also be so held and our planet may thus lapse into private hands." "But to what does this doctrine that men are equally entitled to the use of the earth lead." "Such a doctrine is consistent with the highest civilization, and may be carried out without involving a community of goods." "Separate ownership would merge into the joint-stock ownership of the public. Instead of being in the possession of individuals, the country would be held by the great corporate body—Society. Instead of leasing his acres from an isolated proprietor the farmer would lease them from the nation."

Henry George.

"The truth is, and from this truth there can be no escape, that there is and can be no just title to an exclusive possession of the soil, and that private property in land is a bold, bare, enormous wrong, like human slavery."

"The man who is using land must be permitted the exclusive right to its use in order that he may get the full benefit of his labour." "Rent expresses the exact amount which the individual should pay to the community to satisfy the equal rights of all other members of the community."

Mr. Gladstone.

"In my opinion if it is known to be for the welfare of the community at large, the legislature is perfectly entitled to buy out the landed proprietors for the purpose of dividing the land into small lots." "Those persons who possess large portions of the land of the earth are not altogether in the same position as possessors of mere personalty; for personalty does not impose the same limits on the action and industry and well-being of the community as does the possession of land, and therefore I hold that compulsory expropriation, if for an adequate public object, is a thing in itself admissible and even sound in principle."

Major Atkinson.

"So far as he was able to judge, freehold tenure was not giving satisfaction at any rate in the old countries of the world where the population was thick. What would be the ultimate tenure it would be impossible to say. Land would not be cultivated unless the cultivator had an absolute title. He must secure the whole of his work upon the land and must have such a tenure that he could not be dispossessed so long as he was doing his duty by the land.

"He looked forward to the time when the whole land of the country would be the property of the State."

Sir George Grey.

"One generation should not be allowed to make laws binding the land up from the generations which follow." "The men who deliberately allow, in the unjust manner hitherto done, immense blocks to be picked up by a few individuals are providing misery for the people who are to follow them.

"Now the meaning of Land Nationalisation is that the whole of the lands should belong to the public, that they should be let to tenantry, that the rents should be the property of the State, and that the rents should be applied to take the place of taxation, in which case not only would the whole community be relieved from the burden of taxation, but a great many advantages would be bestowed on the public at large—That, by the most advanced thinkers of the day, was what every nation ought to aim at."

Sir Robert Stout.

"I approve of the principle being affirmed that the State should, whenever circumstances require it, have the right to purchase any land needed for settlement."

Speaking of the large freehold blocks he says :—"It would be quite possible for the Government to buy up many of those estates." "It would be practicable to cut these runs into small farms and to let them in perpetual quit rents." "The rent would pay the interest." "Can any one conceive anything more likely to promote the progress of the colony than properties of that kind, being cut up into small farms." "They" the tenants "might at once enter into possession of these farms subject only to the payment of a quit rent and without any of their capital being taken from them."

Sir Julius Vogel.

"In the course of time some of these estates may be wanted for settlement, and when they are, the State has a perfect right to take them on paying compensation."

The Irish Land Bill

Recently passed by the British Parliament, establishes courts to fix rents, which rents cannot be raised for fifteen years, thereby enforcing the principle that the State has a right to define the respective interest of the landlord and tenant. This legislation is entirely opposed to any absolute ownership of the land.

With regard to this Act Mr. J. E. Fitzgerald remarks :—"The recent legislation on the subject of the land in Ireland has greatly hastened the period when the question must be brought to a practical issue. That measure seems to me to be a final abandonment on the part of the British Parliament of the doctrine of the inviolability of the right of private property in land."

From the opinions of these writers and speakers, and the action of Parliament on the subject of land tenure, I think all must allow that the proposal that the State should repurchase the large freehold blocks, cannot be objected to on the ground of its injustice, and further, I think it must be allowed that the tables are turned, and that instead of its being an injustice to the landholders that the State should compulsorily re-purchase, it is an injustice to the community if the State does not do so, provided that it can be shown that the continued occupation of these lands is against the public interest, and that their occupation is preventing settlement.

To enable us to come to a decision on this question I shall have to trouble you with a few figures, showing the quantity of land alienated since the foundation of the Colony, and the quantity under cultivation.

The quantity of land sold since the foundation of the Colony, in round numbers amounts to 13,300,000 acres, in addition to which 5,600,000 acres have been alienated without payment, mostly in the province of Auckland, where a free grant system was in force for some time. This gives a total of about 19,000,000 acres.

It must be remembered that the land disposed of is the pick of the country, both for quality and accessibility.

We will now see what quantity of this land is under cultivation.

The returns for April, 1888, give the following totals :—

That is to say, that of the nineteen million acres alienated, there are only four and a quarter million acres under cultivation, and even including land upon which grass seed has been scattered without the land having been broken up, the total is about seven millions and a quarter acres. The remaining eleven and three quarter million acres are still in the same condition as when parted with by the State.

Allowing for townships and small areas not included in the Government returns, there will be at least 10,000,000 acres on which the land-holders have never expended anything for cultivation.

Of the four and a quarter million acres under cultivation, over two and three quarter million seres are in grass. The total quantity under grain being less than three quarters of a million seres. Can any one doubt that if these large locks were used to the best advantage, instead of less than 750,000 acres being under grain crops, we should have at least three or four million acres, with an exportation of five times the present quantity, and a result that instead of our population being about 600,000, it would be at least 2,000,000.

There are in the Colony about 260 holdings of freehold land, of 10,000 acres and upwards, containing a total of about seven million acres, and valued for property-tax purposes at about £15,500,000.

I cannot profess to have travelled much in New Zealand, but I have conversed with those who have, and their reports all concur that mile after mile of some of the best land in the Colony is locked up in these immense blocks, employing very little labour, and that land which would provide employment and happy homes for thousands is now left vacant and uncultivated.

This is the cause of the stagnation of the Colony, this is the cause of the depression, the occupation of these lands is the remedy, and the only remedy. Retrenchment will not avail. The most ardent advocate of retrenchment does not profess to be able to effect a saving of more than £150,000 a year, which would be a reduction of taxation of £1 for each adult in the Colony, and I will ask any reader of this pamphlet whether he would be greatly relieved by paying £1 per year less taxation. Protection will not restore prosperity. The encouragement of our manufactures is good, but however advisable it may be to increase our manufacturing population, it is to the development of our pastoral, agricultural, and mineral resources that we must look to restore prosperity to the Colony.

We have now to consider the manner in which these lands may be resumed by the State, so as to combine justice to the community with justice to the landholder.

The unearned increment which has accrued up to the present time cannot be interfered with tut the future increment must be secured to the State. In order to secure this, it will be necessary to at once fix the price at which the State will repurchase. This step will effectually close the door against any political influence being brought to bear respecting the price at which the laud shall be purchased. For my own part, and considering that the bulk of these lands is still in the same condition as when purchased, I am of Union that the present

property-tax value would be a fair price for the Colony to pay for their resumption, but, whatever sum may be fixed upon, the property-tax should be the basis, with perhaps a definite percentage added.

After fixing the price, the next step would be to secure to the State the pre-emptive right to the repurchase of the whole of the blocks of above a certain area, say 10,000 acres. This pre-emptive right should be for a term of ten years. As before stated there are about 260 estates in the Colony which come within the scope of these proposals, containing about 7,000,000 acres, and valued under the property-tax at about £15,500,000.

To re-purchase the land at property tax value would necessitate the issue of four per cent, land debentures of about the value of £1,650,000 a year. The £100,000 extra would be for purchase of improvements, establishment of village settlements and construction of roads as hereinafter detailed. These debentures would be issued on the security of the land repurchased, the rentals of which lands should be specially applied to the payment of the interest and the re-purchase of the debentures.

In the present state of the money market these debentures with this security would be saleable at par, and it must be remembered that a very large portion of this money would be used to redeem mortgages, upon which an interest of from six to seven per cent. is being paid.

The administration should be non-political and might be placed under the control of three Commissioners for each island. These Commissioned would decide, after consultation with the various Land Boards, which blocks were to be re-purchased.

Neither the Commissioners nor the Land Boards would have anything to do with the price of the land, which would as before stated be fixed by the legislature on the basis of the present property tax value. They would merely decide as to the blocks required for settlement from time to time.

After deciding upon the blocks of land to be repurchased, the Commissioners would give the landholder six months notice that it was their intention to purchase the land for the State. The landholder would have the right within three months of the receipt of such notice to select land from the block in the following proportions : On blocks of from ten to twenty thousand acres, one half; from twenty to fifty thousand acres, one third; and over fifty thousand acres, one fourth of the area of the whole block. The land so selected should be in one block, the length of which should not exceed three times the average breadth. The present landowner to have a ten years lease of the land so selected, at a rental of five per cent upon the price paid for the land, regard being given to the quality of the land selected, in proportion to the average quality of the land on the block. Should the landowner not select land the Commissioners will proceed to value the buildings and improvements upon the land, or in event of the landholder selecting land, the Commissioners will value the buildings and improvements on the land not selected by him.

These improvements will be taken over at a percentage above property tax value, or at a valuation, as should have been decided by the legislature.

The Commissioners would then proceed to subdivide the block according to the quality of the land and position. The necessary roads to give access to the various sub-divisions would he laid out, formed, and metalled. The cost of constructing the roads, which might be done by village settlers, would then be added to the cost of the land, and the rentals of the various subdivisions would be calculated so that the total rental of the block should not return less than five per cent, upon the total amount.

This rental would from the first give a margin of one per cent, for expenses and administration. By this means no additional burden would be thrown upon the colony. The increased railway receipts, the customs duties, the increased exports would be clear profit to the community, reducing the burden of taxation, while the increase of population would give a larger market for our local manufactures.

The leases would be for a term of ten years with right of renewal for a further term of ten years, at a rental of five per cent, upon the then value of the land. All buildings and improvements would be the personal property of the tenant, and the rental for the second and succeeding terms would be calculated solely upon the capital value of the land. This new value would be declared at the end of the ninth year of the current lease, and notice given to the tenant by that date of the rental for the next ten years. If the rental was considered too high, the tenant would have to lodge an appeal within three months and the case would be considered by a court in the same way as an appeal against excessive rating is decided now. If the court reduced the rental to an amount satisfactory to the tenant he would continue in occupation for the next term of ten years. If the court did not reduce the rental or did not reduce it to an amount satisfactory to the old tenant the land would be advertised by the State as to let, at the rental fixed by the court, subject to the payment by the incoming tenant of the value of the improvements.

If no new tenant came forward on these terms, then the old tenant would continue to hold the land at the old rental, subject to six months notice. This notice would be given on a tenant being found willing to take the land at the rental fixed by the court and pay a cash value for improvements.

Should the tenant wish to give up possession at the end of his lease he must give six months' notice to that effect. The land will then be advertised to let at the new rental, subject to payment for improvements.

Should no tenant be found by the end of the term of the lease, the State will give compensation for improvements.

As settlement progressed there would be an increase in the rental value of the land, over and above the amount required to provide the 5 per cent, for interest and administration. Townships would be formed and the rentals from the town sections would belong to the community. The whole rentals I should propose to allot in the following manner;—5 per cent, interest on the capital expended to be set apart for interest and administration : one-third of the balance to go to the Consolidated Revenue of the country; one-third to be applied to the re-purchase of the debentures, which debentures should not be cancelled but held by the Commissioners until such time as the whole debentures issued should have been re-purchased. The interest received by the Commissioners to be applied to the purchase of other debentures.

The remaining one-third should be local revenue for the district in which the land was situated, to be applied in lieu of or to assist local rates for roads, etc., or for charitable purposes.

And now I have laid before you my proposal, and I ask you to give it fair consideration. I have placed it before you in the form of a pamphlet, so that, as stated previously, it may be quietly and dispassionately considered. In your homes, your clubs, and your workshops the proposal can be discussed free from the excitement and interruption of a public meeting. If you think it for the good of the colony I ask you to support it. If otherwise it will be your duty to oppose it.

So far as my own view is concerned, after long [thought and anxious consideration, I am convinced that it is a just, practicable and permanent solution of the land question, and that its adoption would mean the removal of the present depression and the renewal of prosperity.

All classes would share in the benefit. All classes would participate in the increased value given to our land by settlement. We should be able to realise that our country was indeed ours pot only as a matter of sentiment but as an actual fact. All would have an interest in its development, and every increase in settlement, every extension of public works, every improvement in mechanical invention would be for the benefit of the whole community.

The increase in the rental value of the land would eventually abolish all forms of taxation, for it may be confidently predicted that as the population and settlement of the colony progressed, as the facilities for communication Increased, so the rental value of the land would improve, and this improved value would mean increased revenue.

The future condition of the masses of our population is a matter for serious consideration, and unless some more just system of distribution of wealth is established, the masses will be forced lower and lower in the social scale.

An American poet some years ago wrote a poem on the future of machinery, and introduced these lines with reference to the development he foresaw in mechanical appliances,

"And soon the world may go and play,
And I'll do the work myself."

Year by year the labour-saving machines are multiplying. Year by year the proportion of manual labour required to produce certain results is becoming less and less, and unless some change is effected in the social system regulating the distribution of wealth we may soon read the lines of the poet with a slight but important variation,

"And soon the world may go and starve,
And I'll do the work myself."

The great factor in the unequal distribution of wealth, is the freehold tenure of land. This is the foundation upon which all other inequalities rest. By doing away with freehold tenure and substituting a just system of leasehold tenure we shall lay a firm foundation for our social structure and promote a vast and rapid settlement of the colony, in the benefits of which all classes will share.

NOTE.—*I shall feel obliged by receiving copies of newspapers containing comments or correspondence, favourable or unfavourable upon this pamphlet.*

Alexander Joyce,
Lyttelton.

Printer at the "Lyttelton Times" Office, Christchurch.

Front Cover
A Discussion on Earthquakes & Architecture Before the Philosophical Society, Wellington. decorative feature Lyon and Blair, Printers, Lambton Quay. Wellington 1889
decorative feature

The late Earthquake, and its Bearings on the Architecture of Wellington.

By W. M. Maskell, F.R.M.S.
[A Paper read before the Wellington Philosophical Society, Sept. 12th, 1888.]

Until the present month it is more than 30 years since an earthquake violent enough to be destructive has occurred in New Zealand. Many shocks there have been in almost every year, and once or twice these have been sufficiently strong to overturn chimneys, or to crack buildings, but they cannot well be termed "destructive" in the ordinary sense. When in, I think, 1872 the Christchurch Town Hall was badly shaken, and several other buildings damaged, much of the mischief seems to have been due to defect of construction or workmanship, and the knocking out of a stone from the Christchurch Cathedral spire about 1882 might have been ascribed, perhaps, to the newness of the work, which had then not been long finished. But the numerous disturbances of the earth's crust which have been felt since 1854 in New Zealand have been in the main so slight as to induce almost a feeling of security amongst the people, the prevalent idea seeming to be that the forces producing great earthquakes are of less violence than formerly. There is, however, absolutely no spot on the face of the earth of which it can be said that an earthquake will not occur in it; and when it remembered that the most violent of all our New Zealand shakes happened in the neighbourhood of Wellington only about 30 years ago, and that a large part of the Te are District in this city could probably not have been built over if that convulsion had not raised it several feet, one is inclined to wonder sometimes at the apathetic coolness of the inhabitants, and especially of their professsonal and municipal authorities. The earthquake of September 1, 1888, appears to have been most heavily felt in the districts ranging from Nelson to Hokitika and Christchurch, a roughly triangular area, mostly on the western side of the main range, and, as far as I know, not supposed to be peculiarly subject to such convulsions. It is far from my intention to dwell at all upon the purely scientific aspect of this event. Professing only the very slightest acquaintance with geology, I leave it altogether to the geologists to say whether that district shows signs of previous disturbance or not. We shall hear all about the scientific theories in due time. My object to-night is to draw attention to some practical points likely to touch nearly the interests of the inhabitants of Wellington. I have said that the comparative immunity which this city has enjoyed since 1854 from violent earthquakes appears to have produced a feeling—not actually expressed, probably, by anybody, yet tacitly adhered to—that we are not likely to be again troubled so much as on that occasion. This opinion may be right or wrong in actual future fact, yet there is nothing whatever to justify it at present in the slightest degree. It is, therefore, not altogether a consoling thought that the Municipality of Wellington, who might be supposed to take into consideration everything tending to the interests of the people, seem to have adopted this idea as if it were founded on a solid basis. Procuring a few days ago a copy of the Building By-laws passed by the Wellington City Council in February, 1888, and now in force in this town, I carefully read it through, and was somewhat surprised to find that there is not, with one small exception, a word to indicate that any danger to life or property is to be feared from earthquakes. The City Council seem to have had a thorough dread of fires, but none of earthquakes. Curiously, also, the exception to which I have referred seems to be nothing more than a dead letter. Clause 19 of the by-law provides that "every chimney . . . must be built from its foundation to the top thereof without any corbelling over whereby any of the brickwork, stone, or concrete of such chimney shall overhang any lower part thereof." This may, in view of earthquakes, be a useful provision; but I doubt whether there is one chimney in a thousand in all the town which is built in compliance with it. In clause 23, it is stated that the City Surveyor shall have power to pull down chimneys built previously to the passing of the by-law if they "cause reasonable danger of fire," from being built contrary to the provisions of the law. But no mention is made of earthquakes. Similarly, in clause 36, all sorts of "architectural projections" are permitted on the outside of buildings, if "approved by the City Surveyor," provided only that they are placed high enough above the street. Perhaps the effect of stones falling from a height are considered in city by-laws to be only trivial matters. Taking the whole of these provisions into consideration, it would seem that the Corporation of Wellington, when drawing them up, had made up its mind that for the future the town would never suffer from convulsions of nature similar to those which have occurred in past times. But it may perhaps be reasonably thought that in matters of this kind a number of municipal representatives, necessarily chosen for quite different reasons than scientific knowledge, must rely upon professional advice, and that the

people of Wellington must place confidence in the ability and complete thoughtfulness of the architects who design their buildings. I make not the least doubt that every architect in this Colony is in the fullest degree capable of providing, as far as human skill can provide, against accidents of all kinds; and it is with the very greatest diffidence that any layman should venture to put forward opinions as to the proceedings of professional men. Yet it is permissible for even a layman sometimes to "want to know, you know;" and there are features in some of our Wellington buildings which to an imperfectly instructed mind seem to be not altogether satisfactory. I must premise to what follows, that I am quite well aware that in matters connected with earthquakes there is absolutely no certitude available at the present day, and that the vagaries of these phenomena are constantly upsetting all seismological theories. Yet on the authority of Professor Milne, of Japan, probably the highest on the subject now living, I find that the experience of many countries and many observers has produced certain data, which are probably, as far as we know, correct. Amongst others it would seem that the following ought to be kept in view by anybody who builds in stone or brick in an "earthquake country" :—"1. So arrange the openings in a wall that for horizontal stresses the wall shall be of equal strength for all sections at right angles." (The meaning of this I take to be, that it is better in buildings of several storeys not to have the windows all arranged in regular vertical lines. A quincuncial arrangement has been suggested as preferable; but I do not know any instance of its application.) "2. Avoid heavy-topped roofs and chimneys. 3. Let archways curve into their abutments." (Archways here seem to include window openings.) "4. Place lintels over flat arches of brick or stone." Seemingly Professor Milne's suggestion is that these lintels should be of iron or timber. "Vaults and keystone arches," he says, "are more perilous than common wood lintels." In addition to the foregoing, I find the following two points suggested :—Height is dangerous: "To build high houses would be to erect structures for the first earthquake to make sport of;" and again, "When the inhabitants of South America saw the Spaniards building tall houses, they told them they were building their own sepulchres." On the other hand, although there seems to be nothing positively to be asserted as to foundations and solidity, it would appear that heavy solid buildings on deep foundations have less safety than light buildings on loose foundations. I do not venture to express an opinion on this point; yet two illustrations from Christchurch seem as if they confirmed this view. One is a very large warehouse of brick, with high thin walls, apparently without any support or buttresses;—and I have heard people remark that some day it would even be blown over, yet I understand that the late earthquake has not damaged it in the least. The other, built on shallow foundations, and seemingly, also, by no means strong in its construction, has also escaped injury, somewhat to the surprise of Christchurch friends of mine, who have remarked on it to me lately. As regards the foregoing points, and the architecture of Wellington, I have taken opportunities of looking at some of the brick and stone edifices in this town, with the result of finding that almost all these points appear to be neglected in at least the greater part of them. For example, in the Post Office, a building which looks as if designed to show how many windows could be arranged in the least space, the openings are placed in numerous vertical rows, their arches springing sharply from their abutments; and there is a heavy cornice running on the top of the somewhat thin walls. The large building of the National Mutual Insurance Company has also a heavy cornice, numbers of external ornamental projections, windows in vertical rows and with arches not curved to the abutments. A building now in course of erection near the wharf has the brick partitions between the windows seemingly designed only to resist vertical pressure, and with little strength horizontally. The stupendous ugliness of the new Government Printing Office is such that perhaps even an earthquake might disdain to touch it; here, again, are vertical rows of windows with sharp-cornered arches, and a heavy pediment on each side. I understand also that this is a heavy, solid building, standing on very deep and strong foundations. Messrs. Harcourt's warehouse has the usual kind of windows, and would seem to the uninstructed eye to be dangerously lofty. In street buildings, the openings, mostly very large on the ground floors for shop windows, have above them several others, generally so arranged as to give a weak appearance to the front. And in many cases imitation vases, globes, groups of figures, and other ornamental devices are placed along the edges of the roofs; these are probably, in most cases, not very solid or heavy, yet they are equally probably harder than the skull of any person they might fall upon. I observe, by the way, that in the Supreme Court these ornaments take the shape of a shell; emblematical, doubtless, of the result to a suitor when the lawyers have done with him. It should be recollected that in cases where, as in the Post Office, a building is nearly all windows and openings, the iron rods and bands used to tie brickwork together cannot possibly run continuously in the external walls. On the whole, an inspection of the brick and stone buildings in the City of Wellington leads the lay mind rather to the impression that architects, at least up to the present, have laid less stress upon safety from earthquakes than on their ideas of artistic effect. Heavy cornices, topping walls only a few inches thick, with these walls reduced in strength against at least horizontal vibrations by numerous vertical rows of openings, may be ornamental, but it would be satisfactory to know that they are equally secure. I have spoken here chiefly of the walls of brick and stone. But there are also the chimneys to be considered; and it is a significant fact that in one of the telegrams from Christchurch it is stated that in the Gloucester-street School the chimneys, topped with heavy stone, were hurled to the ground by

the shake last week. But this matter of chimneys interests not only the dwellers in brick houses, but also those in wooden houses. For there is one thing clearly set forth in past experience of earthquakes—that as wooden houses swing at different intervals from those of their brick chimneys, if these last are in contact with the timbers of the house they are very liable to be simply knocked down. Yet probably there is not one house in a thousand in Wellington where the chimney is not built closely touching the wood-work of the roof. These are some of the ideas suggested by the late earthquake. I am well aware of the old adage, "*Ne sutor ultra crepidam,*" and professional dignity may be shocked at the notion that a mere outsider should venture to express an opinion. In the face of past history, scientific pundits may demonstrate quite to their own satisfaction that a destructive shako is not at all likely to occur in New Zealand, just as some people can show to a moral certainty that the world will come to an end in some particular year. And it is always easy to remark that anybody who hints that all is not as it should be is an alarmist, or possibly an ass. Still it does seem not quite satisfactory that the By-laws of the Wellington Corporation should contain no kind of provision against earthquakes, and that a glance at the buildings in our streets should show that the points mentioned by high authority as desirable should not have been taken into consideration. Those who believe that the era of destructive earthquakes has for Wellington passed away may be quite right. It is also on the cards that they may be quite wrong. On the latter supposition, I trust that no member of this Society may be during a severe shock in some of our brick or stone buildings—say for example, the Post Office. It is to be regretted that the City Council, whilst making it compulsory to build in brick or stone in our busiest streets, did not stop to think that there may be other dangers than fire.

The paper, which was illustrated by diagrams, gave rise to an interesting discussion, the general feeling being much in accord with Mr. Maskell's views, and a vote of thanks was unanimously passed to Mr. Maskell.—*New Zealand Times*, Sept. 13, 1888.

Earthquakes and Architecture.

By Thomas Turnbull,
FELLOW OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS, ETC., ETC.
[A Paper read before the Wellington Philosophical Society, Wednesday, October 3rd, 1888.]

I Trust I shall be excused for having the temerity to address a paper to you by way of rejoinder to Mr. Haskell's, entitled: "The Earthquakes in Canterbury, and its effects on the Architecture of Wellington;" but as he had in that paper, with only one exception, criticised buildings of which I had been the architect, I felt it to be my bounden duty to those who had employed me, to vindicate the faith I had in the stability of brick buildings, and to show, as far as in me lay, those gentlemen, as well as others, that their confidence in the foundations of our city is not misplaced; and also to prove to you, if I could, that modern science has in architecture acquired sufficient knowledge of construction as to be able to erect buildings capable of withstanding earthquakes, even of a severer nature than we are ever likely to experience here.

The subject is an important one, as without sufficient confidence in the stability of the buildings, those who make our cities would never attempt to erect any of a permanent character. Thus the progress of architecture would be checked, and the best index of our civilization impaired. From this point of view, as I have said, the subject is not only an important but an interesting one. If I cannot make it so to you, the fault must be mine.

As Mr. Maskell has quoted Professor Milne, of Japan, as probably the best living authority, and whom from the tenor of his paper he evidently believes in, I would ask you to bear with me while I take a glance through the two chapters he devotes in his book to the effects of earthquakes produced upon buildings, just to see if he is so infallible as Mr. Maskell would have us believe.

Any one reading these two chapters for the first time might come to the conclusion that the Professor, with all his learning, knew little or nothing of architectural construction, as he uses words and phrases that are unknown in its practice; and nowhere does he give us any specific information as to the mode of construction, or to the qualities of the materials used in the buildings injured, but contents himself with stating whether of brick or stone, and often not so much.

The reader will after a little study modify this conclusion, and say that he has studied theory more than practice. At page 100 he gives us an illustration of the effects of an earthquake in Belluno, and on the next page, of one of the brick buildings in Tokio. You observe, brick for the one, anything for the other. Throughout he has a great deal to say about the arches curving into the abutments. Everyone knows that an arch must curve into its abutments, if it curve anywhere. His meaning is, I think, that all arches should either be semicircular or elliptic. But really it is a matter of taste whether the openings should be trabeated or arcuated; if arcuated, then the architect has only to see that the arches of whatever form have no thrust, and this is always a primary condition, whether in earthquake countries or elsewhere, and is usually provided for by introducing wood,

wrought, or cast-iron safe lintels, with butts to wood and skew-backs to iron.

On page 101, the Professor says that he, "with Mr. Josiah Conder, visited a large number of foreign-built houses in the district of Ginza." (The foreign houses he refers to are mostly built by English or American architects and builders.) Their chief reason for choosing this was because it was the only district where a large number of similar buildings could be found. By examining houses or buildings of different construction, the effects produced upon them by earth-quakes are very often likely to show so many differences that it becomes almost an impossibility to determine what the general effect has been. "Unsymmetrical construction, involving unsymmetrical ruin." These are his words, and seem applicable to the suggestion made to him by his colleague, Mr. Perry, as illustrated on page 112. The one is square and symmetrical, and possesses the elements that no artist could beautify. The only inference to be drawn from these two illustrations is, to use the Professor's own words: "In the one you have square and symmetrical durability, in the other angular and unsymmetrical ruin." At page 114 is shown the Webber House, San Francisco, as shattered by the earthquake of 1868. This house was built in the early fifties, when the Anglo-American had only been a few years in California, and at a time when the effect of earthquakes on buildings was little understood. (The Professor takes care not to tell us this.) On page 116 he illustrates a mill at Hayward's, also in California. This was a temporary clapboard erection, as you can see, and was insufficiently fastened to the under-pinning; it was shaken off, and hence came to the ground.

At page 128 he quotes a Mr. Ronaldson, who says that in 1868, at San Francisco, the ornamental stonework in stone and cement buildings was thrown from its position. At that time there were no cement buildings in that city at all; and only one stone building was injured, and that one the Bank of California, on the corner of Sansom and California Streets. The whole of the injury consisted in the balustrade round the top being displaced, and was subsequently taken down to prevent further trouble. He admits that the brick buildings with similar ornaments all stood. But the wonder to me is how Mr. Ronaldson missed taking note of those buildings erected on what is considered earthquake-proof principles, for at that time there were hundreds, only one of which was injured. This exception was the Livingstone block, the architect of which was Mr. Farquharson. The block stands on the corner of Battery and California Streets: it is 187 feet 6 inches square, and three stories high. The ground at the rear corner, facing California Street, sunk about four feet. This part of the city is all reclaimed land from the bay. The reason then given for the subsidence was that there had been a quicksand under, and that the weight of the superincumbent earth, the weight of the building and its contents, and the shaking of the earthquake, had expelled the water and sunk it to a solid substance. The block is built on floating foundations, and did not follow the ground altogether; it followed it far enough, however, to cause fissures in the brickwork. The earthquake occurred in the morning; and before sunset of next day the settlement was raised by hydraulic power, and in ten days or a fortnight the earthwork was filled in, the street made good, the fissures in the brickwork stopped, the floors straightened, and the roof rendered watertight, and no one would have suspected that anything extraordinary had occurred to the building. I tell you this to show that here was a building that would have been a total wreck, had the scientific principles of construction been neglected. He (Mr. Ronaldson) says that most injury was done to those buildings erected before our Institute had studied the effects of earthquakes upon buildings; this so far is true, but the damage was chiefly to fire-walls, or as they are termed here parapets. There were a great many chimney stacks nipped off at the roofs of the wooden buildings. In fact, there was more damage done to wooden buildings than brick ones. I do not know who this Mr. Ronaldson is, but I do know that in 1868 he did not practise as an architect in San Francisco. Quoting Mr. Mallet, he says (page 125) that "the ordinary buildings in Italy, though built of stone and mortar, are poorly put together and are in no way adapted to withstand the frightful shakings they are subjected to from time to time." Now this may be said of all the older buildings in Italy; and many of the ordinary buildings now being erected are put together on the self-same principles as they have been doing for two thousand years. At the same time, the construction of some of their public buildings is more in harmony with modern scientific principles.

The Professor gives some rather amusing illustrations. For instance, on page 108, he says: "It may be interesting to call attention to the fact that in the formula showing three relationships, it was the shape, rather than the weight of a body, which determined it should be overturned or projected by a motion at its base." He states, as an interesting proof that light bodies may be overturned as easily as heavy ones, that Mr. Mallet refers to the overturning of several large haystacks as one of the results of the Neapolitan earthquake. This seems directly opposed to one of Mr. Maskell's positions. I would like to ask him where we are to sleep in earthquake times; as for safety we are neither to do so under heavy nor light buildings? No; nor even under a haystack.

On page 118, (fig. 26,) the Professor illustrates with three flat springs, made out of bamboo, and loaded at the top with pieces of lead. He explains the results of nine experiments, with his deductions therefrom. To architects in the practice of their profession in regions subject to earthquakes, a study of these experiments will be invaluable, and is to my thinking the best part of the two chapters devoted to this subject.

On page 133 is a sentence that most of our citizens will read with wonder; it is this: The Professor says:

"For instance, a Civil Engineer, writing about the New Zealand earthquakes of 1855, when all the brick buildings in Wellington were overthrown, says that it was more violent on the sides of the hills at those places, and least so in the centre of the plains." He (the Professor) quotes this from the "Report of the British Association" of 1858, page 106. Now we of Wellington know this sweeping assertion to be wide of the truth. Here we may well ask: How about all the Professor's quotations? Is it possible that he can be led astray with all the others, as he has been by this nameless engineer? And here I hope you will pardon me for taking a short retrospect of the earthquakes in this much abused Wellington of ours. Seeing this sweeping assertion from such a source, and repeated in a book of such influence as this of Professor Milne's, I felt constrained to make searching inquiries among the surviving old settlers, and particularly of Mr. Thomas Mackenzie, who landed here in 1840, and was afterwards proprietor of the *Independent* newspaper; and of Mr. J. Plimmer, a distinguished builder, who has been here since 1843. All I can gather from these gentlemen, and many others, prove that there have only been three earthquakes in Wellington since 1840 of any memorability. This is the one in 1840; another in October, 1848; and this one of the nameless engineer, in 1855.

In 1840 the first settlers landed at Petone beach. Having no tents, they at once built themselves whares, composed of toi-toi and flax. They found the toi-toi answer the purpose very well; but after dry weather the flax, as a roofing material, was a failure. One night there was an earthquake "*happened"* around, The agitated occupants, thinking the Maoris were shaking their buildings down, rushed out in the most *primitive* of costumes, but saw no one, and at last concluded that old mother earth had been seized with one of her tremors. I have not been able to get any further particulars of this earthquake, excepting that the toi-toi and flax whares were earthquake proof.

The earthquake of October, 1848, seems to have been of a more severe character. There were three distinct shocks of about equal force, the last doing the most injury. Many of the brick buildings were shattered. Mr. Fitzherbert's free and bonded stores, on Farish Street, collapsed, as you see, but were afterwards restored by Mr. Plimmer. One end of the ordnance store was thrown out; afterwards it was all taken down. The front wall of the Colonial Hospital on Pipitea Street was partly thrown out, and so injured that it was thought advisable to take it down. A new hospital was being built of brick on Mount Cook, but was now stopped. Hickson's store is yet standing, on the corner of Old Custom-house and Cornhill Streets. The sketch, as you may see, is somewhat exaggerated. The Wesley Church, on Manners Street, was thrown down, and a wooden one afterwards built. These are all the brick buildings injured or destroyed at that time. It is worthy of note that no wooden buildings were injured, though many chimneys were thrown down. It was customary at this time to build chimneys on the outside, so that they had an opportunity of falling easily. These brick buildings, and all the chimneys, were built with a mortar composed of shell-lime, and clay from Barrett's Point. This composition was said to make a beautiful rich-looking mortar; with age, however, the lime reduced the composition to a powder. What wonder, then, that with such a cement so much damage was done. Old intelligent pioneers assure me that if the buildings had been constructed then as now, they are sure that little or no damage would have been done. Sir George Grey was then Governor, residing in Auckland; and Mr. Eyre (afterwards of Jamaica notoriety,) was Lieutenant-Governor, residing in Wellington. Mr. Eyre drew up a most sensational report of the earthquake, which had a most alarming effect on the colonists, and retarded colonization for a long time. (Verily, Wellington seems never to have been without such friends.)

I have seen a pamphlet published in Sydney by D. Hall, 76 York Street, purporting to give an account of the earthquake in New Zealand in 1848. After an introductory clause, it proceeds to give an elaborate account of an earthquake which occurred in Italy in 1834, by which the city of Spoleto in the then Pontificial States was almost destroyed. The pamphlet neglects to point out the connection between this Italian earthquake of 1834 and the New Zealand shakes of 1848. It then proceeds to lay before its readers an account of the recent earthquakes in Wellington, "as witnessed by Mr. William Fitzherbert, a gentleman who had resided for many years in Wellington, and to whom we [*i.e*. the publishers who write,] are indebted for the following interesting details." It is needless going into the particulars, but I assure you they are fully up to the usual sensational style of newspaper writers. The interesting part of the pamphlet to me was the illustrated page it contained, of which here is an enlarged copy. It was lithographed for the publishers by J. Allan, 2 Bridge Street, Sydney, from a sketch by Mr. Robert Park, of Wellington, engineer and surveyor. The buildings are said to be very closely represented, only Hickson's store being somewhat exaggerated.

And now in respect to the earthquake of 1855, when, as quoted by Professor Milne, all the brick buildings in Wellington were overthrown. I have said it is directly contrary to facts; old settlers thoroughly to be relied on, and who remember all the special circumstances connected with this earthquake, assure me that there were no brick buildings totally wrecked, though some few were injured. The fact is, most of those built before that time are standing yet. I have taken the trouble to go and see them, since Mr. Maskell read his paper, and found all of them in good order, answering all the purposes for which they were built. There is Mr. Hickson's store, that stood the earthquakes of 1848 and 1855, still used as a store by Mr. McCarthy, brewer. Messrs. Bethune

and Hunter use another of the same class as a bonded store. There are two shops in Willis Street, between Dixon and Ghuznee Streets. There is a residence in Ingestre Street, where the late Mr. Hickson lived, and which the late Captain Kreeft occupied for many years. There is another in Abel Smith Street, that was erected for Mr. Holt, and now occupied by Mr. Hickson; and there is another on Adelaide Road that was built for Mr. Braithwaite, solicitor, afterwards occupied by John Jonson, Esq., and family, Mr. John Minifie and family, &c. These buildings are all in good repair, but may be said to have reached that point which in human life is called middle age, when, though robust and healthy, they have lost the vigour of youth, while the end may yet be far off.

There were other brick buildings that successfully withstood the shakes of 1855, as for instance the offices of the *Independent* newspaper, but which have since been taken down to make way for larger premises, and for other improvements, but I will not weary you with the enumeration. I hope, however, that I have proved to you that this sweeping assertion—made by a nameless engineer to the British Association, and copied into Professor Milne's book—is without foundation, and that Mr. Maskell's greatest living authority is not infallible after all.

In saying this, it is not to be understood that I do not appreciate Professor Milne's talents, or wish to depreciate his great learning, or his professional knowledge of Siesmology; but I do protest against his being quoted by implication as being the best living authority on the construction of buildings called earthquake-proof. For I am bold enough to say that I think he is not. I freely acknowledge that he has started many new, valuable, and interesting theories, and given expression to thoughts that the architect would do well to ponder over. With this explanation, I may now say that I have gathered many stray thoughts from him. For instance, I have a letter of his contributed to the London *Times* about nine or ten years ago, respecting the destruction occasioned by an earthquake in Panama, regarding the construction and maintenance of the inter-oceanic canal at that place. In one part he says, "Although we cannot prevent the terrible disturbances which in earthquake shaken countries are from time to time inevitable, yet by studying the effects of previous disturbances we are enabled to do something to guard ourselves against any disturbances of the future." (!!) The Professor finishes up his letter by saying: "Although we cannot avert the calamities consequent upon earthquakes, very much indeed may be done to mitigate them. Patents have been granted for earthquake-proof houses; and I can answer for the fact that such houses have withstood moderate disturbances better than their neighbours." (!) These two quotations contain sound reasoning, and are valuable to us here. This way: we have the evidence of our oldest and most intelligent settlers for forty-eight years, that all the earthquakes that have occurred here in that time have had a forward oscillating movement, ending more or less with a severe backward *jerk*, and that hitherto it has been this ending that has been the cause of the damage done. For this period, then, of nearly 50 years, we have abundant proof that all our earthquakes have had pretty much the same character of movement, and that for that time they have been of a mild type. I think, moreover, that our primeval forests, on examination, will go far to prove that this period may be extended to hundreds of years (always excepting the small area round the Hot Lakes). These giants of the forest are of slow growth, and many of them must have stood for thousands of years, and which, with the slight hold they have of the ground—that is, comparatively speaking—they could not have done had these islands been subjected to the violent convulsions they have in Japan, Java, and elsewhere. With this evidence I think we may be satisfied that we shall continue to have earthquakes of a mild type; and we may well hope that carefully constructed brick buildings will easily withstand them.

For all this, I believe there are some of our early settlers who still have nervous feelings on the subject of brick buildings, so difficult is it to eradicate impressions, however wrong, and how difficult, too, to change an established repute. I was in the Ovens District, in Victoria, in 1855, when the news came that Wellington, New Zealand, was destroyed by an earthquake. The other day a similar rumour spread over that colony, when we had no earthquake at all; our old reputation had evidently been smouldering all these years. Much of this reputation is no doubt due to the startling reports by Mr. Eyre in 1848, and the nameless engineer in 1855.

And this brings me to the question of the possibility of erecting brick buildings in New Zealand, and in Wellington in particular, capable of resisting earthquake shocks, even of a severer nature than any we have had experience of here. I have no hesitation in saying that it is; and more, that buildings of such a quality are erected. Just reflect: Have we not buildings and chimneys yet standing in our city that withstood the shocks of 1848 and 1855; in the construction of which no scientific principles were followed, wherein bricks of the commonest quality were used, and laid too many of them in a composition worse, if possible, than no mortar at all? Need I say that these, for quality and workmanship, are not to be compared in any way to those now being built; and yet they stood.

As Mr. Maskell referred to some of the buildings erected under my care, I may here be permitted to say something concerning them. When Messrs. W. and G. Turnbull first proposed building on the reclaimed land, they told me they would do so in brick, if, with the foundations, it would not be too costly. (Unfortunately the

cost is always an exigency, and has apparently been lost sight of by Mr. Maskell.) I suggested floating foundations, as they were not costly, and had stood the earthquakes well in San Francisco; that, in the position their buildings were to be, the filled-in earth between the rock below and the buildings would deaden the stroke of an earthquake, should one come. This foundation consists, first, of a double layer of angular planking, and over these a double row of beams, side by side, and then all strapped and bolted together. This system was adopted for the free store. For the bonded store, piles were adopted instead of the angular planking, with the double row of beams on top, all strapped and bolted together. The motive for these beams is that when a shake takes place, they will carry the superstructure along with the oscillations of the earthquake. Both these buildings were nearly ready for the roofs when a shake came round. This was at a time when our Solons were in session. Many of them rushed down to the Reclaimed Land expecting to see them in ruins, and, I suppose, were somewhat disgusted to see the mechanics at work as if nothing had happened; so little notion had they of the strength of brick buildings, or the tenacity with which they hold together. I mention this to show that even the siftings of the New Zealand population had little faith at that time in the stability of brick structures in Wellington. For the building on Lambton Quay, built for Jacob Joseph, Esq., 11 years ago, it has, as Mr. Maskell says, "the openings arranged in the usual way "—that is, the openings are over one another, and simply means, if Mr. Maskell will look at it rightly, that all the weight of the walls from the top down, all the floors and roof, and the weight of all the merchandise within, is conducted down to the foundations on straight perpendicular supports. For, even in earthquake countries, there is such a thing as specific gravity, a factor seemingly overlooked by Professor Milne and his colleague, Mr. Perry, who recommended the openings to be scattered over the face of the building, thereby rendering perpendicular support impossible. Mr. Maskell thinks this building too high. It is exactly as the proprietor required it; and I submit he had a right to build it the height it is if he was willing to pay for it. It is this very height that gives it an elasticity or a pliability that enables it to follow, or, we may say, accompany, the oscillations of the earthquakes—a quality that one-or two-storey buildings cannot possess. For in despite of Professor Milne, and all the authorities he has quoted, I assert and can prove that the high buildings in San Francisco suffered the least. The walls of this building, with the brick, mortar, bond and hoop iron, would in 10 or 12 months from the time of its erection be thoroughly incorporated. The floors and roofs, too, are powerful auxiliaries in binding the building into one compact mass. This is true of any building: a quality which the Professor, and those he quotes from, singularly enough overlooks. That this building is united together into one compact mass, Mr Walter Nathan assures me; that with the two or three earthquakes we have had since it was erected, it moved with their oscillations, and when these ceased there were no cracks to be seen anywhere, not even in the plaster. Mr Maskell says that the National Mutual building has a heavy cornice, and other projections, and that the arches do not curve into the abutments. He says the same of the Post Office. Now in each of these buildings the cornices project 6 in. less than according to the best authorities, they should do in order to produce true architectural beauty. I note this to show that I have erred on his side, if error it is. In my opinion, however, the line of 6 in. more could have been touched with perfect safety, as the roof behind is infinitely more than a counterbalancing weight; this is further shown by the cornice projecting over the baked walls of the Post Office for the past 18 months, without floors or roof, and after being exposed to such a heat. So far as the arches are concerned, they all curve to the abutments, for the reason there is nowhere else to butt them to. I am really sorry that the number of the windows in the Post Office do not please Mr. Maskell. In that building it is now too late to try. I may explain, however, that the officers, who at the time it was being designed had competent authority, wanted all the light they could get, and I never heard any of them complain of having too much. For its safety as a building I cannot now answer, and am not responsible; but before it was destroyed by fire I would have stood in any part of it during the severest shake I have felt, either here or on the west coast of America, and had perfect confidence in its safety. So much for egoism, but which, from the remarks in Mr. Maskell's paper, I could not avoid.

In another part of his paper he says that his only object for reading it was to call attention to the fact, that the buildings of Wellington were not put up with a view to resist earthquakes. Now this is not a fact, as he could easily have ascertained by applying to the proper quarters. Here, as elsewhere, money enters largely into the quality of a building, and, speaking personally, I use to the utmost every precaution that the money at my disposal will allow; and I am sure, for their own sakes, my contemporaries in their wisdom are doing the same thing. Therefore, it is neither just nor fair to an honourable profession to make such an invidious assertion—not even by a gentleman who confesses he knows nothing about it.

I am not prepared to speak of the construction of buildings in Christchurch, only that I took a cursory look at Morton's block, and the Cathedra], when last there. The Cathedral spire, and Morton's block facing the street, are faced with stone and backed with brick. So far as I could see, there were no precautionary measures against the action of earthquakes, though there might have been. The mortar appeared to me soft, and only composed of lime and sand.

I agree with Mr. Maskell in saying that the Corporation By-laws ought to be more explicit than they are.

There is not one word about the quality of the brick, or of the mortar, (a more important factor,) or how they are to be laid together; and not one word of the floors and roofs, nor of the sizes of their respective timbers in relation to the space. The parapets are too high, and are dangerous. Clearly, our City Fathers have paid more attention to the Fire Insurance agents than to earthquake agitators. When on this subject, I must note that I think the time has come that this city should have a Building Inspector that knows something about building construction, one who has sense enough not to make the Building Regulations a continual source of irritation to all concerned; and one, too, who, under differing conditions could take and give, while securing the public safety.

Of some suggestions for foundations in Professor Milne's book, one is to place a building upon two sets of rollers, one set resting upon the other, at right angles; another is cannon balls, carried on plates resting on foundations; and yet another is described in a design for a house, the upper part of which was to rest on balls, which roll in inverted cups fixed on the lower part of the building; but all this must refer to bamboo and paper architecture, and for isolated buildings, where there is room to roll, and would, therefore, be of no use to us here. In a paper that was published a year or two ago, he (the Professor) suggests a method which he thinks applicable for heavy structures of stone or brick. It is to allow them to rest on foundations on hard ground, rising from a deep pit or series of trenches; that is, to provide a soft cushion for the building, or just such a foundation as we have on our reclaimed land, and exactly as I explained to Messrs. W. and G. Turnbull and Co., twelve years ago.

I have mentioned floating foundations as being largely used for buildings on the city front, San Francisco, and that answered the purpose perfectly there, and were not costly. I adopted them two or three times here; but as many of our citizens thought it ridiculous to build brick on wood, I had to abandon them, they not knowing, or forgetting, that but for such foundations, cities like New Orleans never would have been built. For an earthquake-proof building I still think that on our reclaimed land it is the best method that could be adopted, as the heavy frame-work all bolted together will prevent the building from spreading at the bottom. For foundations anywhere, off the reclaimed land, they are easily and cheaply found and require no remark.

In erecting the superstructure the following system may be adopted in a general way. It was a system that was in universal practice in California in my time, and may with advantage be practised here, as we are building under very similar circumstances. There, as here, there are no seasoned bricks to be had, none that have been exposed to wind and weather for at least twelve months before being used—the rule being, out of the kiln into the building. There, as here, there are no buildings to slake the cement, that is, a building with a large floor surface, whereon the cement could be spread out and kept dry, (for it must not be wetted until it is to be used,) and turned over now and again for two or three weeks. This process is to slake, as far as possible, any particles of free lime that may exist in the best cement. There, as here, we have to admit our heavy timbers into the buildings fresh from the forests.

The bricks used should be hard and sound, not too finely moulded, but square; and if new, water to be continually poured on them, as without the water the mortar will not adhere. Further, there should not be more than three courses of stretchers to one of headers.

In respect to the cement to be used, in brick or stone buildings in earthquake regions, too much attention cannot be given, as upon it the stability of the building entirely depends. It ought to be composed of such a mixture as that, when it is hardened, it will have a density as nearly as possible analogous to the stone or brick to be used, and so that the walls may be as nearly as possible one homogeneous mass.

This question of cement has in all ages been a vital question with architects. We cannot forget the words of Pliny, when he said "The cause from which at Rome so many buildings fall is the bad cement." In latter times we have examples of mortar without any adhesive quality. For instance, M. Fruesart having to re-construct in Strasburg, in 1822, the foundations of a bastion built in 1666, found there the mortar as fresh as if the masons had laid it out some few hours be-fore. A similar circumstance was observed at Berlin, by the architects who took down one of the towers of St. Peter's, which was built about eighty years before. Happily, with lessons such as these, and others, and with our greater knowledge of chemistry, we now know the nature of most of our limes and cements, and so are able to compound a mortar in the present day that in ten or twelve months will in hardness equal, if not be superior to, the best mortar extracted from Roman monuments that have an antiquity of two thousand years.

In California the limes are none of the best, and we substituted Rosendale or Portland cements, as we could get them. The former is a natural product of America, of which Mr. Henry Reid gives the analysis in his book on cement. After some experience we found that not only this but Portland cement set too quickly; that in some buildings where alterations had to be made the cement only formed a cake between the bricks, without the slightest adhesion thereto. Two French architects told us of a custom they had in France of mixing cement with the lime and sand; that by this process the setting was slowed long enough to allow the brick and mortar to adhere together. After trial we found not only this to be true, but that it was easier worked, and that the

bricklayers could lay a greater number of bricks per day. These two architects, at the time this discussion was going on, told us of an aqueduct built in Paris, 87 miles long, having nearly three miles of arches, some of them 50 feet high, and of 40 feet span, that had been built with a concrete of this mixture, and that the work was eminently satisfactory. It is called in France "*beton agglomere,"* and was invented by Monsieur F. Congiet. Curiously enough, this very aqueduct is spoken of in "The Building Materials of Otago," by Mr. Blair, and by him highly commended. After this there was no other mortar used in San Francisco. The specification is something to this effect: To three measures of clean sharp sand (this sand is the foundation of a great part of San Francisco) add one measure of rock lime and one measure of Portland cement. If it was Rosendale cement: To four measures of clean sharp sand add two measures of rock lime and one measure of Rosendale cement. The mortar was mixed in the usual way. These are only the proportions. You will note that there is a greater portion of lime to the Rosendale cement, the reason being that it set so much quicker than the Portland. With well-soaked bricks, and such mortar as the above, all the joints fully filled, we found that in less than twelve months brickwork became one tough solid mass.

Mixing lime with cement has sometimes been condemned, as, for instance, by Mr. Henry Reid; but he knew nothing whatever of the conditions we had to struggle against, or the aims with which we were actuated, and was therefore unfit to be our judge. There were both architects and builders here who condemned it, because they saw it in Mr. Reid's book. But, as has often been said: "To the young or inexperienced all things are mere theories," and most of the builders now admit its utility.

To render the building still more durable, we continued the use of building in the walls the usual complement of hoop-iron, and added bond-irons to girt the buildings at the beds of all the joists and roofs, instead of the usual wall-plates. The ends of all these bond-irons are clipped and bolted together. The ends of all floors or roofing beams, and the ends of the joists at short intervals, are anchored to the walls with wrought-iron cross-anchors; and wherever framed joists or the butt end of joists meet they are strapped together with straps and bolts.

The timbers in California are much better for building purposes than those we have here. The fibre is tougher and more pronounced, and when overloaded will give warning before breaking; and, above all, they are capable of being seasoned, and do not shrink the end way. Here our timbers have little or no fibre; when overloaded they break without warning. Some of the varieties never season, and the most useful and best shrink the end way, to the disgust of both the architect and the builder. For these reasons largo allowance should be made for our timbers. The thickness of the joists should be one-fifth of their depth—certainly never less than one-sixth; and they should be bridged not more than six or seven feet apart. Of course, I am speaking of brick or stone buildings. It can easily be seen that by such a method of construction no fractures could have happened in the walls, as illustrated in Professor Milne's book. In addition to this mode of construction, further security has been sought by building inside the walls strong timber framework, strongly anchored into the masonry, furred angularly, and then lined with strong matched lining, the opposite way of the furring. Colonel Elliott, of the United States Engineers, advocated a system of triangular rods to be built within the walls, begun on the solid masonry in the foundations, and so to the top. Something like this was adopted in the erection of the University of California, by Mr. Farquharson. There have been patents granted in America for various methods of earthquake-proof construction, but, so far as my information goes, the benefit has not been compensated for by the extra cost.

Mr. Maskell tells us that he has taken opportunities of looking at some of the brick buildings in this city, and finds the greater part of the theories of Professor Milne neglected. I hope he will now admit that in those peregrinations his looking was only superficial: that he only saw regular openings, one over the other, instead of scattered ones; that the arches were not curved into the abutments, and that there were some projections that did not please him. Also that he will, after hearing the foregoing general description of the construction of the buildings under consideration, see that the wrought-iron within the walls, and the iron bond connection that the floors and roof have with them, form such a tower of strength as even Professor Milne never dreamt of. The above is the system that has been followed in the buildings Mr. Maskell has criticised; and I await with perfect confidence the result of any test they may be subjected to, though I trust that time may be far off. It is a mode of construction that has been eminently efficient in San Francisco, and along that coast, and is in use with the San Francisco architects, a body of gentlemen who represent almost every nation in Europe, as well as America, and who began the study of earthquake-proof construction long years before the name of John Milne was known to the scientific world, who are still continuing the study, and, on this subject, are in my opinion the best authorities on the face of the earth, Professor Milne and all his hearsay evidences notwithstanding.

In conclusion, I hope there is nothing contained in Mr. Maskell's paper, nor in Professor Milne's book, that will alienate the faith we have in our adopted country;—that we inhabitants of the Great Britain of the South will continue to believe that we shall have no more severe tremors of Mother Earth in the future than we have had in the past. That with this faith in ourselves and in our new home, we may continue to cultivate the arts and

sciences, and in civilisation march on abreast of the other great families of the Anglo-Saxon race that are to be found in every quarter of the globe. That we may even have the courage to rival in progress our illustrious mother, the Great Britain of the North, who, in the face of the 255 recorded earthquakes, has built a city of such a magnitude, of such excellence, and who governs it with a perfection such as the world has never seen. That we may feel in our souls that these islands are as safe and secure as the land which has sustained the Pyramids for thousands of years: more steady than the foundations on which the ancient Greeks erected their matchless temples : as enduring as the sunny plains of Italy, on which the ancient Romans originated the glories of arcuated architecture, and rendered possible the production of the sublime cathedrals of the middle ages: that we may have such a faith in this our abode as the citizens of that young great city of the Occident have in theirs, and wherein originated the mammoth hotels of our own time.

"True," those may say who are habitually foreboding evil; "but our fate may, one of these days, be as was those of Japan, Java, and Central America of late years." Aye; and so, too, may come the time spoken of in Holy Writ, when "the heavens shall pass away with a great noise, and the elements shall melt with fervent heat; the earth also and the works that are therein shall be burned up."

Mr. W. M. MASKELL regretted that Mr. Turnbull had made the question a personal one. He (Mr. Maskell) had carefully avoided that; and his only object in presenting the paper was to draw public attention to an important matter. He did not desire to defend Professor Milne—he could stand up for himself; but if he was allowed he would differ from Mr. Turnbull's opinion of that gentleman. As far as his (Mr. Maskell's) reading went—and it was not that of a few days—no name stood so high as that of Professor Milne upon such matters. He combated Mr. Turnbull's arguments at some length, and pointed out that the effects and results of earthquakes were incomprehensible. Earthquakes seemed to knock buildings down, or leave them alone, just as they liked. A number of buildings on one side of a street might be knocked down, while others on the opposite side would be uninjured, He considered that Mr. Turnbull had given up the whole question, just as an architect who had written to a newspaper in reply to his (Mr. Maskell's) paper had done, by making a statement that we were not likely to again experience destructive earthquakes. Those who thought that were perfectly welcome to their opinions. He did not believe that we were not going to have destructive earthquakes in New Zealand, and he explained that the whole of his paper was based on the supposition that what had happened before would probably happen again. He quoted some notes on the shock of 1848, written by Mr. W. Fitzherbert, who stated that "the earth in some parts was moved in waves averaging about 12 inches in height." He would like to know how their brick buildings would fare under those circumstances. Mr. Fitzherbert had further stated that several brick buildings were thrown down, and that a subsequent shock completed the destruction of most of the brick buildings. Mr. Maskell also quoted from some notes on the same earthquake given by Mr. H. S. Chapman (afterward Judge Chapman) in an article in the *Westminster Review*, detailing the damage done. Mr. Maskell expressed his belief that if the recent shock experienced in Canterbury had occurred here that half the large buildings of brick and stone in the city would have been very much injured, if they had not fallen down.

Mr. TURNBULL said that Mr. Maskell regretted his "making the matter a personal one." He denied this, and pointed out that Mr. Maskell, by selecting his (Mr. Turnbull's) buildings for criticism, had put him on his defence; and hoped that in his paper he had succeeded in dispelling many of the fears in the stability of our buildings which might have arisen from the startling tone of Mr. Maskell's paper. Mr. Turnbull denied that he had given up the whole question. He had taken in hand to read a paper on "Earthquakes and Architecture." The paper from beginning to end had never left the subject. With regard to the earth waves one foot high, described by Mr. Fitzherbert in 1848, reliable old settlers allow there was nothing of the kind, though there might have been atmospheric illusion that produced something approaching to their appearance. Mr. Turnbull did not envy the feelings of those who were always living in dread of something terrible that was going to happen. He said he intended to pursue the subject at some future date.

The meeting then terminated.

An Address to the Members of New Zealand Friendly Societies
By Edmund. Mason, Esq., Registrar.
Delivered on Monday, 8th July, 1889, in the Exchange Hall, Wellington.
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An Address to the Members of the New Zealand Friendly Societies.

Although it is more than a year since I addressed the members of the Wellington friendly societies in the

Oddfellows' Hall, I wish to refer to some criticisms passed upon the paper which I read on that occasion—subsequent criticisms, I mean, by persons who were not present, but who saw a printed copy. I may say that I received from many correspondents throughout the colony very complimentary expressions of their appreciation of my treatment of the subject, but I propose to refer only to those criticisms which were adverse, in order that I may reply to them. One friend said to me : "I see that you have been delivering an address to friendly societies. Rather full of padding, wasn't it?" I did not think it necessary to defend myself to my critic, who doubtless alluded to the numerous quotations with which I had supported and enforced my arguments. Now, those quotations were in every instance from the writings of actuarial experts and others, whose position entitles their words to the greatest possible respect; and if, in support of what I consider to be sound advice, I find passages in the works of recognised authorities setting forth in forcible language the views which I desire to advocate, I unhesitatingly say that, instead of restricting myself to words and arguments of my own selecting, I think it far better to ask my bearers, as I shall ask you to-night, to weigh well the statements of those who are manifestly and admittedly competent to speak on the subject. I readily acknowledge that the question should not be "Who says this or that?" but "Are the allegations true, and are the deductions logical?" And if the authorities Appealed to in support of my contention on any point can be shown to be illogical as to their reasoning or mistaken as to their facts, then my critics are welcome to include both them and myself in a well-merited condemnation. Another comment that was passed on my humble effort to convey instruction and information was that it was not sufficiently entertaining. Now, gentlemen, I am quite willing to be entertained, and if any of the friendly societies will arrange a social gathering and include me in the list of guests (as my friends of the Southern Cross Lodge did the other night), I will come and enjoy the evening with you. We will, for that night, forget that there are such words in the English language as inadequate contributions and deficiencies. All our thoughts shall be of surpluses and of long life without a pain, but, on occasions like the present, when the questions under review so clearly belong to the serious side of life, I take it for granted that you will approve of my determination to treat our subject in a serious manner. Another objection that what I said contained nothing new, and that it was but the repetition of an oft-told tale, I had anticipated, disclaiming originality. The methods of conducting a friendly society which I recommended have been by a consensus of opinion pronounced by experts to be sound. New views can be originated, therefore, only by the condemnation of those methods, and of the foundations on which they rest; and, as I am convinced that the wisdom of those methods cannot be impugned, I do not know how to avoid the charge of repetition, as from time to time I am called upon to offer advice or to urge reform No great advance is likely to be effected by one appeal. The settled conviction that results in continuous action is of slow growth in the minds of men. I ask your forbearance, therefore, if in my desire to see New Zealand societies occupy the front rank in respect both of their organisation and their success I keep on repeating, as occasion serves, established truths. I beg, too, that you will banish from your minds the idea that, because in the course of my official duties I find it incumbent on me to point out errors and defects in your system, I do not fully recognise the fact that the highest praise is due to those who have done so much and faced so many difficulties in the establishment and development of these institutions. Nor do I seek to detract from the value of the work in which you are engaged. While pauperism and kindred social subjects are continually presenting overwhelming difficulties to the mind of the statesman and the philanthropist, a section of the class most nearly affected solved for themselves and for those who joined their voluntary Association the anxious and complicated problem. With- out financial influence, without the leadership of men of mark, without, in fact, any of those advantages which are generally thought to be necessary to the success of great enterprises, struggling even for a time under the ban of public opinion, the pioneers and organisers of the affiliated friendly societies in England fought a noble battle. There were, undoubtedly, at first, mistakes and defects, and consequent loss and partial failure; but the history of the movement proves that the men who devised the scheme of mutual insurance for the masses knew what in the main was suited to their needs, and exhibits them persisting through good report and evil report in their efforts to carry forward the work which to day is so important a feature in the social life of the community. And with reference to the mistakes and losses made by friendly societies, are there no other institutions which also exhibit failure? To mention one class only: what a lamentable array of life insurance offices have collapsed utterly during the present century. There is not, I admit, any satisfaction to be derived to you from this fact, but it certainly should serve as a warning, for those failures were due to the very same errors which I urge you to correct. A recent utterance by Professor Seeley seems to me so appropriate to your founders and reformers that I will quote it, and I think that we, too, may flatter ourselves that our presence here to-night is a proof that, although we may not be able to claim that we have done very much for the cause, we are ready at least to approve and follow the counsel and guidance of the wisest and the most far seeing. Professor Seeley was addressing a society whose purpose is the cultivation of a higher standard in all social and ethical relations; but his words have a general application, and as such we will venture to appropriate them to ourselves. His words are these:—

I know no way in which a nation can acquire clear views except by the influence of the clearer minds upon the rest. In every generation some men can see their way even when the multitude is most bewildered, some men can grasp principles even when the most are without pole star or compass. These men must influence the rest, and the utmost that can be tried in such an extremity is to bring to bear upon the mass the greatest amount and the beat quality of influence from the better gifted and the better informed.

I have one more objection to deal with. I was charged with taking too gloomy a view of those societies whose financial position has, upon investigation, been declared, and that more than once, to be unsound. From the facts, as they are stated, it does not seem to me possible to evade the conclusions that I drew. I should greatly rejoice if either the facts or the con cessions could be disproved or gainsaid. A very long time may elapse before an unsound society goes utterly to the wall, but even within the short experience of this colony, commencing from the passing of the Act of 1877, several societies and branches have dropped out of existence; and there is not, nor can there be, any tangible record of the individual suffering which has resulted from such imperfect thrift. And I should not like it to be possible that men should say—whether or no I be alive to hear it—that I had helped, even by my silence, to deceive them to their rain. I am glad that public attention has been at length aroused to the insufficiency of the contributions of many of the societies. Hitherto there has been evinced by the majority an utter indifference to those warnings which the Registrar and the Public Valuers have given; to societies whose rates of contribution are inadequate to provide the benefits offered. I have had conversations with members who did not even know that a report showing the unsoundness of their lodge's financial position had ever been issued. Hat I would deprecate any attempt at compulsory legislation. My opinion is that education is the only possible means whereby to cure the evils that exist, and that a system of coercion would necessarily and lamentably fail. Existing members, and those also who are about to join their ranks, must be persuaded not to begrudge a few shillings a year for the sake of securing a *safe* insurance. I refuse to believe that the members of friendly societies in this colony will persistently remain blind to their true interests. Your Victorian brethren were face to face with the game difficulties, and they have done much to amend their position. New Zealanders will, I am satisfied, become not less alive to the necessity of action. Already some societies have taken steps in the right direction, and the present shaking among the dry bones is, I take it, a hopeful sign of coming improvement.

It will, I think, be both interesting and instructive to consider what is being done by friendly societies and other provident organisations outside of New Zealand, and to learn what we can from their example and experience; but, first of all, I will refer to two matters which possess for us a very direct and immediate interest.

Man has been variously defined-as a talking animal, as a reasoning animal, as a praying animal—but it is obvious that to single definition, even if it be sufficient to differentiate him from the rest of the animal creation, embraces every side of his character. I do not know whether anyone has yet labelled him as a cooperating animal; but, whether the expression be original or not, it will suit our purpose to night to adopt it. Friendly society organisation is one form of co-operation. Out of wages at the lowest rate it is Impossible for men to lay by a sum to meet extraordinary expenditure, especially that [*unclear:* tailed] by the sickness of the bread winner, and the only practical means whereby it is possible for this class to combine so as to [*unclear:* ert] pauperism is that which you have [*unclear:* dopted] in your various orders. To quote from the report of an English Parliamentary Committee in 1825:—

Whenever there is a contingency, the [*unclear:* deapest] way of providing against it is by [*unclear:* ting] with others, so that each man may subject himself to a small deprivation in [*unclear:* ler] that no man may subject himself to a great loss. He upon whom the contingency does not fall docs not get his [*unclear:* cey] back again, nor does he get for it any [*unclear:* ble] or tangible benefit, but he obtains [*unclear:* curity] against ruin, and consequent peace [*unclear:* ney] mind. He upon whom the contigency less fall gets all that those whom fortune [*unclear:* tea] exempted from it have lost in hard [*unclear:* cey], and is thus enabled to sustain an [*unclear:* ent] that would otherwise overwhelm [*unclear:* shos].

Or, as a recent writer has expressed the [*unclear:* ne] idea:—

From the day of entrance the member becomes possessed, in some measure, of the [*unclear:* antages] of property, not indeed to the [*unclear:* tant] of setting him free from the necessity favor, but as enabling him to face life with light heart."

It is true that he may not finally stand in and of such a provision. He may be [*unclear:* sucful] in business, and, having acquired a [*unclear:* petency], may withdraw from his society, [*unclear:* isa] be may remain in it as an honorary members This contingency, doubtless, accounts a part for the high rate of secession [*unclear:* obsesrvle] in the statistics of this colony's friendly [*unclear:* cety] experience. Or he may have been throughout life singularly free from sick[*unclear:* isa] But, if such has been his favored lot, [*unclear:* ald] he regret the method of his thrift? [*unclear:* ght] he not rather to congratulate him [*unclear:* of] on his successful career or on his combative immunity from sickness, as the [*unclear:* sho] may be?

Moreover, the bond of union between members of a friendly society is not to be [*unclear:* ured] merely by

the selfish standard of [*unclear:* necey] value. There exists a closer tie of [*unclear:* therhood] among those who have high [*unclear:* ms] and abundant charity, not limited by [*unclear:* the] walls of their lodge room, whose [*unclear:* symthies] with every effort for the happiness [*unclear:* any] their fellowmen. Such are some of the [*unclear:* re] friendly society co-operation for its [*unclear:* hab] members. Let us briefly consider what benefits it confers upon the community at [*unclear:* mita] The Charitable Aid Society would, [*unclear:* qine], have ample funds at its disposal for [*unclear:* vodeable] casus of distress if every man in [*unclear:* shou] colony were a member of a well-[*unclear:* ised] friendly society. Where do the [*unclear:* ners] that fill our gaols come from? Are by recruited from your ranks? Think for a moment what the idle and the improvident and the criminal classes cost the State year by year. Nor is this vast present expenditure for judges and magistrates and police and gaolers and prisons the only burden that has to be borne by the thrifty and the law-abiding. What is this compared with the consequences of the transmitted vice which by heredity and evil influence and example is engendered and developed in the children of pauper and vicious parents? I will give you a startling illustration of this inherited and perpetuated career of misery and crime, for which my authority is the 'Edinburgh Review' of April last.

"Every guardian of the poor is familiar with the case of individuals who are chronic paupers, and of families which have been 'on the rates' for generations. A striking instance comes from New York, in a recent report of the Children's Aid Society in that city. The descendants of a pauper girl and her sisters were traced to the number of 709. Of these, 368 were legitimate, 91 were illegitimate, 250 doubtful, 128 were known prostitutes, 18 kept houses of ill fame, 67 were diseased and cared for at the public cost, 172 had received outdoor relief for 734 years in all, 64 had been in alms-houses for 96 years in all, 76 were publicly recorded as criminals."

There is, it must be admitted, an unfortunate lack of information as to the number of the original sisterhood, as to the number of generations over which the observations had extended, and as to the manner in which the observations had been taken; but I think that we may accept the statement in evidence of the distinction which I wish to emphasise between the conduct of the thrifty and the conduct of the unthrifty in its effect upon the happiness and upon the prosperity of the entire community.

Once again, the pecuniary relief afforded by friendly societies is not confined to members of their own Order. They have raised considerable sums for specific purposes—as, for instance, at the time of the cotton famine, as it was called, when the Lancashire weavers were thrown out of work, as a consequence of the American Civil War. In England special grants have been made by the Ancient Order of Foresters towards the equipment and maintenance of the lifeboat service; and of the American Order of Oddfellows it is recorded that when fire demolished the city of Chicago, or yellow fever decimated the inhabitants of Memphis, or the grasshopper plague made a desert of the States of Kansas and Nebraska, then the generosity of the Order was displayed by gifts of tens of thousands of dollars.

I think, therefore, that with such a record it is surely not unreasonable to ask that your institutions should be exempt from local as well as general taxation.

There is one matter to which I have to refer with mingled feelings of satisfaction and disappointment. It has been urged by all experts and generally admitted that to complete and to materially strengthen the financial position of friendly societies, the establishment of a superannuation fund is necessary, and New Zealand societies have, from time to time, been urged to devote any available surplus to the carrying out of this recommendation. At the instance of the Executive of the Independent Order of Oddfellows a scheme was drafted and submitted to the last biennial meeting of the society for the formation of such a fund, there being a surplus in the funeral fund which it was proposed to assign as a nucleus of the said superannuation fund. I regret to say that a majority of the delegates not merely voted against the scheme, but expressed their opposition to the principle. I beg, therefore, to ask your attention to a passage on this subject in the writings of Mr Watson, the actuary to the Manchester Unity in England.

"The true mission of friendly societies is only partly fulfilled while superannuation or annuities for aged members remain unpro-provided. The sentimental outcry against centralisation will have to be modified. . . . If a friendly society is formed, individual interests are sunk for a community's good, and centralisation, in a degree, is established. There can be no combination for mutual help without more or less centralisation. The centralisation of such associations as the Independent Order of Oddfellows, the Ancient Order of Foresters, and other large affiliated bodies is consolidation, the moulding into a compact integral body of the various branches or parts of which each is composed. The central bodies of the large societies have no power beyond that which the society and the rules give them, and they generally have to be reelected by the representatives of the whole society, year by year."

The above was written about eleven years ago, and since then the two societies to which Mr Watson refers by name have adopted a scheme of superannuation. It has not, however, found favor as yet with members in England, but I hope that New Zealand societies which have a surplus will, before long, come to regard this

method of allocating it as the most suitable and effective.

The address of the Grand Master of the Manchester Unity in 1882, the year in which the superannuation scheme was introduced into that Order, contains these words:—"By your acceptance of this additional element of thrift in the constitution of this society, you will . . . have strengthened the lever wherewith the better to elevate the working man to the level of comparative independence."

The objection made to this form of insurance is that a large percentage of the subscribers to the fund will not live to be recipients of the benefit. But surely this objection, if it have any validity, is applicable in greater or less degree to the general principle of friendly society co operation so far at least as relates to the sickness benefit. I wish most sincerely that candidates for admission into a friendly society would give to this objection its full weight so far as unsound societies and branches are concerned, and be deterred from joining such by the consideration that there is is very great probability that, although they may live to *need* the benefits promised, they well not enjoy their due share as offered and contracted for. Then the unsound societies would soon either cease to be, or would put themselves upon a solvent footing, the sound ones would flourish, and such a state of confidence would be established that their membership would be largely increased, and success be crowned with success yet greater

The following passage, also on the same subject, occurs in a paragraph which I inserted in my recently issued official report extracted from the Rev. J. F. Wilkinson's paper in the 'Oddfellows' Magazine on 'Fifty years of friendly society progress': "The first society that popularises a sound scheme of superannuation, and educates its younger present members and all future initiants to take shares in it, will be the premier friendly society of the future will never capitulate to the attacks of want and pauperism, but will provide a shelter to *the end* against the ills industrial life is their to."

Let us now turn our attention to matters of interest connected with our subject is other countries.

In England a very strong feeling has gradually grown up among the members of the affiliated orders that the general application of the term "friendly societies' so as to include "collecting" societies, as they are called, is calculated to injure the good name of those institutions whose members are banded together for mutual succor and support. The collecting society is simply private venture, and the contributors to its funds are, for the most part, the poorest of the poor. The expense of management is necessarily enormous. The insurance if chiefly, and in some societies wholly, for a money payment at death, and the lives of children form a very great part of the risk. At a recent conference of the affiliated orders the following resolution was passed—"This Conference is of opinion that the time has arrived when the sections in the Friendly Societies Act, 1875, having reference to the collecting societies should be eliminated therefrom, and that they should be embodied with any other sections these societies may deem necessary as a separate Act for their special guidance and government; also, that the words 'Friendly society' be not inserted [*unclear:* is] any sections of their Act, such appellation being in our opinion, misleading to the public when associated with the collecting societies." In July, 1888, a Select Committee of the House of Commons was appointed to inquire into and report upon the operation of section 30 of the Friendly Societies Act, 1875, as amended by subsequent Acts, and into the organisation or general condition of societies and companies is which the said section applies, and to suggest what amendment of the law (if any) if required to ensure the better management of such societies and companies, and the more complete protection of the interests of the members; and in February last the Committee was reappointed. The evidence given before the Committee last year dealt with three principal points. More stringent regulations as to children's insurance were aged, in order that no premium might be offered to baby-farmers and others having pecuniary interest in the death of the assured. The helplessness of the members against the perpetration of fraud or injustice was also suggested as a matter requiring Ether legislation. And the waste involved in this method of thrift was dwelt upon, 40 per sent and upwards being absorbed as expense of management, managers and collectors making a living, and even a handsome income out of these weekly pennies. It is said in reply that, according to the law of supply and demand, if there were no room for such institutions they would cease to exist, and that the contributors belong to a class which either will not or cannot join a mutual society. The probable result will be that in England they will continue their work. What I would suggest is that in New Zealand the affiliated orders should occupy the field, so as to render the establishment of of such a wasteful form of thrift unnecessary and impossible.

While speaking of the cost of management I wish to show you what New Zealand societies are spending under this head. The average expense of management per member is less than 5s 6d in every £ paid as or for benefits. But this ratio diminishes continuously for many years after the establishment of a society. It is therefore more useful to calculate the ratio of the average expense of management per member to the average contribution. This ratio is less than 4s in the £. Again, if to the contributions be added the amount received as interest on the accumulated funds, the ratio of the total expense of management to the *Total income* is a little over three shillings in the pound. The explanation of this economy in management is that so much time and work is given for the honor of the cause without any pecuniary remuneration. And the economy is all the more

conspicuous when we consider the small value of the average benefit per member as compared with that in any life insurance office, and when we also take into account that in this colony the cost of travelling and of other items of necessary expenditure is unavoidably high.

In England also, among recent proposed legislation, it is sought to insist upon an actuarial certificate as a condition precedent to registration. I must confess that I do not agree with those who propose to reintroduce this system. I scarcely think that, with English ideas as to the liberty of the subject, it would be possible to legislate so as to prevent persons from establishing societies working under scales of contributions and benefits to which no actuary would affix his name, and, as a matter of fact, the "certificate system" has been tried and failed. The law in England from 1819 to 1834, and again from 1846 to 1850, refused registration to societies unless they produced an actuarial certificate. The result was that comparatively few were brought within the protection afforded by the Act to registered societies, or within the control exercised by the officer charged with the administration of the Act.

There is one other matter of interest for us in the "Home" experience. The friendly society system, originated by working men, is thence growing into favor with the classes that can afford to pay a higher premium than the rate fixed by working men for themselves, and I think that the example might advantageously be followed in New Zealand. I will not say that there is too much life insurance in the world, but I consider that the amount of it is out of all due proportion to insurance for sickness and old age. In England an association has been formed among medical men on friendly society lines. At Edinburgh has been established a sickness Assurance Association, which grants a weekly allowance of L1 and upwards according to the premium paid. I think that it would meet the needs of many if they could join a society in which they would be entitled to sick pay ranging from L1 to L2 a week, together with a medical benefit; also to a deferred annuity varying in amount from L30 to L50 per annum, and commencing at the age of sixty or sixty-five; also to a payment at death ranging from L20 to L100. It may be thought by working men that the premium for such an insurance would be beyond their means; but I take this opportunity to express my belief that such a scheme would prove attractive to many, if established as a *mutual* society, by men who would be willing, like the members of friendly societies, to give time and services to the affairs of the Association.

Let us now turn our attention briefly to what is being done in Germany. An elaborate system of compulsory insurance has been gradually growing up in that country; insurance against accident, against sickness, and for old age annuities is now in operation. The scheme does not yet cover the entire working population, hut in its complete development is intended to do so. It is reported that the scheme is generally acceptable to the persons assured. Although under State control considerable voice in the management is given to the members, and facilities are afforded to the representatives of the associations to suggest and carry out measures for the prevention of accidents, the improvement of sanitation in workshops, and other like matters. Sir Edward Malet, the British Ambassador at Berlin, in one of his late public despatches, speaks of the scheme as "a social experiment on a vast scale, which, if it succeeds, will form the most enduring title of the late Emperor William and Prince Bismarck to the gratitude of their countrymen."

The working out of such a scheme naturally possesses a world-wide interest, and as it appears to be in harmony with the institutions of the German people, it is to be hoped that it will prove practicable and beneficial. But it by no means follows that this example of State Socialism could be successfully imitated by us. I do not think that it is compatible with British freedom. German ideas on social questions may be in advance of ours, or our ideas may belong to a higher plane than theirs, but, whichever it be, the fact remains that the two nations differ so materially in temper and genius that the success of this experiment in Germany would not necessarily prove that its adoption would be equally beneficial to ourselves. It is, without doubt, an attractive idea that for every man, out of his own savings, should be secured a provision against absolute want; and if compulsion were to be tried at all, it would seem reasonable that those upon whom the experiment should first be made are the men who make no attempt to provide for the future, the men whose improvidence expos s them to the risk, I might say to the *certainty*, of pauperism; exposes not themselves only, but wife and children also, to the degradation of dependence. Those who have denied themselves are called upon to support the thriftless, and the tax weighs with heaviest pressure upon those who have to exercise the greatest self-denial in order to maintain their own independence. It is, without doubt, the greatest possible hardship that the improvident should thus drain the stream of charity, so as to deprive those for whom it should run full and free. But, until for us compulsion is brought within the range of practical politics, I commend to the ambition of friendly societies the effort to strengthen and complete the edifice of voluntary thrift.

In France, friendly societies have increased rapidly during the past forty years. As compared with our societies they present several distinctive feature in their constitution and management There are two classes—one class being admitted to the full privileges conferred upon such institutions, the other being merely recognised as possessing a legal status; but all have to register and make annual returns to what in England is called the House Office. Honorary members represent 14 cent of their number; women and children are

enrolled and represent respectively [*unclear:* be a] per cent, and 2 per cent, respectively of the total membership. There are deferred annuities and pension funds in aid of the aged and infirm. For the "approved" societies there is partial exemption from taxation, and in addition the allowance of a liberal rate of interest upon moneys in the public funds deposited for the purpose of providing annuities, as well as State grants in aid of such annuities, Other privileges are conferred upon them—the use of municipal buildings for their meetings, the supply of the necessary books for the management and accounts, and reduced charges for their members in departmental convalescent institutions.

In the United States of America there has been, as you know, during the present century, vast progress in every direction—a vast increase of population, a vast increase of settlement, a vast addition to the agriculture, the commerce, the manufactures, and the wealth of the nation. And whereas is this rapid growth many of the American institutions have developed new forms, in respect to friendly societies it appears to be recognised that the model of the Affiliated Order, which Englishmen have the credit of inaugurating, is found to be equally suitable to the citizens of the great Republic. The American Order of Oddfellows, which is, I believe, the largest friendly society in the States, is, in fact, an offshoot of the Manchester Unity, and until the recent disruption, caused by the "color" question, the Foresters there formed a Subsidiary High Court of the English Order.

In conclusion, I repeat my satisfaction at the turn that affairs have lately taken. I hope that it will prove the turn of the tide which, taken at the flood, may lead friends societies on to fortune. I am told that some have taken great offence at my outspoken language. As I said to you last year, I personally have nothing to gain by calling the attention of societies and the public to these unpleasant truths, but if I had failed to do so you might justly have charged me with negligence in the discharge of my duty. I have pointed out the malady. The remedy can be effected by yourselves, and say again that I refuse to believe that you will not prove equal to the task of reform which lies before you.

Front Cover

DIARY OF A TRIP From Lake te Anau to Sutherland Falls. decorative title page

By Walter Prince.

Introduction.

THE following diary is an exact account of what happened, and of what was seen; no rhapsodical imagination is introduced, and the reader may accept all that is said as being unvarnished truth, both as regards merits and demerits. This statement is made, because the writer has seen many descriptions which are very long-drawn, and which really do harm to the district when visited by readers of those accounts.

Diary of a Trip

From *Lake Te Anau to Sutherland Falls*

SATURDAY, FEBRUARY 9TH, 1889.

ThE writer started from Quinten McKinnon's (track cutting) camp, now called Trackton, in company with Daniel McKinnon, on a trip up the Clinton Valley and over the McKinnon Pass, to the now celebrated Sutherland Falls; Trackton is situated a short distance from Lake Te Anau, at the mouth of the Clinton river.

For about three miles the pair were accompanied by J. Barber and Quinten McKinnon, and the whole party had lunch at the junction of the East and West Clinton rivers opposite Mount McKenzie, when Barber and Quinten McKinnon left to return to Trackton. A short distance from luncheon-place the writer and his companion came to a creek, which they, taking it to be the Clinton, followed on its left bank, as they had been told to do, but upon which they failed to find any track blazes. After spending all day in searching this creek for blazes, they camped at the confluence of two smaller tributary streams, and grilled a couple of grey ducks in Maori fashion, *i.e.*, stuck a stick through the ducks and placed them over a camp fire.

SUNDAY.

After considering their position, they decided to return to the luncheon-place of the previous day, there to pitch the tent, while the writer returned to Trackton to get fresh instructions and explanations from Quinten McKinnon. After much teasing and sarcasm, he returned to luncheon-place (East and West Clinton junction) camp, not having obtained any particularly fresh or useful information. Arrived at about 6 p.m.

MONDAY.

Started early, determined to find track, and soon arrived at greek where the befogging occurred on Saturday. After much searching it was found that this creek had been mistaken for the Clinton itself, and that we had to cross it instead of going up it. The track was at last found on the further side, where it commences lower down the creek, which creek was found to be merely a Clinton tributary: if the track had crossed in a straight line, this mistake would not have been made. Having found the track, which is here very clear, and being in much better spirits, better progress was made. A Paradise duck was shot on our way, and a creek called Bruce Creek was reached at about 6 p.m. Tent was pitched here, and better progress having been made this day, it was thought possible to get over the Pass or Saddle (now in sight) the next day.

TUESDAY.

Left early and found clear blazes leading out of Clinton river-bed, which were followed, but which led in a short distance to a large fallen tree over which no track is visible, and no progress could be made through such thick bush as lay beyond it. The track up to this tree is clearly blazed and well beaten, and later information says that nearly all the parties of tourists have been misled into following it as far as the tree, and then retracing their steps to the Clinton. There was no help for it but to return to the river-bed, which was done, the conviction being that this part of the track is simply fooling people. Clinton bank was searched for any other track for some hours, but without avail, and ultimately the character of tourist was abandoned and that of explorer adopted, for there was no help for it but to make ones own track: there is no doubt but that all traces of a clearly blazed legitimate track ceases at Bruce Creek. It was therefore decided to keep to the Clinton river-bed until the Pass was reached, and after much wading and boulder climbing a grassy flat was reached near to the shores of a small lakelet called Montara. Since so much time had been wasted by following false blazings, and then looking for true and correct ones, the day was nearly spent, and it was decided to camp here, although earlier in the day than usual for pitching the tent. Since however this flat was right at the foot of the Pass, it seemed reasonable to expect that the following day would see it crossed, and the Beech Hut (tho destination) arrived at, for the Hut is only about two miles from the foot of the other (western) side of the Pass. But "blessed is he that expecteth nothing, for he shall not be disappointed," as the sequel showeth. The conclusion arrived at as regards the track is, that it ceases at Bruce Creek, and that from that place the tourist may just do the best he can; this is confirmed by others.

WEDNESDAY.

Rose at daylight and struck tent; and also decided to leave gun, and heavy portion of swag so as to make the ascent of the Pass less laborious, for every pound in weight feels ten upon such grades. Also had the last meal of animal food, in this trip, at this place. Skirted the shores of Lake Montara, and found a camp site, with memo saying that R. Hay, F. King, and R. Henry were camped there three days by reason of wet weather. Took to bush immediately behind this camp, and started to rise over Saddle (or Pass). Being a warm day, it was very hard work, for the grade is in places about 1 in 2, and it was necessary to pull oneself up by means of the trees and scrub. This took longer than was expected, for ever so light a swag feels heavy on such grades and in such country, and the summit of the Saddle was not reached until about 2 p.m. And now for a slight description of the scenery *en route*, and from the view at the Pass: the Clinton Valley from its very commencement at Lake Te Anau is a combination of all that is beautiful in Alpine scenery while it presents many unusual features not known in other Alpine countries, and by no means frequent or common in New Zealand. The river winds about through a comparatively narrow valley, over a bed composed of boulders of unusual size, and between ranges of mountains whose peaks are from 4,000 to 8,000 feet in height, and which mountains are clad in evergreen forest (colonially called bush) up to the snow line, while from this line upwards the clothing is snow—in many cases perpetual. Waterfalls of many feet, snow-slips of large extent, and turbulent creeks and torrents are of course common, but which all add to the beauty of the landscape of this part of the "Wonderland of the World" as the Union Steamship Company calls it. The very track through the forest is of great beauty and charm to the naturalist and botanist, for it consists of many varieties of trees and shrub, including red and black birch, red, white, and black pine, totara, rata, &c.; while it abounds in ferns, among which the writer noticed the Todea superba, Todea hymenophylloides, Gleichena Cunninghami and dicarpa, Hymenophyllum scabrum, Trichomanes reniforme, Davallia Novæ Zealandiæ, Pteris scaberula, Lomaria Alpina, and Asplenium flabellifolium, among others; wild fowl are abundant, including grey, blue, and paradise ducks, grebe, wekas, kakapos, kiwis, teal, black swans, &c., while the lake and parts of the river abound in eels, some of which approach conger eels in sire. On and around the tracks there are several lakelets, grassy flats, and (by no means

least to the pedestrian) hogs. It is noticeable that all the water about this district is very pellucid, except in flood time, and a very striking and pleasing feature with these lakelets is, that they seem coloured with different varieties of shades of colour,—one, for instance, being an emerald green, another deep blue (nearly purple), while others represent almost any degree of shade between these extremes. The scenery from the summit of the Pass is superbly grand and beautiful. On the one side the view is down the Clinton Valley with its evergreen clothing, snow-covered peaks and granite crags, while to the right (looking down the Clinton) is an amphitheatre of rocks, snow-slips, and avalanches, forming the head and end of the Clinton Valley. To the left the Pass is bounded by a very lofty peak called Balloon Peak, and said to be 9,000 feet in height, while turning round and looking towards the West Coast, the Arthur Valley is in view with its extremely grand surroundings. To the writer, the Clinton side of the Pass seemed to present a combination of grandeur and beauty, while the Arthur side seemed grander but hardly so beautiful, although this may be from the fact that, while the view is nearly straight down the Clinton Valley, it is very quickly intercepted in the Arthur Valley by a projecting mountain range. Certain it is, however, that the scenery is more grand and majestic on the Arthur side, for its mountains are higher, its glaciers more abundant, its creeks and rivers more turbulent, its valley sides so precipitous that the word gorge seems more fitting than valley, while all around old father Time's mills are hoard grinding away in the form of avalanches, slow but exceedingly sure in their work of bringing on the time when literally "the valleys shall be exalted, the mountains laid low, the crooked straight, and the waste places plain," for, without doubt, the mountains are slowly being levelled and the valleys filled up. All the grandeur and beauty makes one realise what a splendid asset this poor depressed Colony has been so long neglecting, for in no part of the world is so magnificent a combination of the grand and beautiful, of the immense and minute, of the intricate and simple to be found; at any rate, not in New Zealand or Switzerland, for the writer has seen all the former, and a great portion of the latter. The Saddle itself is covered with a kind of mountain grass and is studded all over with Ranunculus Lyalli (mountain lily), several forms of Celmesia (mountain daisy), and with Edelweiss plants, which were all in blossom at the time of the writer's visit, making the whole surroundings a veritable tourist's Arcadia.

Having spent an hour or so on the Pass, and after a "billy" of tea in addition to drinking in the district's magnificent surrounding spectacle, the journey was resumed, and the very precipitous western side of the Pass negotiated. Delay in ascending the Clinton side, and delay on the top for the purposes of admiration, caused another tent pitching, although the Beach Hut was now only two miles distant. The tent was therefore pitched about halfway down the Pass, on what was comparatively a level place, but, for all that, the writer's sleeping bunk had its head about three feet higher than its foot.

THURSDAY.

Continued the descent until Roaring Creek was reached, when its bed was kept, the travel being a continuation of the Clinton boulder climbing and wading, considerably exaggerated. No track signs visible except a few amateur blazings here and there, which were not heeded, and a bee line was made for Mount Pillans, under whose shadow (and on the banks of Arthur river), the Beech Hut is situated. This hut was expected to come in sight in an hour or so, when suddenly a tree, which the hand of man had fallen, was sighted, and in a few paces more the hut itself was in sight, forming an agreeable surprise, for fatigue was apparent as was likewise shortness of "tucker."

The Beech Hut is built of slabs with a tree-fern roof, and contains eight sleeping berths, which berths are filled with dry fern leaves by way of mattress. There is a fireplace nearly the width of the end of the hut, at anyrate, wide enough to take logs 5 to 6 feet in length, but the hut has no door and no signs of ever having had one: possibly, this is to show that it is built *pro bono publico*, and to prevent anyone from fastening it up, or, to use an Americanism, to prevent any housebreaking. Records of visitors were found (more or less egotistical) in the shape of names pencilled and carved all over the place, and on every available piece of timber and on all the surrounding trees.

This name-carving on tress becomes an atrocious piece of vandalism and desecration, and the writer would respectfully suggest that visitors might more suitably, if less distinctly, leave their marks behind them in the form of seed sowing, and planting useful shrubs, &c.

The writer has put his opinion into practice by sowing grass seeds and hardy annuals, and by planting strawberry, blackberry, and raspberry plants, everywhere he has made any stay. A small stock of oatmeal, sugar, biscuits, and a much larger supply of tea in all sorts of packages as left by various visitors, was found and was gladly hailed, for the lengthened period of travel had very ominously reduced the provision part of the two swags. The hut was a great relief after so much of tent living, and it was decided to stop for a day or two and regain some lost strength for negotiating that awful track homewards.

FRIDAY.

Started this morning for a visit to the now celebrated Sutherland Falls. The track is for the first part along the Arthur river-bed, and then it is very clearly blazed right up to the Falls, the distance being about two miles. The Falls were soon arrived at, and standing at their foot, upon a little terrace of cutty grass, a full and front view was obtained. Judging from somewhat derogatory and depreciatory remarks as to their size which have been made, it was an agreeable surprise to see the large body of water (and this in fine, dry weather) which falls just on 2,000 feet. From the volume of tail water which here forms fully half the Arthur river, and to which must be added the large body of water dispersed in the form of spray which is blown by the wind in every direction, and which never reaches this tail water, it is possible to get a rough idea of the immense power and general magnitude of the Falls. It is only possible to imagine that those persons who were disappointed had, in the first place, become so much accustomed to great heights and depths that their eyes failed to estimate the correct appearance; and in the second place, it is probable they had no idea of Hydraulics. But when it is remembered that the pressure of this water, if placed in a pipe, would be nearly 1,000 lbs. to the square inch at the bottom, and that a supply of water at this pressure would give one mechanical horse-power for about every 30 gallons, while the amount falling represents fully two million gallons, it follows that about 70,000 horse-power of energy is here. This from the utilitarian and hydraulic point of view may help to form some idea of the body of water. From the scenic point of view, the falls are (according to the person's mind) awe inspiring, even although the eye is accustomed to very high peaks, turbulent rivers, and general magnificence. Not being of a rhapsodical turn of mind, the writer cannot fly off into realms or figurative and laudatory descriptions, but will simply say that the Sutherland Falls are extremely and supremely grand, and falling in three jumps such a great distance over a rugged and precipitous mountain side, partly clothed in green by ferns of the Asplenium flabellifolium and other kinds, they are really magnificent to anyone capable of being appealed to by nature's magnificence.

The hut was returned to about mid-day, and a good rest taken.

SATURDAY.

A week to-day since the trip was started upon, and a hard week's work, too, but the "light is worth the candle." Decided to stop in the hut to-day, and fully recover for the return trip.

SUNDAY.

Started at about six in the morning on the return journey with the idea that the thorough rest and perfect acclimatisation experienced to Alpine climbing, would see this night's camp on the banks of the Clinton and therefore over the Pass. Very good progress made up the Roaring Creek bed, and after keeping to it until it was thought safe and correct to leave it, the creek was left at right angles, and the ascent of the Pass began. The bed of a dry tributory creek was taken, which after a little while became very steep; the ascent was continued, however, but as the bed of this dry creek now became smooth steep rock, impossible to negotiate, its sides had to be used, where, by means of bush, it was possible to pull oneself up. The grade kept on increasing until it was almost a case of "hanging on by one's eyebrows," and the higher the ascent the worse it got; in some cases the rocks wore overhanging, and but for plenty of scrub and grass by which to hold on and pull oneself up by, it could not have been attempted. Proof was now apparent that the Roaring Creek bed had been left too early, and that the journey ought to have been continued up its bed until the base of Balloon Peak was reached.

[N.B.—The proper and only way to safely ascend this side is to go up the Roaring Creek bed until the base of Balloon Peak is reached, and then by rising on its base a fair track can be made; all the rest of this side of the Pass is precipitous, and a great deal of it worse than perpendicular (for pedestrians), for it is overhanging.]

But by a sort of determination, only to be call foolhardiness, and for which the writer is chiefly to blame, this mode of ascent was continued, when presently a sort of mantelpiece on a rock presented itself, and along which it was necessary to crawl; it was moreover so much overhung with scrub, &c., that it was impossible to retain the swags in the orthodox place, viz., on one's back, so they were taken off, and each dragged behind its owner. During this mode of travel, the writer found a tuft he was clutching was giving way, and to save himself from falling down a precipice he clutched at a stronger hold, and in doing so released his swag which fell over the precipice, thus taking the writer's place in the falling. All that was seen of it was its making one or two bounds as it touched the rocks, then it disappeared, and, according to the writer's companion's opinion, never to be seen again. The writer, however, does not take quite so pessimistic a view of the matter, for he believes that when the Colony has progressed "by leaps and bounds," (to quote Sir Julius), and has sufficient population to people these alpine districts, then some alpine mountaineer settler may find a vestige of other days in the shape

of the decaying remnants of the writer's swag. The loss of the swag was, however, very serious, for all the matches (packed in a glass bottle for keeping dry) were in it, as was also all the writer's spare clothes, blankets and papers, but fortunately no provisions or tent. After much more hard work the summit of the Saddle was reached, the time taken making it quite late in the evening; but endeavours were made to descend the other side to camp on the Clinton bank, for spending all night in a tent 3,000 feet above sea level is not very enticing. Only a short distance was descended, however, when it became too dark to think of getting down that night, and since it was also too dark to pitch tent, it was used to roll round our bodies as we lay on the earth. Unfortunately it came on to rain in the night, and in a short time everybody and everything was wet through, and it was therefore best to stand up and wait till morning, for it was too dangerous to walk about in the dark. After much anxious waiting, daylight appeared, but only to bring a dense fog, which rendered any progress as impossible as the darkness did.

MONDAY.

After a few attempts to descend to the Clinton through wet scrub winch felt fully as bad as being up to one's waist in water, the fog made it impossible to continue, and so the summit was returned to, since it was there possible to walk about while waiting for the fog to clear away. This was very cold work, for a driving wind made the fog and damp atmosphere very piercing and worse than the rain to persons thinly clad in football jerseys, &c., and wet through to begin with. In spite of walking about, a feeling of torpor came over the writer, and but for the exertions of his companion, who insisted on his moving, he would probably have laid down never to rise again. Since the fog did not clear up, and since the matches were lost and both persons wet through, it was at last decided to return to the Beech Hut, there to get the clothing dried, to get matches, to get a little more oatmeal, &c., and also to get a blanket which some person had (as it happened) most opportunely left. It was easier to go backwards than forwards in the fog (in spite of the previous mishaps and mistakes on this side), for by going on the Saddle summit right up to Balloon Peak, and descending on its base until Roaring Creek was reached, the grade and travelling is comparatively easy. Once down to Roaring Creek it had only to be followed to lead to the hut, where 3 o'clock p.m. saw the writer and his companion quartered again. Having lit a large fire and having gone to bed in a state of nature, wrapped up in tents and the solitary blanket found in the hut, it was compulsory to stay in this position until the wearing apparel was dry.

TUESDAY.

The garments not being dry this morning it was impossible to start until mid-day. Having provided ourselves with matches, a little oatmeal and crumbled biscuits, and the writer taking the blanket found in the hut, a fresh start to return to Trackton was made. Before 100 yards had been travelled the writer found that a feeling he had experienced all night was intensified by walking, and he was fearful of a return of paralysis of the lower limbs, for they had been almost totally paralysed some three years ago by reason of an accident which then happened to him. At any rate, he found it impossible to walk even on the easy part of the track, to say nothing of the harder part ahead, and to save having to stop on the way and perhaps jeopardise the safety of his companion also, he decided to return to the hut, while his companion, who was a stronger man and in better condition, went on to Trackton, from which place he promised to send relief. The writer, therefore, returned to the hut, arriving there about 3 o'clock, and having lit a fire and turned in to a bunk, he covered himself well with tents, sacks, clothing, &c., with the idea that by getting thoroughly warm, he would avoid the horrible paralysis which was making itself very prominent.

WEDNESDAY.

Since there is now only the writer to talk about, the first person singular will be taken.

In solitary grandeur, I remained in bed best part of day, conserving as much as possible of the small stock of energy remaining in me. My only provisions were a pannikin full of a mixture of breadcrumbs, oatmeal, biscuits, and flour, with tea in abundance, but no sugar. This was eaten by being soaked in tea, and lasted four days, as will be seen: had a little to-day. Glad to feel that with continual warmth and rest the paralytic feeling was abating. Nothing special occurred this day.

THURSDAY.

Still lord of all I survey, as far as any individual to dispute my possession is concerned. My only daily companion was a Maori hen (weka) who inquisitively inquires into all pertaining, to sundry preserved meat tins (would they were full) left by former tourists, but she declined to come inside the hut; well for her safety she

didn't. My night visitors were, among, other nocturnal birds, the kakapo. I mention him because he makes himself heard (oftentimes disagreeably) at night. I have heard of "the kakapo modulating his voice, awed by the grandeur of the surrounding scenery." Well, all I can say is, that my surrounding scenery was in all conscience grand enough, but my kakapos did by no means modulate their voices to my nightly disgust. Another small portion of biscuits, &c., in tea.

FRIDAY.

Another day of loneliness; and now getting past feeling hunger. Have often surveyed my past life and the many special feeds of which I thought nothing then, but of which a 100th part would now have been very, very welcome. Never realised before how much a man's stomach may influence his feelings, but that is now past, and I suppose I am now approaching the *in extremis* state (in an extreme mess I undoubtedly was). Also never realised before how much of a man's life in all its trivialities, as well as its more important parts, may pass through his mind when in solitude, and when he has had little or no food for some days, and now, next to none at all.

SATURDAY.

Nothing has happened to vary the monotony of loneliness, and now find I am getting too weak to waste energy in chopping firewood, so collected chips which lie about the hut, and which were left during the slab-splitting and tree falling for its erection. Have got to realise that man is a gregarious animal, and, although there are such beings as hermits, they are the exception that proves the rule. A man may desire to get away from "the hum of cities and the wrath of human life," and be can doubless do the former, but the latter is more prominent than when in the hurley-burley of human strife, and amid thousands of persons.

Unfortunately to-day saw the expiration of the solitary luxury possible to me, for my tobacco was finished. With only my short experience of bush life, I can fully endorse the bushman's choice, viz., that he would rather go without food than a smoke: I believe it serves in some degree as a sudorific, at any rate it seems to palliate the troubles one may be in. Tried smoking tea leaves, but they are a long way off the correct thing, so only took about half dozen puffs at a time,—just enough to satisfy my imagination that I had had a smoke, but no more. I believe the thought of the *grand finale* is far worse to man in full vigour of life, than the feeling present when the end actually draws near. At any-rate I was now too weak to care about anything (not even eating), and yet I felt no pain, but was quite as comfortable and satisfied as if in the most luxurious home. About 2 or 3 o'clock I was suddenly startled by the fire-fly which I had hung over the door space, being suddenly pulled on one side, and with it the appearance of Quinten McKinnon and Charles Brown, both members of the Professor Brown search party, and now forming my relief party.

At the time of their arriving, I had just been four days alone, for I was left at mid-day on Tuesday, and my relief arrived at mid-day on Saturday. They brought a good supply of provisions, not omitting a little whiskey and a bottle of Perry Davis' Painkiller, the latter a valuable bush medicine, for it has a healing, stimulating and satisfying effect when taken internally by a person in my state. After a careful meal and the luxury of a real genuine smoke, I went back to my bunk again, and by the morning felt fifty per cent better.

SUNDAY.

Feel much better, and almost ready to tackle the return trip, but fully believe what was said, that it was only excitement. McKinnon and Brown decided to go down to Lake Ada (about nine miles towards Milford Sound), to arrange for the transport of some stores from the Sound to the Beach Hut, for McKinnon's track cutting men, when they get towards this end of the track he is making for the Government. They left me in the Hut, so that I might have a full day to feed, rest, and get myself into condition for starting back next day, They returned at about 5 p.m. with sundry cock and bull" stories as to where they had been, whom they had seen, and what they had heard, seen, and done.

MONDAY.

Started on the return trip early, McKinnon leading, and prospecting the country as he went to find the best route to cut his track on this side of the Saddle. Did not therefore keep the Soaring Creek bed this time, but went through the bush alongside it, blazing as we went, so that the men will know where to cut the 5 feet wide track when they arrive in this neighbourhood. Made very good progress and reached the summit of Saddle about mid-day. Nature seems to smile upon us to-day, for it is a magnificent day after several days of rain and fog, and the view from the summit seemed clearer and more grand and beautiful than at either time I had been

on it. After collecting several roots of Ranunculus Lyalli and Celmesia, we hurried on to get down the Clinton side of the Saddle. Having accomplished this by much sudden dropping a few-feet at a time, we skirted Lake Montara and arrived at the grassy terrace where Daniel McKinnon and myself had camped on our fourth day out (Tuesday), and where we had left the gun. The three of us now camped on the same site.

TUESDAY.

Started early with the intention of reaching home by night, *i.e.*, we were going to get from Beech Hut to Trackton in two days, whereas it took Daniel McKinnon and the writer five days to do the same distance outwards. Pushed ahead very hard, and had lunch at our old camping place at Bruce Creek, and where a clear track begins. About mid-day it commenced raining, which was very uncomfortable through bush tracks and with the speed we were hurrying. The writer had no swag the whole of this trip, or he never could have done the work in the time in his then condition. As it was, it was extremely fatiguing, but having been relieved once, he was not going to stop while the others went on so long as he could move one foot before the other. For the last four or five miles the pain in the writer's lower limbs was horrible, his knees felt like a hinge without oil, and ached most excruciatingly when going down hill or in stepping down from a fallen log lying across the track, which latter is a common occurrence. However we finally reached the camp, where we were joyfully received. We were soaking wet, tired, dirty, and hungry; and so the writer, after a bath in the Clinton river (sandflies notwithstanding), a change of borrowed clothing, (for he was now very little better off than the day he was born), and a good meal, he turned into his tent and slept as only a downright fatigued man can sleep.

N.B.—This second day's journey is too much for anyone to do in one day with any degree of comfort, especially if he has a 30lb. swag to carry. It is really from the Saddle to the Clinton mouth, or in other words, it is the full length of the Clinton, and two days should be taken, pending the com pletion of the Government track.

Summary.

The scenery is most grand and beautiful, and worth a lot of trouble to see; but the present state of affairs is really dangerous to the average tourist. What is wanted is a fairly good and clearly distinct track, with shelter huts—say every eight to ten miles—for to a person wishing to notice and enjoy the scenery (and it follows that is the reason of his presence), this is quite enough walking to do in one day, and over such country; for if the Government do all that can be reasonably expected, it will not be an asphalted or macadamised road. The huts would avoid the necessity of carrying heavy swags, for no tents would be necessary; a very little weight of provisions would be needed; and the best part of these could be carried in the well-known "billy." All this will be accomplished in a few months, and in time for 1889 tourist season, for the Government have let a contract for the track and shelter huts, and the work is now in progress. Then a good hotel is needed at Lake Te Anau, so that tourists may rest and recover themselves, while they enjoy the scenery of the lake itself.

Lake te Anau.

Lake Te Anau is the largest lake in the Middle Island of New Zealand, and this is disagreeably realised sometimes by the boat travellers when a strong head-wind arises, for the waves are really surprising on an inland body of water. The lake is very beautiful, and is very plentifully besprinkled with small islands covered with trees and bush, while its shores are greatly indented, thus forming numerous harbours. At the first approach from Lumsden Railway Station, the shores are clear, the adjacent country being what is called fern land. The land is covered with bracken (Pteris aquilina). A little way up the lake on this side and the forest and mountains form its shores, and on the farther side (the western), its shores are everywhere mountainous and forest-covered. On this western side also there are three large arms or fiords, and these fiords, together with the Clinton end (which might almost be called a northern fiord), furnish the opportunity for a fortnight of picnicking which cannot he surpassed either for beauty, comfort, and variety. With a launch capable of providing sleeping and cooking accommodation for—say six to eight people—there would be no tent-pitching, no swag-carrying, and only as much pedes-trianism as the person chose by landing. Then, with shooting, fishing, botanising, &c., &c., while the eye is continually being charmed or astonished by some new natural wonder or beauty, it is possible to spend the acmé of perfection of a holiday. For this purpose it is understood that next tourist season will see an entire novelty on this side of the Equator, for it is proposed to place an electric launch upon the lake. This launch will be able to carry thirty persons, and to provide sleeping

accommodation for eight, and since an electric boat has no visible machinery, no noise or vibration, and ran conveniently carry double the number of passengers, the same size steamboat could (since there is no room needed for engine and boiler). Next season Te Anau will be enabled to offer unusual, unique, and unsurpassed attractions to tourists. The launch in question is to be charged by electricity generated on shore by water-power, of which the district contains many thousands of horse-power in its turbulent rivers and creeks. The cost of propelling it, is then, merely the interest on the water-power outlay, with average depreciation.

A twenty-two roomed Alpine Hotel (Swiss chalet style of architecture), is also about to be built, and as the table will be good, the accommodation comfortable and suitable, while its general surroundings will be such as no other hotel in the Colony can boast, there will be every inducement and no drawbacks to cause all the Australasian tourist world to hasten to spend so glorious and complete a holiday.

decorative feature

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Canterbury Industrial Association.

The N.Z. Railways.

Effects on Trade and Progress.

FROM THE "LYTTELTON TIMES," Thursday, May 22, 1889.

Being a Paper read by MR. G. W. RUSSELL *at the meeting of the above Association on May* 20 (*Mr. A. W. Beaven, President, in the chair*.)

I wish it to be understood that in this Leper I am not criticising the management of the railways. Anything I have to say is not so much against the management as against the policy on which the lines are managed and run. The regularity of the train services of the country, the efficiency of the employees, their loyalty to the service, their general courtesy to the public, and, above all, the singular immunity from serious accidents an our lines, all show that the management of the railways in New Zealand will bear favourable comparison with that of railways in other countries. Hence, my criticisms are not on the officers as men, but on the principles on which their work is carried out.

The subject is certainly an important one, as the railways command the internal trade of the Colony. They are the only available means of transport for the bulk of our trade, and were they closed the commerce of the Colony would be paralysed until new channels of communication were obtained. On March 31, 1889, there were 4326 hands employed on the railways. During the year just ended—March 31, 1890—the gross tonnage carried was 2,073,000 tons, 406,000 parcels, 1,069,000 cattle and sheep, and 3,376,000 passengers, besides 12,300 season tickets issued, the gross revenue obtained being £1,095,000. You will thus see that next to the Government itself, the railway system is far and away the largest "concern" in the Colony.

Bearing these facts in mind, one would naturally expect that the management of the lines would be subject to keenest scrutiny on the part of the Legislature. Yet, as a matter of fact, with the exception of a question now and again asked by some hon member, and usually "foggily" answered by the Minister, the matter of railway management has of late years hardly ever been brought before Parliament. With the exception of the Committee appointed in 1886 to report on the "Vaile system," and the discussion on that system which took place in 1887 on the present House assembling, I can remember no general and comprehensive discussion of late years on the railway tariff. The House has wrangled for days over the construction of a small line, or some new piece of railway, whilst the vast interests to the trade of the Colony involved in the lines already opened have been ignored.

Only one result could be expected from this. The lines have become more and more "a one-man concern," until, a year or two ago, they were regarded almost as completely the property of Mr J. P. Maxwell, the General Manager, as if he had been Jay Gould, or Vanderbilt, or some other American railway king.

It is true that in 1888 the present Government appointed a Board of Railway Commissioners, and thus the despotism of Mr Maxwell is now shared by him with Messrs M'Kerrow and Han nay, Mr M'Kerrow being an ornamental figurehead, no doubt; but the fact that under the Commissioners there has been no improvement in the principles of management, no concessions to the producer, no' increased assistance to the industries of the Colony, justifies me in saying that the management is exactly the same as it always was, with these important

differences: That Messrs M'Kerrow, Maxwell, and Hannay have all received substantial increases to their previous salaries, whilst, what is much more important, the right of the Colonists through their representatives, to object to the management, to reverse the policy on which the lines are run, and to kick out of office a Government on its railway policy has been sacrificed, and we are now bound hand and foot to the Commissioners, who have absolute power, in the words of the Act, as to the "management, working, and maintenance of all Government railways in New Zealand." The appointment of a Board so constituted was entirely unexpected by the country. The only valid argument for the Colonists parting with their right to say how the lines were to be managed was this:—It was said, "If we can get a good man for £2500 per year from Home he will improve matters, but he will not come without be has a free hand." Therefore the appointment of the Commissioners was agreed to; but when the curtain rose, behold the familiar faces of Messrs Maxwell and Hannay bobbed up serenely, with Mr M'Kerrow, another Civil Servant, as a buffer! What the Colony wanted, and what it expected, was the appointment of a first-class railway expert from Home, one railway man in the Colony, and a really good commercial man an the third member of the Board, who would have brought business capacity, business knowledge, business tact, and a thorough acquaintance with the resources, industries, and trade of the Colony to bear on railway management. As it is, we have parted with the tight of fixing the principles of management, and have secured no perceptible alteration, and but little improvement. The number of trains have been reduced in some parts of the Colony, and slight reductions in cost of working have been made; whilst finally, being unable to lower the wages of the employees owing to their combination and the pressure of public opinion, the Commissioners have adopted the miserable expedient of largely employing boy labour in the workshops. These appear to be the sum total of the benefits (?) the Colony has received under the Board of Commissioners.

In their last report the Commissioners claim a net profit of £350,570, and they say—"This on a capital cost of £13,472,837 on 1,777 miles of railway, gives a return of £2 12s per cent." No doubt this is true. But in stating the cost of the lines at £13,472,837 they take only the amount spent on the opened lines. Besides this, there is a further sum of £1,402,350 on the unopened lines; so that in the Public Works Statement, 1889, (Table No. 2), the total expenditure and liabilities on railways is put down at £14,946,265. There are two other items to consider. (1) The railways have absorbed half of the £26,000,000 spent on immigration and public works, and are therefore fairly chargeable with half the cost of raising the loans (£1,021,472); and (2) half the departmental expenditure (£329,611). If we add, therefore, half the sums named (which amounts to £675,541), to the total cost of the railways, we have a grand total of £15,621,806, and the railway revenue on this last year was £2 5s per cent, not £2 12s.

There is one other matter, viz., the Commissioners claim credit for reducing expenditure last year by £40,283. No doubt the returns show this result, but how was it done? In 1887-8 the trains ran 2,944,786 miles. In 1888-9, with 19 miles more railway open, they ran only 2,796,007 or 148,779 miles less. Now, if you will remember that the expenditure per train mile last year was 55.54 pence, or say 4s 7½d, this will at once account for a reduction of over £34,000 out of the £40,000 the Commissioners say they saved, leaving the actual reduction of expenses at £6000! That is to say, the reduction of expenditure was secured by cutting off services—not appreciably by better management. No doubt some districts have been disgracefully over-served by the railways in the past, but there is a vast difference between lessening the actual expenditure and reducing the amount of the work done. If the Commissioners followed the same course to its fullest extent they might secure still greater reductions by reducing the railway services of the country; but they would not be accorded that credit they might expect for their achievement.

And this brings me to the interesting question, How have the railways affected the trade and progress of the country? Has that increase of settlement and population taken place in the Colony which an expenditure of some £16,000,000 on railways, entailing payment of some £640,000 per annum was expected to produce? Above all, have we succeeded by our railways in pushing back our population into the interior, and settling the distant lands? In other words, accepting Sir Robert Stout's dictum that every million borrowed increases the taxation by £40,000 per annum, have we got good value for the £290,000 annually paid by the Colony for the indirect benefits of our railway system, after allowing the Commissioners credit for a profit of £350,000 on the railways? The general opinion of the country is that all these questions must be answered decidedly in the negative; that the railways have not been the success they were expected to be from a Colonising and industry-promoting point of view; and the reason is not far to seek. It is this:—The lines have always been, and are still, managed by men who have no real acquaintance with practical busing, who have no sympathy with the struggling farmer or settler, who are unacquainted with the industries of the Colony, and whose chief desire has apparently been, and is, to squeeze the last penny possible out of the pockets of the users of the lines, in order that their own reputation as railway experts may be enhanced.

Now, it must be remembered that, when the railways were inaugurated, several large industries then in existence were seriously crippled. The private carrying trade, which gave employment to the horse-breeder, the

farrier, the waggon-builder, the farmer and grain-seller, was wiped out and with it many of those who depended on it. In some cases, river steamers were driven off, specially low rates being made (most unfairly made, I think) in order to crush the river boats, thus closing up some of the finest natural highways of the country. True, the railway employs four thousand three hundred men, but the industries I have mentioned employed at least an equal number, and consequently we had a right to expect that by reducing freights and fares to a minimum the country would get the maximum of direct and indirect benefit from what it has had to pay so dearly for, not only in the crippling of its industries, but also in the shape of direct taxation.

Well, gentlemen, I have no intention of taking up your time by following this subject out in all its ramifications. Allow me to say that the result of some years' careful observation, and having lived in districts directly affected by the railways, is this: That as the railways are run now they are of little or no benefit to the Colony, so far as lands situated at any considerable distance from the sea coast are concerned; and I unhesitatingly affirm that if we are to people our distant lands, if we are to settle a population and offer inducements to them to farm an area which lies beyond the fringe around our ports, we must go in for a radical reform of our railway tariff. We must not only alter our present policy. We must reverse it. Instead of making the production of revenue from our railways the first and chief consideration, we must make it subordinate to that of offering inducements to people to go and settle on and farm the unoccupied parts of the Colony contiguous to and affected by the railway lines.

If the railways were properly managed, in a young and fertile country like this, with so much unoccupied and unsettled territory, there should be a steady increase of our railway revenue. Every year should see an increase in the number of passengers, the produce and the merchandise carried. With the natural increase of our population, independent altogether of the increase of the mileage open for traffic, there should be a development of the railway revenue. But what is the fact?

The revenue in 1884-5, with exactly 300 miles less of line open, was over £48,000 more than in 1888-9! In 1882-3, with only 1358 miles of line, we carried 150,000 more passengers than we did in 1888-9 with 1777 miles open! A few figures will show how fully my argument is borne out.

This table shows that with 381 miles more open in 1888 9 than in 1883-4, the lines earned only £36,311 more; the increased tonnage of goods, stock, &c., carried was only 220,000 tons; whilst the passengers carried were 139,841 more in 1883-4, and 319,047 more in 1887-8 than they were in 1888-9.

But now I will ask you to notice a table which sets out more fully the details of the traffic and revenue.

Table showing Live Stock, Goods, &c., carried, and Revenue earned, for the years 1885-6—1888-9, and 1889-90.

1885-6. 1886-7. 1887-8. 1888-9. 1889-90. Horses ... ... No. 9,518 9,165 9,301 8,378 9,358 Dogs ... ... No. 22,668 21,598 21,128 19,971 21,209 Dray a ... ... No. 660 597 592 547 678 Cattle ... ... No. 31,107 35.544 30,562 27,580 29,684 Calves ... ... No 2,527 1.891 2,204 1,837 2,016 Sheep ... ... No. 781,470 856,431 857,397 842,840 985,336 Pigs ... ... No. 40,558 48,151 50,046 47,126 51,359 Total Live Stock No. 859,322 912,614 940,801 919,939 1,069,253 Chaff ... ... tons 14,985 22,110 22,190 24,335 37,900 Wool ... ... tons 74,777 82,963 84,147 78,202 91,213 Firewood ... tons 80,280 73,040 65,860 67,045 77,454 Timber ... ... tons 202,571 175,581 158,023 160,399 172,813 Grain ... ... tons 413,846 315,253 358,021 447,027 498,198 Merchandise ... tons 368,224 329,227 347,379 356,732 399,258 Minerals ... tons 669,080 719,578 700,140 786,689 797,117 Total Goods ... tons 1,823,766 1,747,751 1,735,761 1,920,431 2,073,955 Grand Total Tonnage 1,856,732 1,783,524 1,770,637 1,951,126 ... Passengers ... £ 316,895 339,255 334,925 305,631 ... Goods ... ... £ 622,810 581,350 579,359 610 488 ... Miscellaneous ... £ 16,731 11,892 14,610 15,662 ... Total Revenue ... £ 1,017,418 998,788 991,843 997,615 1,095,569

You will observe that this table shows disastrous results for the four years ending March 31, 1889. During that period the number of horses, dogs, drays, cattle, calves and pigs carried, all showed a steady decrease, whilst the wool carried fell off 6000 tons (or 30,000 bales) in 1888-9, as compared with the previous year. On the Napier, Wellington, Wanganui and Hurunui-Bluff lines the decrease represented 38,790 bales, and it is certain the decrease would have been much larger, but that the Port Hills absolutely prevent wool being carted to Lyttelton. Hence the amount stated does not represent the cash value of the loss of trade to the railway. In the same year there was a drop of 36,000 in the number of sheep carried along the Hurunui-Bluff lines. During the four years ending March 31, 1889, firewood decreased 13,000 tons, timber 42,000 tons, and general merchandise 12,000 tons. The revenue from passengers dropped £41,000, the goods traffic £12,000, and the miscellaneous receipts £1100, so that the actual falling off in revenue in 1888-9 (with 1777 miles of line open) was over £50,000, compared with 1885-6 (with 1613 miles open). In 1888-9 the coal and grain traffic increased in the aggregate 175,000 tons, or the falling off in revenue would have been much more marked. Such are the results of the four years ending March 31, 1889, and though these were years of exceptional depression, yet so disastrous a reduction in the traffic proves that our railway system does not (as a State system should) meet and minimise the effects of that depression to the public. High freights accentuate the depression of trade, because

low prices and a small demand nearly always go together. When prices are good low freights are not of so much importance, whereas when prices are low every fraction of reduction in cost of production or transit represents so much benefit to the people. Hence, I claim that the railways did nothing to assist the removal of the depression, but rather made it heavier by the higher proportion the cost of transit bore to the value of the articles and the ability of the public to pay. Of course, such a terrible state of things as I have shown could not last. The Colony touched bed-rock in 1888-9, and with the improvement in prices, the development of our coal measures, the increase in the grain trade, and the growth of the frozen meat trade—all of which have grown not because of, but in spite of, the railway policy—the trade of the Colony has begun to revive. This, aided by the passenger traffic caused by the Dunedin Exhibition, has caused the railway returns for the year just expired to show a most gratifying increase, the revenue being, as doubtless you are aware, £152,000 more than last year's, although even then it is only £48,000 more than in 1885-6. I think, however, the facts I have given show that the railways are not carrying out their proper function as colonising agencies; that they are not assisting the Colonists to meet the waves of depression we must expect from time to time; that they are not assisting the industries or developing the resources of the Colony to that extent we have a right to expect, considering the vast capital invested in them, and the fact that, as State railways, they are supposed to be run for the benefit of the people at large. When we consider the exceptional natural gifts of New Zealand—the fertility of the soil, the geniality of the climate, and the extent and variety of its resources—we have a right to expect that the railway lines would carry a steadily increasing quantity of its raw and manufactured products; instead of which we find that in almost every department of its trade, as compared with 1885-6, the railways were doing less in 1888-9.

In order to emphasize this part of my argument, I will give the revenue per mile of railway open for five years:—

And now, having shown the evil results of the present system, I will endeavour to point out the remedy which I think should be applied.

And first of all, next to having practical common sense and business capacity brought to bear on the management of the lines, I think we should cease to make the payment of interest on the cost of construction the primary idea of our railway policy. A railway capitalist looks for interest on his capital. The general improvement of trade is nothing to him, except in so far as it brings grist to his mill. But the State is in a different position. The State secures indirect benefits from public works by the enhancement of the value of its lands, the increase of its stamp duties, its Customs duties, and its other sources of revenue, none of which reach the pocket of a mere capitalist, who builds a railway line as an investment. The State secures its return in another shape altogether, viz., in the increased prosperity of its people, and the development of its resources. That was the original idea of our public works system, and the sooner we go back to it the better. A railway is merely a road, with two lines of metal along it, and the State finds the haulage power instead of leaving the individuals using it to do so. That, I believe, is the proper light to regard the matter in, and as we do not look for interest on the three and a half millions spent on roads, on the half million spent on water-races on gold-fields, on the one and three-quarter millions spent on public buildings, or on the two and a quarter millions spent on immigration, so I maintain if we wish the Colony to prosper, we must cease to regard the railways as taxing machines in order to provide interest, and look to the benefits they can be made to confer as colonising agencies as their first and primary function. Had the people of Canterbury looked for interest on the money would they have spent £340,000 in piercing the Port Hills, or £316,000 on the main lines traversing the Province? Not a bit of it. They took a wider view, and saw that without these bold and enterprising steps their lands would lie idle and their Province remain little better than a huge sheep-walk. If we are to get the Colony as a whole out of the Slough of Despond it is in, we must lay aside the question of interest on cost of construction, and gauge the success of our railway system rather by the tons of stuff they carry and the people they settle on our lands than by the percentage they pay. The second step in reform should be to simplify the railway tariff. The present tariff comprises some fifty-seven pages of closely-printed matter, and is nearly as elaborate as a Hebrew dictionary or Cruden's Concordance, and decidedly much more complicated. I have been told that when a railway officer receives a new tariff he has to will up and sign a printed form in which he says, "Received copy of circular dated" so and so, "which I have read and understand!" Well, if he understands it he is smarter than most of the public, though what would happen if a railway officer had the temerity to say he did not understand the tariff, one can only imagine. That the tariff is unduly weighted, is full of crudities and absurdities, and is largely a repetition of the tariffs of other countries whose traffic is vastly larger than our own, and whose trade is entirely different from ours, will be apparent to all who have come in contact with it. When I tell you there are tariffs for "apple blight mixture," for "banners," for "juniper berries," for "bills of exchange and other securities," for "cash," for "coin," for "valuable documents," for "artificial flowers," for "fog-signals," for "lace, packed," for "maps," for "money," for "racecourse stalls," for "silver coin," for "surveyors' pegs," for "title deeds," for "trinkets," for "writings," and, finally, for "hobby horses "—and even these are carried at "owner's risk: Class A "—you will see I have not misdescribed it. Instead of having a tariff comprising nearly one thousand items of

classification, the tariff might be divided into a dozen or so comprehensive and self-evident divisions, these principles being kept in view: First, that all the actual necessaries of life which are produced in the Colony, or are admitted at a minimum duty because they are necessaries, should be carried as low as possible; second, that all articles admitted into the Colony duty free, or at a low rate, in order to assist the industries of the country, should receive further aid by being carried at a minimum rate; and third, that all the natural products of the Colony, and all those industries which our people are endeavouring to establish, should receive every possible encouragement in the way of cheap freights, not only of the raw material, but also of the manufactured article after it leaves the factory, in order to wipe out the imported article. In other words, I maintain that our Customs tariff and our railway tariff should go hand in hand, and that it is no use giving a concession to a man to enable him to start an industry with one hand and taking it away with the other. That would be like a doctor who ordered a sickly infant to be fed with beef tea, and other nourishing food, but insisted on a drop or two of croton oil being mixed with each meal to prevent his patient growing strong too fast! At present, instead of the railway and Customs tariffs working harmoniously, they are in many cases in direct conflict. For example, we allow almonds, arsenic, arrowroot, bookbinders' materials, borax, druggists' bottles, brush woodware, carriage shafts, churns, books, and a number of other things all in duty free, and directly they are put on the railway lines they are charged the maximum rate. But time would fail me to work through all the devious eccentricities of the tariff. All that I can do is to emphasize the principles I have laid down by urging that the two tariffs should work together, not only to lighten the cost of living, but also to assist the development of our industries. Whilst we are professing to encourage the manufacture of machinery of all kinds, including ploughs, threshers, reapers and binders, presses or flour dressers, directly they are put on the railways they are rated as Class B, and have to pay the second highest rate. Then, again, take the case of one or two special industries. The fruit trade and its cognate industries of jam manufacture and fruit preserving, are among the most important of our growing industries. Every possible encouragement should be given to them; and there is every reason to expect that from the diversity of our climate, we ought in a few years to be able to take a foremost place in the world's markets with fruit and jam. We charge a duty of 2d per lb on the imported articles, but the local manufacturer has to pay a duty of ½d per lb on his sugar, whilst it travels along the railways as Class B, and his jam is classed as A, unless he sends a consignment of at least half a ton direct from his factory, in which case it is carried as Class B. Cheese is similarly treated, as no concession is made to the local article unless it is sent direct from the factory in lots of one ton each. I confess that I should like to see all articles made in the Colony carried at half the price of the imported article, the simple condition being that it should be marked, "Made in New Zealand," the consignor being liable to pains and penalties, as well as forfeiture of the goods, if he acted dishonestly in the matter. Confectionery, preserved milk, pickles, preserves, and numbers of other articles made in the Colony all come within the category of what I have urged. But I must hasten on. There is one matter, however, I must remark on, and that is Colonial cement. This is an industry it is most desirable to encourage, and with this view a special rate is made, it being put into Class N, rate and a half, but in no case to exceed Class D, under which the English cement is carried. Now, the rate for the English cement from the ship's side at Lyttelton to the consignee's store at Christchurch is 6s 10d per ton; that being Class D, 5s 9d, and 1s 1d cartage added. The Colonial cement is carried in quantities of not less than four tons at rate and a-half, Class N, which amounts to 5s 3d per ton. But, coming under Class N. a haulage charge of 1s per ton is made at Lyttelton, which brings it up to 6s 3d, landed at Christchurch station. But being in Class N also, the railway does not deliver the stuff to the consignee. He has to pay the contractor 1s 1d extra for cartage, and thus it costs him 7s 4d per ton for Colonial cement, as against 6s 10d for English. For a long time my informant actually paid the 7s 4d, but one day luckily discovered that he could not be compelled to pay more than Class D. He, therefore, exercised his right, and insisted on the railway taking off the special concession in favour of Colonial cement, which had cost him 6d per ton more than if he had had the English article! It Is needless to say he has lost faith in the beneficent assistance of local industries by the railway. And whilst on this matter, I would urge that these concessions should not only be made more real, but should extend beyond the mere transit of the stuff from the factory. The minimum quantities are all too high—very few use four tons of cement on one job—whilst the concession in freight, if made real, should not only be extended to the transit from the manufacturer to the merchant, but also to the transit from the merchant to the person using it. In fact, as I have already said, the marking of it as of New Zealand manufacture should be quite enough to secure special cheapness of freight for any article wherever it travels on the railways. But it is not only in the complexity of the tariff and its heaviness that the trader is hit by the railway. There are often other charges added on, and amongst the most burdensome of these are the loading and unloading charges. Perhaps the worst of these relates to timber. At one time men contracted at Lyttelton to unload timber from the ship into the trucks at 1½d per 100ft. The railway, however, insisted on doing this work, and charges 3d for it, being exactly 100 per cent more than the market value of the work.

I think I have now said enough to answer the query, "Are the New Zealand railways aiding the

development of the industries of the Colony?" Yet, harassing as is the railway tariff on the trader and industrial man, it reserves its severest blows for the settler—the farmer—the man who has to bear on his shoulders the whole fabric; for it is a truism that all wealth comes from the soil. Mr Stead has lately advocated the influx of capitalist farmers, and asked the country to support him in proposing that special concessions shall be given to such. My opinion is that the reason New Zealand does not enjoy a steady inflow of population is not the lack of the special inducements Mr Stead proposes—for they are mere bagatelles after all—but rather because the farmers already in the country are not really prosperous. Despite our heavy grain yield, and the higher value of our sheep and other stock, as compared with the other countries of the world, which Mr Stead proved a few years ago in a paper which commanded much attention, it is an unfortunate fact that the New Zealand farmer's life has not been a happy one of late years j and whatever may be said of the effect of dear money, low prices, and heavy rents, rates and taxes, I maintain that heavy railway charges lie more heavily on the farmer, and more directly on him, than anything else I have named. In the matter of low prices he is affected only by the universal value, but the railway charge is a fixed amount, which must be paid before his goods are delivered, and if Indian or American wheat is carried a hundred miles for what it costs him for every ten miles, then he is handicapped to that extent. The men who control the means of transit control the trade of a country; and I would go so far as to say that not only should the freight on our railways be reduced to a minimum, but also our ocean-steam services and mail subsidies should be so distributed as to secure a minimum of freight for our producers in reaching the ports of disposal for their products. I mention this to show how the trade is commanded by holding the means of transit. Now, I will take a farmer under Mr Stead's scheme, and I will suppose he takes up three hundred acres of land sixty miles from Lyttelton. Let us see what he would have to pay the railway. The passenger fares for himself and his family (second class) would be 8s 4d each. His luggage would cost him 30s 8d per ton; the post and rails for his fences and his firewood would cost him 39s 4d per truck of six tons; the timber for his house would cost him 2s 6d per 100ft (and if he built a decent house this item alone would amount to £25); the iron to roof his house and the cement to pave his yard would both cost him 19s 11d per ton, whilst his paper-hangings, the marble mantelpiece for his drawing-room, and his furniture would cost him 36s 2d per ton; his buggy would cost him 26s 8d; and his doors, windows, and nails would cost 26s 2d per ton; the coal for his fires would cost 8s 4d, even if he bought it from the local supplier. In fact, I may safely assert that if one of Mr Stead's settlers took up 300 acres of virgin land, and put his family on it, he would have paid the State over £100 in railway freights and fares by the time he could begin to farm his land. But I will now suppose he has got his 300 acres into working order, and that he has become a New Zealand farmer. Let us see now how, having bled him to the last possible extent as a "new chum," the State proceeds to treat him as a producer. I pass over the fact that all the machinery, the waggons, the harness, the seed he uses are charged for, as I have already shown, at excessive rates. Let us suppose he has had a good harvest, and we shall get this result:—

In this I have not considered freight on live stock, pigs, or butter, cheese, fruit, hides, sheepskins, honey, hoofs, onions, or many other articles which an enterprising farmer might consider desirable additions to agriculture, and which in my opinion, should be more generally valued by our farmers than they are, who, I think, often too exclusively confine themselves to grain and sheep-raising. This by the way. These items, if included, would probably raise the total up to £150—at any rate that amount will certainly be reached if we include the cost of "railway-carried goods consumed by the family in the course of the year, and his occasional fares to town. Thus, you will see the freight costs nearly 10s per acre, and I put it to any body of men whether that sum is not excessive, and whether it does not stand in the way of men going into the country as settlers.

I quote the following from a letter by Mr S. Vaile:—

"A farm of 300 acres, half in crop and half in grass, would, in manures and other things taken to the farm, and in crops, dairy produce, and live stock taken off it, require to transport at least 175 tons per annum.

"Mr Maxwell, in his report to the House, states that the average distance goods are transported in New Zealand is twenty-five miles, and the average charge paid is 6s 10d per ton, consequently he says the average charge per mile is a small fraction over 3¼d.

"This is the result showing the annual transit charges such a farm would have to pay if placed at the following distances from the market:—

Miles
7—£16 11s 11d
14—£33 3s 10d
21—£49 153 9d
30—£71 2s 6d
80—£189 13s 4d
130—£308 4s 2d

"A glance at the above figures will show how utterly impossible it is for the men at eighty and one hundred

and thirty miles distances to compete with those at seven and fourteen miles. No difference in the price of land could make up for the extra transit charge. This it is that has taken the value out of country lands, for land has no value unless it can be occupied and profitably worked.

"I shall be told that the difference between £65 and £308 is so great that the country could never stand the loss. My reply is, that the £308 is the price demanded from the unfortunate settler, but never obtained, because no man could possibly pay it, and we have here the secret why our trains run empty and the country remains unoccupied."

But some friendly critic will say, "O, they don't grow potatoes as far away as sixty miles!" Well, why not? Is it not because the freight to port stands in the way and leaves the producer no margin? This strikes me as the greatest blot on our railway system—that whereas they were meant to encourage population to settle at a distance from the port, by heavy freights and charges they force the population to settle as nearly as possible round the centres, because high freights limit the number of articles a farmer can produce to advantage; and the result is that only high valued crops like grain and wool are grown. In fact, the railways, which were meant to act as a centrifugal force, in spreading our population out, act centripetally in compressing it as near the ports as possible to save freight. And it is manifest that men will crowd near ports if the freight on potatoes (for example) is only 2s 6d per ton, instead of going where it is 10s, as on a five-ton crop this means a saving of; 37s 6d per acre alone. The proof of what I say is found in a remark in the Canterbury Corn Exchange report for last Friday, as follows:—"Potatoes—Derwents, 35s at country stations within a radius of twelve miles," that being apparently the point at which the freight affects the trade. If you consider that there are many districts, like the Waikato in the North Inland, which are 100 miles from a port, you will see how heavily handicapped many of the producing industries are.

Now, to overcome these barriers to the settlement and development of the interior which the railways now interpose, I beg to suggest, not only that there should be very large reductions in the freights, but also that we should abolish the mileage basis, and adjust our charges on a system of stages, under which we should carry stuff (especially the products of the Colony) any distance within a certain radius for the same amount—that is to say, we might fix our charges on stages of ten or twenty miles, and have the same charge whether the stuff were carried the whole or only a part of the stage. This is the principle on which Mr Vaile, of Auckland, bases his proposals, and I consider it a perfectly sound one. Allow me to quote a few lines from the *Lyttelton Times* of April 3:—; "The system of 'zonal' railway tickets in Austria is showing astonishing results, and producing quite a sensation. In four months—August to November—the number of passengers has nearly tripled. During four months of 1888 the number of railway tickets issued was 1,616,000, while in the corresponding period of last year 4,300,000 were issued. The tickets are available within a certain radius or zone. No one had dared to hope for such a happy result; yet, notwithstanding a radical lowering of rates, the receipts have increased from 3,188,000 florins to 3,784,000 florins. This is an increase of 600,000 florins, when a great falling off in the receipts was expected on all hands. No doubt this experiment of the Hungarian Government will make a little noise in Europe; or, indeed, all over the world." Some such scheme as that, if applied to the freight of the products of the Colony, would certainly stimulate the industries and help the farmers. The impetus which would be given to the production of articles now only grown within certain limited areas near to the ports, would greatly increase our export trade; but it would do more than this—it would stimulate the internal trade of the Colony to an extent we can hardly conceive, by setting districts moving which are now lying undeveloped. I maintain that, instead of the railways being so managed as to scrape the last possible penny out of the pocket of the producer, our policy should be to leave every farthing we can in the pockets of the people. Instead of asking, what can we put on the charges, the query should be, what can we take off? And it should ever be borne in mind, that the greatest attraction any country can offer to outsiders is the prosperity of its inhabitants. Under the reign of borrowed money, we have been looking for prosperity from without ourselves. Let us now take a new departure, and try to create prosperity within ourselves. It will rapidly work outwards, and streams of unassisted and unaided immigrants would flock to our shores, attracted: by the magnetic power of our prosperity. Indeed, some day we may find it desirable to have a railway tariff which shall rise or fall with the market, so that in years when there are bad crops, or when prices are below a certain minimum, the railway tariff may be adjusted accordingly.

I will now refer to two or three objections to low railway freights which may be urged:—

- It is said that our freights are as low as those of other countries, and, as a matter of fact, there is not a great deal of difference between our freights and those of Victoria and New South Wales; but it must be remembered that we are an exporting country, that those are likely to be in the not distant future our principal markets, and that our I produce has not only to be charged with, freight to the port of shipment and wharfage, but that it has to pay a hostile Customs tariff (in Victoria at any rate, and; probably soon in New South Wales), wharfage there also, cartage to the store, and finally transport to the customer. If, on the other hand, it is sent Home it has a 16,000-mile journey, and then it has to compete against American

wheat, backed up by extremely low railage charges to the port of shipment, and a five or seven days' journey to the United Kingdom, or against Indian wheat assisted by minimum railway freights, and cultivated at a cost for labour against which our farmers cannot compete. Hence our policy as a country must be to encourage our export trade by giving the producer every concession we can on our lines. But even in other countries the shrinkage of prices in agricultural produce is compelling the question of freights to be faced. The *Alta California* (San Francisco) of April 5, contains the following:—"Experience has opened a school in some of the prairie States, and while the lessons taught therein are difficult, they are being learned with pain under the raw hide of necessity. States have properly the power to affect by legislation and by administrative action the rates of transportation. The great agricultural staples produced in such volumes by Iowa, Nebraska and Kansas must go to the seaboard for export abroad in search of a market. Their prices have fallen until the value of real estate has almost collapsed. The shrinkage in the resources of the farmers in some sections has compelled them to burn their corn for fuel because they can't sell it for a price that will enable them to buy coal. In Iowa the attempt to equalise income and outgo to the farmer by reducing transportation rates is just being made. The new rates give a railroad 60cents for hauling a reaper and mower fifty miles; for 100lb of butter fifty miles, 13cents; for carrying a horse, usually occupying a whole car, fifty miles, 1dol 50cents; a piano, 400lb, fifty miles, 80cents; and so on through the list of crops and articles. These rates are enforced also as 'joint rates,' where the freight has to be transferred from one road to another, including an extra handling." This extract shows how the people of Iowa treat the question of freight, and as competition becomes keener and new regions are devoted to producing food, those countries which can shift their products from the producer to the consumer at the least cost will be most prosperous. The others will be driven out of the race, and will either continue in a state of depression, or will be compelled to turn to other industries. Hence I ask you to dismiss altogether from your minds any question as to the freights in other Colonies, and to deal with this matter entirely from the point of view of what will enhance our own trade and secure our own prosperity.

- A second objection is that if a system of cheap freights were adopted, it would merely put so much into the pockets of the landed proprietors; that the producer would not be at all benefited, as the landlord would get all the profit. Well, am thankful to say landlordism has not so strong a grip of this country as that objection implies. Taking the three Counties of Selwyn, Ashley, and Ashburton, I find that out of 5463 holdings over one acre in extent, 3240 are freehold, 1462 rented, and the remaining 761 are partly freehold and partly rented. By far the largest proportion of rented holdings is in Selwyn, where the contiguity to Christchurch and the accessibility to market give land an excessive rental value as compared with more distant parts. Ashley has two and a-half freehold holdings to one rented, and Ashburton has over three. If the same proportion obtains throughout the Colony, viz., about three freehold to one rented holding, the reductions I propose would be a great assistance to the producers.
- But a third objection is this. People say—"We paid a high price for our land because we were near a port. If you lower freights for long distances, other lands will be as valuable as ours, and you must give us compensation!" This is a plausible objection, no doubt. I wonder whether these gentlemen, who complain so much of others being benefited by low railway fares, were anxious to put their hands in their pockets and pay the State any of the unearned increment given to their lands by the expenditure of fifteen millions on railways. Exactly the same argument is used by a certain class regarding the State lands. They say—"We paid £10 per acre for our lands; why should the State raise up competition against us by giving land away?" The answer is very simple—"The greatest good of the greatest number" must rule, and the interests of the few must be made to stand aside where the welfare of the Colony is at stake. Not only so, but it is very doubtful if the lowering.

Front Cover

A Few Short Views of the Native Land Laws, *As they Principally Affect the Native Race*, Being the Subject of a Letter

To James Carroll, M.H.R.,

For the East Coast Native Electoral District,

By E. F. Harris.

Printed at the "Herald" Office Gisborne Gladstone Road 1889

James Carroll, Esq., M.H.R..

GISBORNTE,

July 10th, 1889.

DEAR SIR,—

PARLIAMENT being now in session, I propose addressing some remarks to you on the subject of the statutes affecting Native Lands. To criticise at any length the results of the legislation of the past on this subject is not altogether my object. That object rather is to review the laws as they at present stand, and offer such suggestions as appear to me desirable to make them more efficient and workable.

Let me here quote a fable by which the Duchess of Orleans illustrated the character of her son, the Regent:—"All the fairies save one had been bidden to his cradle. All the gossips had been profuse with their gifts; one had bestowed nobility, another genius, a third beauty. The malignant elf who had been uninvited came last, and, unable to reverse what her sisters had done for their favourite, had mixed up a curse with every blessing."

This fable, to some extent, can be applied to Native Land legislation. Nowhere else do we find such startling contrasts; nowhere else do we find measures adopted which are fatal to the object intended; no where else do we find the intended cure accelerate the progress of the disease sought to be cured. The influence of the malignant elf is apparent through it all. That influence appears to control the whole course of Native Land legislation. Nor does the Legislature appear to be able to rise to the exigency of the situation. That it learns little from the efforts of the last twenty-four years is apparent from the legislation of last session, which intensifies the evils sought to be guarded against. No more striking instance of this can be given than the ame ndments making provisions for dealings with Native Lands. I refer to Section 12 of "The Native Land Court Act, 1886, Amendment Act, 1888," and Section 5 of "The Native Lands Frauds Prevention Act, 1881, Amendment Act, 1888," which, in their effect, prohibit dealings in any degree with Native Land if held in blocks owned by more than twenty owners.

Of land still in the hands of the Natives, whether "Native Land" or otherwise, the proportion of first-class land bears relatively a small proportion to land of fair average quality; that, again, bears a still smaller proportion to the area of poor land. To insist on these lands being cut up into parcels with twenty owners would, in many instances, be to make the surveyors the owners. There are blocks of land which no surveyor would accept in payment for his services if he had to cut them up as required by the Act.

If the object to be arrived at is to make provision for ascertaining who are the owners of Native Land, and also to provide a measure whereby Natives will derive a benefit from these lands, that object will not be attained by imposing conditions which are prohibitory to all dealings, and consequently tend to lessen, instead of increase, the value of the estate.

Considering the matter from the point of what is the best course to adopt in the interests of the Native owners—which really is the question involved—the desired end is not to be attained by an attempt at one-sided legislation, whether looked at from an European or Native point of view; nor will the object be attained by the imposing of conditions which involve an outlay altogether out of proportion to the value of the benefits to be derived. "*Ko te whenua, ko te ora*" (Yes, the land is "the life" if utilised). Land which is an encumbrance is not "life," nor has "life" that pregnancy of meaning to us which it had to our ancestors. With no cereals, quadrupeds represented by one species of rat and the domestic dog, having only the kumara, tare, and uwhi to cultivate, as the most common vegetables of the present day wore unknown, to them, indeed, the land was life, and if it is to mean life to us, those means will not be attained by a protection which amounts to prohibition, and which by the imposition of expensive conditions, tends to depreciate the value of the land to the Natives, so that the price received for the land sold bears a very small proportion relatively to the total cost, and which also affects the rental for lands to be leased. If Natives are to receive a fair benefit from their lands, greater freedom will have to be allowed in land dealing. First of all, secure to them land restricted from sale for their own occupation and for leasing, and facilitate free and unrestricted dealings in the residue.

For the Natives to get rid of a portion of their lands will be to increase the value of that retained. Nor would it follow that if greater freedom in land dealing were permitted the Natives would part with *all* their lands. Individuals might do so, but not the whole bulk of the people, and in considering the question of greater freedom in Native Land dealing, we should not shut our eyes blindly to the incidence of taxation.

From some figures supplied to me I find that in Cook County alone Native land within five miles of a track amounts to 293,000 acres, of the rateable value of £250,000, the Native rates on which now total £7000.

This sum is chargeable on the land. If the land is leased or sold, these charges are recouped to the Treasury. The Crown and Native Land Bating Acts, under which the Treasury advanced these rates to the local bodies, are now repealed. With taxation at strangulation point, we can hardly expect the colony to put up with the loss of the moneys advanced, or that Native Land, in some form or other, be not made to contribute to the revenue

of the colony. And if the principle of equality in land tenure is over to have practical effect, the attainment of that object will be assisted by having a Native Land law which facilitates the individualisation of title, and which permits land dealing under simple safeguards. If, in addition to this, you limit the operation of the Native Land Court to lands hold under Memorial of Ownership and Certificate of Title, leaving titles of Crown Grant or Land Transfer title to the operation and protection of the ordinary law of the Colony, and if, further, you abolish special Maori representation, thus equalising the political privileges and rights of the two races, the effect will be to sound the death-knell of the so-called "Native difficulty." To show that the acquisition of Native Land is not all "beer and skittles," let me give you some details of expenditure in the acquisition of a block of land in this district prior to 1886:—

These figures are instructive as showing the comparatively small sum the Natives receive in proportion to the purchaser's outlay. To obtain five shillings, an outlay of one shilling and five pence is incurred for surveys, and if it had been necessary to subdivide the land into parcels of twenty owners, an additional fourpence per acre would have been added to the cost of survey. I shall have something to say on the question of the Native duty further on. It is, however, owing to this Native duty, to unnecessary and stringent enactments, which increase difficulties in obtaining partition of purchasers' interests, that Natives do not obtain a fair price for their lands. Let me here add that if it is desirable to limit the area of land purchased by an individual or company, greater freedom should be allowed as to areas to be taken up under lease.

Applications for Re-Hearing

WHILST I freely admit the justice of the principle embodied in the legislation of last session, which directs that these applications shall be determined in open Court, it must be admitted that they already occupy a very considerable portion of the time of the Chief Judge, and of the various Registrars. The right to appeal is being abused, and some means will have to be devised to act as a check on the same. We are between the Charybdis of the old system and the Scylla of the present one. Without some salutory check, the evil will grow beyond the power of a single Judge to remedy, besides adding heavily to the expenses of the department. Many of these applications are only sent in as pure speculations—"heads I win, tails I lose nothing." Some are sent solely from a desire that the senders may see their names in the *Kahiti*, and air their eloquence in Court; others out of "pure cussedness." To insist that each application should be accompanied by a deposit of £3, to be forfeited if the re-hearing be not persisted in or refused by the Court, would have more effect in checking speculative or bogus applications than would be expected from the smallness of the sum named. Power should also be given permitting the withdrawal of an application at any time before the date of hearing, such permission to be notified in the usual way Although it may, as a general rule, be desirable that those applications should be determined by the Chief Judge in person, it seems to me that circumstances may arise which would render it advisable to make provision for delegating the duty to other Judges, to prevent unnecessary delay in completing the titles. If the work is limited to the Chief Judge only, it could well happen that the title to blocks of laud might be hung up for a year or two, to the great inconvenience and serious loss of persons interested.

The defect in the law in not providing for the withdrawal of these applications, or for the abandonment of the re-hearing except in open Court, is causing serious loss by hanging up the titles to land.

Half-Castes

FROM the passing of "The Native Land Act, 1865," until last session, the definition of "NATIVE" meant an aboriginal Native of New Zealand, and included half-castes and their descendants by Natives. The legislation of last session, with a view, as it was hoped, of improving the position of descendants of mixed marriages between half-castes and Europeans, struck out the words "by Natives" in Section 3 of "The Native Land Act, 1886." Not to mince matters, the effect of the definition of the word "Native" as it stood was to legalise immorality and encourage robbery. Cases in support of this statement are within your knowledge, and have, I believe, been discussed in Parliament.

In an intestate estate, the children of a half-caste and European were barred in the succession, the Maori next-of-kin being the heir. To the credit of the Native people let me record that in no instance did they stoop to avail themselves of the loophole thus afforded by the Act. Section 20 of "The Native Land Court Act, 1886, Amendment Act, 1888, is as follows:—

"In determining the right to succession in respect of either Native land, hereditaments, or personal estate, the child of a half-caste shall be deemed to be a Native.

"Native Land" means land in the Colony owned by Natives under their customs or usages, but of which the ownership has not been determined by the Court." Succession hero is a veritable "Chateau de Espagne," about as valuable as the honor of nobility conferred on the ancestors for three generations of the British Ambassador,

on the occasion of the recent marriage of the Emperor of China, more sound than reality, the amendment of last session practically loaves the question as it was before as regards the matter of succession.

"Hereditaments" means land granted by the Crown to and held by Natives. Here at least there may be a substantial benefit to the child of a half-caste, but to "land" which moans any land in the colony owned by Natives, except "Native Land," and as "land" in this sense means land to which the title is under Memorial of Ownership, Certificate of Title, Land Transfer Title, or Crown Grant, other than hereditaments, the child of a European and half-caste is no better off than he was before last session, and the child of a half-caste and a Native is actually placed in a worse position.

To increase the absurdity of the position, the succession is only barred to the child of a half-caste—his child comes in again as a full-blooded Maori.

"Are things what they seem,
Or is visions about?
Is our civilization a failure?
Or is the Caucasian played out?"

I would suggest that the Section be amended by adding the word "land" after the words "Native land" in the second line; or, better still, to repeal the whole clause.

Under Section 3 of "The Native Lands Frauds Prevention Act, 1881, Amendment Act, 1888," a half-caste who understands the English language, if that knowledge is certified to by a Justice of Peace, can execute a deed of conveyance or lease with the like formalities as required by Europeans. This concession is only as to the *execution*. To validate the *transaction* the Trust Commissioner must satisfy himself that the formalities required by the above Act have been complied with, and grants his certificate accordingly. I have already argued that the powers of the Native Land Court should be limited to settlement of questions affecting orders for titles issued by that Court, and I see no reason why the Trust Commissioner's duties should not be restricted to dealing in land with Native Land Court titles. I admit it is desirable, in the interests of both Natives and Europeans, that this inquisition should to some extent be held, but think a distinction should be made in the case of an English-speaking half-caste, more especially when that half-caste possesses land under Certificate of Land Transfer or Crown Grant in his individual right, He can purchase from Europeans or the Crown without being troubled by the law as to whether "the transaction relating thereto is contrary to equity and good conscience" or otherwise; but he cannot sell this same land again without being put under the harrow of the Trust Commissioner's enquiries. The result of these enquiries is to depreciate the value of the price to be paid to the half-caste, besides saddling him with extra legal and Court expenses. The remedy for this would be to extend the exemption as to "execution" by including therein enquiries by the Trust Commissioner when the dealings is with land other than land under Native Land Court title.

Native Lands Frauds Prevention Act, 1881, Amendment Act, 1886.

I HAVE already referred to Section 5 of this Act. A very serious defect exists in Section 3, which has reference to the execution of deeds. The section very properly provides that a statement in the Maori language, certified as correct by a Licensed Interpreter, of the effect of a conveyance or lease shall, before the document is signed, form part of that document, and (Subsection *b*) "the effect of such statement shall be explained to each Native before signing." There is a very important omission here. It is not imperative that the statement shall be explained by a Licensed Interpreter. This, as already stated, is a very serious defect, and requires amending. The words "by a Licensed Interpreter" after the word "explained" would meet the case.

Section 3 is only mandatory as to the statement in the Maori language to a deed of conveyance or lease. From this it follows that deeds and documents such as powers of attorney, declarations of trust, wills, settlements, bills of sale, stock mortgages, or wool liens require no such statement to be endorsed or form part thereof. It is singular that the law is quiescent as to "statements" forming part of the above deeds or documents, and yet insists that promissory notes and bills of exchange shall bear a written interpretation on the back, and a certificate from the Licensed Interpreter that the maker or endorser understood the obligation imposed before he signed the same.

Succession.

SECTION 43 of "The Native Land Court Act, 1886," is repealed by Section 23 of "The Native Land Court

Act, 1886, Amendment Act, 1888." In determining the right of succession to land held under Memorial of Ownership or Certificate of Title, the Court is to be guided by "Native custom or usage." "In respect of other land, the Court should decide according to the law of New Zealand as nearly as it can be reconciled with Native custom." "Native custom or usage" is as the sign x in algebra—an unknown quantity, potent or otherwise, according to the circumstances of each case. When the question of title to land is being first "ascertained," the Court should give the widest latitude to the meaning of "Native custom and usage," as it forms the essence of all Native title.

The title having changed from parole to written, to admit a like latitude in successions would not be so desirable. "Native custom and usage" could well recognise the rights of foster or adopted children, and as both husband and wife have their separate landed estate, independent of each other (in the absence of children), should recognise the right of the nearest of kin of the husband and wife to succeed to their respective estates. To give effect to "*kupu oha*" or "*poroaki*" ("dying words or wishes") would be wide of the question, and encourage conspiracies to defraud the natural heirs, The experience of the Native Land Courts in the matter of written wills or dispositions where Natives only are the witnesses, is not to place implicit confidence in Native evidence on the question of the validity of such documents. Where the deceased hold land under Crown Grant or Land Transfer title, the succession should be governed by the ordinary law of the country, irrespective of "Native custom or usage." Section 46 of "The Native Land Court Act, 1886," provides only for orders of succession to hereditaments being registered under the Land Transfer and Deeds Registration Acts. It seems singular that power is not given to register orders of succession to land held under Crown Grant other than "hereditaments" and Land Transfer titles. This clearly requires remedying, and I would suggest that after the word "hereditaments" in the fourth line of Section 46, the words "or land under Land Transfer title or Crown Grant" be added.

The Native Land Acts, I take it, were called into existence to afford a means of changing the ancient Native title to that of a Crown title. Whether this may be so or otherwise, the right of succession to lands other than Native Land Court title should be left to the ordinary law of the land to determine. How this question of succession affects half-castes and their descendants, I have referred to elsewhere.

Surveys.

It seems to me that further provision is necessary in the direction of enabling survey liens to be registered.

Until the District Land Registrar has been furnished by the Native Land Court with the order of freehold tenure, no registration can take place, nor can the Court forward these orders until all costs of Court are paid. The surveyor should be allowed to pay these costs in order to give full effect to his security, the amount paid to be added to the security. Power should also be given to the Court to cut off a sufficiency of the land so secured to cover the security and the cost of obtaining and giving effect to the same. Native owners should also be permitted to pay off their proportions of the cost of survey; nor should *particular* owners be personally liable for the costs of any survey when they hold the land with others. To make the land liable would facilitate this important branch of Native Land Court work, without lessening the value of the security. Additional power is also necessary to enable the Court to order subdivision surveys on terms and conditions. If I understand aright the meaning of Section 81 of "The Native Land Court Act, 1886," the surveyor's mortgage only affects the interests of the Natives who employ him, and if such is the case, the section should be amended so that the security shall cover the whole estate and interest of all the Natives owning the land. Section 82 gives the Court power to secure the cost of a survey made by Natives, who, on the subsequent investigation of the title, are found *not* to be the owners; but, singular to say, the statute apparently makes no provision for securing to *a Native owner* the cost of a survey *paid for by him*. It is sufficient for my purpose to draw your attention to the above facts; the need of a remedy is patent.

Native Duties.

I venture the opinion that very few are aware that Native duties were originally imposed for the support and maintenance of the Native Land Courts. This Native duty is a special first charge of £ 10 *per annum* on the consideration money, and of £10 *per centum per annum* on the yearly rental of Native lands.

"The Native Land Act, 1865" which called those Courts into existence, is also responsible for the imposition of this tax. It hardly seems creditable that a tax which so severely affects the weaker section of Her Majesty's subjects should have thus existed for twenty-four years. For such a lengthened period, however, this act of injustice has been permitted to disgrace the Statute Book. I am glad to see that Mr Fitzherbert has tabled a motion for the repeal of this tax, and I trust he will be ably supported.

On this question Sir Robert "Stout when Premier did not have the courage of his opinions. That courage led

him to the *fierce* denunciation of the iniquity of the tax, but failed him when it came to a question of tabling a motion for its repeal.

"Oh it is excellent
To have a giant's strength but it is tyrannical
To use it like a giant."

To give some idea of the amount that Native duty contributes to the revenue, I will refer to the return asked for by you last session for the period from 1880 to 1887, and from which we learn that it amounted to £121,407 5s., being an average for the eight years, in round numbers, of £15,550 per annum. The Court fees for the same period totalled £19,182 7s. 10d. the surplus over expenditure must have been at least £46,000, and we can fairly assume that the Government has more than recouped its expenses for maintenance of the Court since 1865.

The Native duty on leases was payable yearly up to 1882, since when, the duty is calculated on the capitalised value of the whole term and made payable in advance. This was heaping injustice on injustice. The having to pay these large sums in advance necessarily lessened the amount of the rental. It is also a loss to the Treasury as I will now proceed to show. Taking a lease for twenty-one years at a rental for the first term of seven years at £50 per annum, £100 per annum for the second term of seven years, and £150 per annum for the last term of seven years; the Native duty if collected annually would produce £210, capitalised it produces £11.3 18s., shewing a loss of £96 2s. If the rental is £150 per annum for the first term, £184 for the second term, and £220 for the remaining term the duty, collected annually, would amount to £387 16s., capitalised to £226 15s. 6d., or a loss of £161 0s. 6d. If the calculation is made on a rental of £100 a year for seven years the loss will be £12 2s 6d. The reason assigned for the departure from annual collection to capitalisation, seems to have been the difficulty of collection. A simple remedy would be to make the duty payable at a Money Order Post Office, to inflict graduated fines for length of time unpaid, and declaring the lease void if the duty is twelve months in arrear. No Treasurer, however, could be found with the courage to propose such a measure, affecting as it would the "superior race." My treatment of this portion of my subject may seem irrevalent to the general issue, it, however, bears on the question of the depreciation of rental, which is more affected by the one mode of collection than it is by the other.

The Native Land Court.

THE Crown having so to speak made a bargain (although in the nature of an enforced one) with the Natives, it ought to follow that the benefits to be derived from the Native Land Court department should be of a substantial and lasting nature in return for the money paid. This, however, is not the case, and until the Judges of these Courts are placed on the same footing as Supreme Court Judges, and the Chief Judge made responsible for the working of his department, the maximum 'of efficiency will not be attained. The present status of these gentlemen cannot be justified on the ground that the law they have to administer is only temporary. That law has been in existence now for twenty-four years, and so far as appearance go will last another decade or two. To assign the Judges certain permanent districts, and make them resident therein, would materially tend to the better performance of their duties. They would become better acquainted with the nature of the titles to the land, its natural features and position, both important factors in subdivisions, and, what more essentially should impress the Treasurer, this system would effect a considerable saving in the expense of the Department especially in the matter of travelling allowance. The position of Assessor to the Court is also one which does not receive that consideration which the importance of the office entitles it to. Really able Assessors can be counted on the fingers. The present roll requires purging, and to secure the services of really good able men the present wretched pay should be increased at least fifty per cent. Another feature that tells against the efficiency of the Court, is the not having permanent Clerks attached to the Courts. To some extent it is owing to the present system, that the records of the Court are so unreliable, more particularly the minutes of evidence. The Clerk should possess some knowledge of the Maori language and have received a modicum of training for his work. To read over to a witness the evidence he has given and obtain his signature thereto, in the same manner as depositions are treated in other Courts of law is also desirable. This course would tend to make the witnesses more careful, and their evidence more reliable. The Court fees could also be well reduced.

Partition.

ON this important question I see very little to take exception to. The Act gives full powers to the Court on partition. I confess, however, to not understanding why there should be a difference in the mode of obtaining a

title when the purchaser has only acquired a portion of a block of land and not the whole. I refer to land dealt with under the title of Memorial of Ownership or Certificate of Title. In the former case, any Judge can make the Order for freehold tenure; in the latter, it is only the Chief Judge who can do so; and as the Chief Judge's visits to districts are few and far between compared to visits of other Judges, unnecessary delay in completing the title arises.

I would suggest that Section 4 of "The Native Land Court Act, 1886, Amendment Act 1888," be amended by striking out the words "the Chief" in the third line, and substituting the word "a." There really seems no good reason why this duty should be cast upon the Chief Judge alone. As regards Native owners, the Act appears to me to afford ample protection. No doubt Natives are dissatisfied at the decision of the Courts in partition cases, more especially where the interests of purchasers are being defined. For this we can hardly blame the law, although we may blame the method by which that law is administered. The peculiar nature of Native custom also has its effect, protecting as it does individual rights to plots of land, besides the general right to the lands held in common by the sub-tribe or "people." I admit that these individual rights should where possible be recognised. But to make any hard and fast rule would be contrary to the wholesome dictum that private rights must sometimes give way to the public good.

The Maori Real Estate Management Act, 1888.

PROVISION is required under this Act to empower Trustees, with the consent of a Judge of the Native Land Court, to pay the just debts and funeral expenses of deceased owners out of the estate—that is, the estate of the deceased owner held in trust for the benefit of his heirs. This power should include the right to sell land for that purpose. Trustees should also have the power to exchange land where the Court sees that it will benefit the estate.

Trustees can sell or lease, subject to the approval of a Judge of the Supreme Court. This approval is a necessary safeguard, and could well be exorcised by a "Judge." It would, at least, have the merit of giving more publicity to Natives, and be a saving of expense to all concerned. To omit the words "of the Supreme Court" after the word "Judge" would meet the case.

Restrictions.

SECTION 5 of "The Native Land Act, 1888," vests in the Governor-in-Council the power to remove or declare void existing restrictions on alienation. Section 6 of "The Native Land Court Act, 1886, Amendment Act, 1888," whilst making provision for the removal of restrictions on alienation which may hereafter be ordered, directs that they shall only be annulled or varied on public enquiry by the Court after due notice being gazetted.

Uniformity of procedure seems desirable, to obtain which Section 5 should be repealed, and there should be added after the word "alienation" in the first line of Section 6 the words "heretofore made or."

Native Equitable Owners Act, 1886.

UNDER this Act, when the Court has made its order for additional owners, and where the land has been leased, the lessee must pay the rent to the Public Trustee. Here we have another instance of multiplying restrictions. Surely the provisions of the Native Land Court Act relating to rent are sufficient. For my part, as far as *this Act* is concerned, I shall be sorry to see the lands subdivided, because, as a rule, they are, as to situation, admirably adapted as a means of support for the people. The restrictions on these lands are against the sale, and do not prevent leasing.

To determine the value of the relative interests of the parties so as to regulate the rental to be paid, is all that I hope will be done.

Conclusion.

AND yet a few words before concluding my subject. I cannot too strongly impress upon you the necessity of having a law which secures to the Natives a good and valid title to their lands, and at the same time afford them a means of dealing with those lands to the best of their advantage. Let me again reiterate, that those means are not to be attained by enacting that blocks of land shall be partitioned into parcels, owned by not more than twenty owners, and that to restrict any dealings with the land, if the same is hold by more than twenty owners, is oppressive to the Natives.

If to this is to be added a multitude of arbitrary and harrassing conditions, necessary to validate such dealings, you increase considerably the cost of acquisition, and lessen the value of the land to the Natives.

"A flea
" Has smaller fleas, that on him prey,
"And these have smaller still to bite 'em,
"And so, *ad injinitem."*

I have endeavoured to treat my subject in an impartial manner, certainly from a standpoint tending to the interests of our people. The Native Land Court does not give that satisfaction to the people that it should do. This has not arisen altogether from the action of the individual Judges, but has been partly caused from defects in the law they have had to administer. Much of this dissatisfaction would be remedied by amending the existing law, defining the interest of each individual owner, and lessening the fees payable to the Court. From these causes may be partially traced the desire of the Natives to frame their own land laws, and for Parliament to give effect thereto. Laws so framed, however, would be a sight for "gods and men,"—a change from King Log to King Stork. I still hope to see a law which will be workable. If, however, that hope is ever to be realised, it will not be effected by such legislation as that of last session—a return to some of the worst features of the old repealed statutes. If it is true that it requires a sledge hammer to drive a joke into the head of Scotchmen, how much the more would it require a Nasmith's hammer to flatten out the moaning of some of these enactments. He who attempted to master their intricacies often only succeeded in finding that the more he read the less he knew.

With the experience of the last twenty-five years there should be little difficulty in framing a measure which would secure to the Native the highest benefit attainable from his lands, and at the same time afford ample security at a minimum cost to the European when dealing with those lands.

I have taken upon myself to draw your attention to this question, one, indeed, of vital importance to that race with which we as half-castes are so closely allied, and whose interests are identical with our own.

Although you may not be prepared to accept in their entirety the suggestions which are hero offered to you by me, it suffices me to know that you are fully alive to the responsibility which devolves upon you, to devise or support any measures which will render more effecient the present statutes relating to Native affairs. For my part I am content if my usefulness in that direction is as the "guide-post which points the way itself cannot follow."

Yours truly,

E. F. Harris.

decorative feature

The Railway Problem in New Zealand.

By Samuel, Vaile.

Introductory.

It is now more than seven and a-half years since I placed my scheme for reforming the administration of our railways before the public.

My main propositions were: 1. Mileage rating must be abolished and a stage system of rating substituted. 2. Differential rating must also be abolished, and fixed and equitable rates substituted. 3. That railways must be worked by the Government in the interest of the *whole* people, and that they must no longer be regarded as tax-gathering machines.

Many will remember the derision with which the railway department and their friends met me; but events move on, and the legislative action of the greatest nations of the world has shown that I was right. England and America, by the most stringent laws, have abolished differential rating, and Hungary, Austria, Spain, and Hesse have abolished mileage rating. The other nations must follow.

Why did we not lead in this great forward movement, which commenced here? Simply because it did not suit Messrs. Maxwell, Hannay, Richardson, and Mitchelson. The colony will have something to say about this before long.

In the following papers I have dealt mainly with the financial portion of the question, indeed in all my writings, so far, have touched very lightly on the vast social interests involved. If I appear to have neglected this

part of the subject, it is not because I have not appreciated its vast importance, but because in the present position of the colony I have felt that it was useless to advocate any reform in railway administration that would not show immediately good financial results.

As a matter of fact it is the social aspect of the question that has mainly occupied my mind, that caused me to take up the work, and has induced me to persevere in it.

I believe there are none of us, who can for see the vast social revolution that will be brought about—I say will be, for it is only a question of a very short time—by the abolition of mileage and differential rating, and the substitution of stage rating, with fixed, equitable, and cheap fares, rates, and charges.

This chancre must take place, the world over, in the next few years; it has become a necessity of the age.

The motives that have actuated me in carrying on this contest have been greatly misrepresented, and it is perhaps right that I should say something on the subject.

Some, chiefly paid officers of labour associations, have thought proper to persistently state that I am the agent of certain land owners, and have worked in their interests and theirs only. The fact is these individuals dread the effect of my work, they are probably acute enough to know that if I succeed in my effort their occupation is gone. They know that there would speedily arise such a natural and continuous demand for labour that the grievances between the classes would quickly disappear.

Of all men, I despise most those who make their living out of the real or supposed wrongs of their fellow creatures. As a rule they never have made, and are incapable of making, the least self-sacrifice, and are ever ready to impugn the motives of those who disinterestedly work-for the public-good. They cannot comprehend such characters.

An incident in my early life gave me a lasting interest in the poorer classes of society, and when in the early part of 1862 I returned to London, I naturally took to spending a portion of my time in working among the very poor of that vast overgrown city. Whilst so engaged I was very deeply impressed with the fearful evils produced by the overcrowding of great cities. Having personally investigated the homes of the very poor, and the haunts of sin and misery, I know, from actual observation, what crowding a vast number of human beings into a small space means, and I say that the man who has this knowledge, and at the same time believes he has found a remedy for the evil, would be worse than a fiend if he allowed himself to rest till he had seen that remedy tried. I devoted a good deal of earnest thought to the subject while in England, but failed to get even a glimmering of an idea of how to deal with this tremendous evil.

In 1869 I returned to Auckland, and the subject passed out of my mind till the lecture given in this city in 1882 by the Rev. Joseph Cook of Boston revived it. Towards the end of that year circumstances led me to study the railway transit system of the colony.

I had not been long engaged in this investigation before I saw how intimately the railway transit system and the overcrowding of cities was connected. The first thing that attracted my attention was the fact that differential rates are always given in favour of the great cities and great producers, but never in favour of poor districts and small producers. It was longer before I saw the still greater evils of the mileage system.

It is interesting to me to note, that both England and America as nations, have now realised the evils of differential rating, but neither nation as yet appears to have the least idea of the greater evil of *mileage rating;* nor, indeed, do those nations who have adopted the "Zone" system.

I found it much easier to detect faults than to propound a remedy for them, but when I did find it, I resolved not to let the matter drop. Greatly mistrusting my own ability to deal with so vast a subject, I sought the assistance of some of our leading men, but as no one would join me, I resolved to enter on the contest alone. Its history is public property.

As to working in the interests of the large landed proprietors, such a thought has never crossed my mind; on the contrary, I know—I do not say I think,—I *know* that the introduction of my system will *do* more to break up the large estates than anything else that has yet been done. *The present system, as also the "zone" systems of Hungary and Austria mean concentration, my system means distribution, and distribution means subdivision of land as well as of everything else*.

Many a time have I been tempted to give up the contest, but the knowledge that carrying it to a successful issue will bring immense relief to the struggling masses of mankind that are pent up in the great cities of the world, has been the thought that has kept me at my task. My great idea has been to bring about such a state of things, that the *toilers* of the world need not drag out a miserable, unhealthy existence in garrets and cellars, but may live on hind in health and happiness. This is, I think, an idea worth fighting for.

No one can be more conscious than I am of many failings and shortcomings in dealing with this great question. I am aware that I have not always exercised the patience and discretion that I ought to have done, and know that many of my fellow colonists do not approve of my method and manner, and the fierceness of my attack; still I have honestly striven to do my best.

The fact that the value is fast going out of real estate, and more particularly of country lands, all the world

over, gives cause for serious alarm. It is a wonder that more attention has not been drawn to the subject.

Land is not only the source of all wealth, but it is also the basis of all security for the possession of a competency. Many of us have invested not only in mortgages but also large sums in life insurance policies. Does not the value of these policies rest on the value of securities held over real estate by the various companies? If the present movement goes on much longer, no life policy will be worth the paper it is written on, nor will the savings bank or Public Trust securities be of any value.

What is wanted is not to tax the value out of land, but to make the lands of the world so accessible, that all who want land can obtain it at a fair not an inflated value, and thus enable land to bear its fair share of the burden of taxation, which it is fast losing its ability to do, and as a natural consequence an ever increasing burden is being thrown on the industries of the world. This can only he done by an equalisation of transit charges, and that again by a stage system of railway administration. After that must come an equalisation of ship transit charges. In short, the world must be drawn more closely together.

Coincident with the decreasing value of land comes this other startling fact, that the value is also leaving the next largest investment in the world—the railways of the world. Is there no connection between the two things?

If we are true men we shall rouse ourselves and pay strict attention to this matter. Our very existencedepends upon it, and I say that the first step towards setting things right in this colony, is to get rid of the incubus of Messrs. Maxwell and Hannay.

All thoughtful men must have noticed the social and political unrest that pervades the world. What has been the chief cause of this? Is not the main cause poverty, or what is often worse, the dread of poverty among great masses of the people?

Is it not want, misery, social degradation, that has led to the creation of the various societies of Anarchists, Dynamiters, Nihilists, Clan-na-Gaels, Socialists, Fenians, etc., etc.; and where is the birthplace, the home of these societies? Is it in the villages and broad fields of the country, or is it not rather in the slums of our overgrown cities?

The true work of the statesman then is to devise means by which the masses may live in greater freedom and comfort in suburban and country districts.

When we reflect that four thousand three hundred millions of pounds (£4,300,000,000) have been spent in constructing the railways of the world, and that this vast sum, this tremendous engine is at work not for the public good, but for the mere purpose of putting money in the pockets of a few capitalists, I say, when we remember this tremendous fact, is it any wonder that we have social misery, political I unrest?

As a matter of fact the great highways of the world have been handed bodily over to certain capitalists to deal with as they please, and we need not wonder that they have availed themselves of their opportunities, and imposed the most crushing disabilities on every kind of industry. No thought of the people, no thought of the future ever comes in. The sole consideration is how much money can be squeezed out of the users of these highways.

It may be said that my remarks do not apply to our railways, that they be-long to the people. It is quite true that the people have paid—paid very dearly for them; but how can they be said to belong to the people when they have never been used as though they were public property, and we have now given them away in *fee simple* to three men who are not only responsible to nobody, but who had previously proved themselves incapable of decently managing them. Was there ever such an act of folly committed by any people?

Here we have all the disadvantage of Government ownership combined with the very worst form of private ownership.

When railways belong to private companies their directors are responsible to the shareholders, but our directors are not responsible to anybody, and they have already given us convincing proof that all they care for is their own salaries and positions.

THE GOODS TARIFF.

The re-arrangement of the goods tariff will be a work of vast importance, and the future of this country will largely depend on the skill, and the fairness and impartiality with which it is dealt with. If Messrs. Maxwell and Hannay are allowed to control this important matter very many people and great public interests will suffer severely.

The evidence these gentlemen gave before the Parliamentary Committee of 1886, and reproduced in my Paper, No. 8, conclusively proves that they could not correctly calculate the simple averages of the passenger traffic, neither with regard to their own system nor mine. If then they made such a fearful mess of this comparatively easy task, what will they do with the much more complicated and important question of the goods tariff.

It appears to me that there is nothing for us to do but to repeal the disastrous Act of 1887 with the least possible delay, and let the railways revert back to the Crown and be managed under the control of a responsible Minister.

What, then, are we to do with the Commissioners? As to Messrs. Maxwell and Hannay, the colony has surely had enough of them. To pay the cash value of their salaries, deducting therefrom the amount of their compensation as civil servants and the chances of their lives, would mean a very small thing. It would pay the colony to give ten times as much to get rid of them. Mr. McKerrow, who is a good departmental officer, and must have acquired a great deal of routine knowledge of the department, might probably be retained with advantage.

We ought, then, at once to introduce a stage system. If a better one can be found than the one I propose, by all means let us have it; if not, let the system that has already been investigated have a fair trial.

There are now before the world three stage systems.

THE HUNGARIAN SYSTEM.

We have now information in respect to this system direct from the Hungarian Minister. It is described as comprising two groups of "zones," one of two zones for "suburban traffic," and one of 14 zones for "distant traffic."

The letter to the Railway Reform League states that, "The arrangement of the stations in zones according to their different relations is shown in tables which constitute the second part of the tariff; *this would be too voluminous to send you"* From this it will be seen that the arrangement is a somewhat complicated one.

It is somewhat difficult to understand the arrangement of the suburban zones, but I take it that they start from any large centre and cover at least 15 miles and in some instances greatly more. The charge for the first suburban zone is 6d. first-class, 3d. second-class, and 2d. third, and for the whole 15 miles 8d. first, 4½d. second, and 3d. third.

Then follow 10 zones of about 9 miles each with charges of 10d., 8d., and 5d., then two zones of 15 miles each at the same fares, and finally any distance outside these 13 zones also at the same price.

It will be seen that this arrangement gives great advantages to the large centres. There are also many other plans of giving advantages to the great cities. Old railway traditions are still clung to. The effect will be to still further concentrate population and wealth.

Hungary has also adopted the plan of selling railway tickets wherever postage stamps are sold. It is also proposed to relieve the Government of their responsibility as carriers; I have proposed to do both these things. The English papers state that for the eight months it had been in force, this system has shown good results.

THE AUSTRIAN SYSTEM.

This system differs from the Hungarian. It comprises twenty six (26) zones of 50 kiloms., but, in the interests of the traffic *near the capital* the first 100 kiloms. were divided into 5 zones of 10, two of 15, and one of 20 kiloms."

The first zones are a small fraction over six miles each, with fares of 2d., 4d., and 6d. for third, second, and first class respectively. The next two zones are of 9 miles each, and the next 12 miles, the remaining 18 zones are 31? miles each. The fares in all the zones are at *the same rate per mile*, and are the same for the whole or any portion of a zone

The effect of this arrangement, it appears to me, will be very disastrous as regards country interests. For; instance, round the capital a man can travel 6 miles for 2d., 12 miles for 4d., or 18 miles for 6d.; but if he is 62 miles away from the capital, and requires to travel two miles only, he will have to pay 10d. It is true he can travel .31 miles for the same price, but if he makes ever so short a journey on a stage he must pay the full fare. It seems to me that the Austrian system will fail; that is, if I understand . it aright.

Both the Hungarians and Austrians have abolished season tickets. I hold this to be a serious mistake.

THE NEW ZEALAND SYSTEM.

This system provides for four stages of seven miles each on every line starting from a town of 6,000 or more souls, two from a town of 4,000 souls, and one from towns of 2,000, with intervening, stages of any length up to fifty miles.

Passenger fares are fixed at 6d. first class and 4d. second class for the whole or any portion of a stage, no matter what its length may be. In time these fares will be reduced to half the amount.

This system is the exact reverse of all existing systems, including the Hungarian and the Austrian, which all greatly favour the thickly populated districts and great cities; my system greatly favours the thinly populated

districts and the small towns.

Under all existing systems the protection given to the crowded districts is continuous and ever increasing. Under my system the protection given to weak country districts and small towns is *only temporary*, to enable them to acquire population and strength, and as they do this they will have to pay their full share of transit charges, and the great centres will be proportionately relieved. Ultimately all fares and rates will merely be charged to and from certain centres of population, and the burden of transit charges will be equally distributed. (See Pamphlet 3, pages 5 and 7.)

Under such a system as this, it is impossible that 6 per cent, of the users of railways could be, *as they are now*, compelled to pay 37 per cent, of the transit; charges of the country.

The great distinctive feature of the New Zealand system is this: that under it all fares and rates are based on the location of population, and consequently that each district will help to bear the burden of transit charges in proportion to its ability to stand the strain.

Another distinguishing feature is its great simplicity; any intelligent boy of ten years' old could understand it.

I do not propose to do away with season tickets, but would abolish the present system and substitute a new one that I believe will give better financial results, and much greater facilities to the public.

I propose to manipulate goods traffic on the same system as passenger traffic, and am prepared to work out a new goods tariff whenever am placed in a position to command the necessary information.

AUCKLAND,

6th June, 1890.

Wilsons and Horton, Printers, Queen and Wyndham Streets, Auckland.

decorative feature

The Railway Problem in New Zealand.

No. 1.

By Samuel Vaile.

[NOTE.—I have been asked by many people who take a deep interest in the railway question to publish in condensed and consecutive form the whole argument on the railway problem, which has hitherto only appeared in scattered letters and papers. This I propose to do in a series of articles, of which the following is the first. Those who will take the trouble to peruse them will, I hope, obtain a clear view of the whole question as it affects New Zealand.]

WE complain, and not without cause, of commercial and financial depression, but few, very few, of us take the least trouble to search out the underlying evil that has brought this state of things about.

When a large commercial house fails, numerous smaller businesses must fail in consequence, and the larger the transactions of the house that fails first, the more widespread the disaster.

We most of us remember the consternation, disasters, and trouble that followed the failure of the Glasgow Bank. We have a mild example nearer home. Our local bank is not as prosperous as it used to be. No one able to judge doubts its ability to regain its former position; but in the meantime we feel the effects of shaken confidence.

What placed the Bank of New Zealand in its present position? Incapacity, or worse, on the part of its management and directors, say Mr. Buckley and others. I hold a totally different opinion, and believe that the Bank's difficulties have arisen chiefly from causes outside of itself and beyond its control. They arise from the failure of a still larger concern.

Those who have managed the affairs of the Bank have no doubt made serious mistakes, but these would not have been felt had not the value gone out of country lands to such an extent that the owners were compelled to abandon them to the Bank, and the Bank directors have been unable either to realise or utilise them. It was never thought that the Bank would have become the owner of these properties. This loss of value is due to maladministration of public affairs.

What is the chief business of any country? Is it not its public business, the administration of its Government; and are we not all convinced that for years past this has been a serious failure? And why has it

been a failure? Simply because it has become a fashion with the leading men of ail classes to say that a business man ought not to take any part in politics, and thus public affairs have been allowed to drift into the hands of inferior men, and our merchants and others have gone on "minding their own business" till now they have very little business of any kind to mind.

If this country, or, indeed, any country, is ever to be really prosperous, its citizens must recognise the fact that, from the highest to the lowest, we all have *public* as well as business and private duties to perform, and that if we neglect public duties, private interests must necessarily suffer.

Of all the departments of our public business there is not one that exercises so great and immediate an influence for weal or woe as the department of working railways.

In it we have invested £15,000,000 of capital, or considerably over £24 per head for every man, woman, baby, imbecile, and gaolbird in the country. This, then, next to the whole public business, is the largest concern in the colony. It is purely a business department. Alongside of it the Bank of New Zealand is merely a baby. The Bank's capital is but £1,000,000; the railway capital is £15,000,000.

The Bank is not prosperous, and the country suffers in consequence. But what influence can this have compared with the failure of our railway department? I do not suppose there is an individual in the colony who has bestowed the least thought on the subject but what knows, and feels, that the administration of our railways is a complete, an absolute, and most contemptible failure.

The most ardent advocates of the present system cannot pretend that in any respect it has been a success. The one object has been to "get revenue," and here it has failed miserably. As a means for settling the country it is a still worse failure, while as regards the transportation of goods, and providing facilities for the travelling public, the whole colony loudly complains.

Price 2d.

All Profits go to the fluids of the Railway Reform League.

If, then, this great department is really a failure, it follows that the whole colony must suffer seriously.

In a small and thinly-populated country like this £15,000,000 is a vast sum of money to expend in any one direction; and if the object aimed at is not obtained, serious disaster must ensue.

No one can pretend to say that any one of the objects we had in view when we consented to burden ourselves with our vast public debt has been attained by the construction and administration of our railways.

What, then, is the cause of our failure? I believe there are two causes:

1st. The policy, or rather want of policy, pursued in the administration.

2nd. The want of capacity in the men we have placed at the head of the department.

As to the policy pursued, the only idea has been to use our railways as great tax-gathering machines, to make them get as much revenue as possible, without the least thought as to whether the system pursued could last, or the least regard for the wants and requirements of the country. Such a system must necessarily come to grief. It was only a question of time.

The miserable failure of the attempt to "get revenue" is due to the fact that no effort has been made to use our railways so as to meet the requirements of the country, and develop its resources. They have been worked not as though they were State property, but as though they were the private property of the railway managers, as indeed at the present moment they virtually, if not in fact, are.

We want a national railway system. We must put out of our minds the false idea that the first business of a railway is to directly make money; we must rather regard them as instruments for the creation of national wealth, by providing quick and easy transit facilities *at the lowest possible charge*, and on equitable terms. We must come to consider our railways as national highways, that are not to be used for the purpose of raising taxation.

If we were to make the same effort to "get revenue" out of our ordinary roads that we do to get it out of our railways, what would people think of our folly? And yet if the one thing is right, why is not the other? Compared with our railways, our ordinary roads are merely byways; the railroads are, or at any rate ought to be, our highways, the great channels through which commerce should flow.

If we would but reflect on the fact that everything in this world depends on *the power to move*—that without motion there cannot be any life, we should see how important it is to make our transit system as easy and free as possible.

Motion is just as necessary to commercial life as it is to animal or vegetable life. Arrest motion in either case, and death is the inevitable result. Why, then, do we allow the commerce of our country to be blocked by an additional charge for every mile its people or its products pass over?

It is in this false and pernicious system that we have the real cause not only of the failure of our railways, but also of nine-tenths of the commercial and social troubles the world suffers from.

The railway system of transit stands alone. There is no other, and there has been no other, where the charge is made by the mile. There is no other, and there has been no other, where it has been claimed that it is impossible to lay down an intelligible scale of charges.

I assert that the whole thing is an unutterable absurdity; and I say that it is just as easy to lay down a fixed, fair, and equitable tariff of railway charges as it is to fix one for postal and telegraphic charges. There is no honest reason whatever why the present complicated and fraudulent system should be kept up.

My contention, then, is: That the real cause of our commercial and financial troubles lies in the fact that we have so managed our national transit system as to ruin our great producing districts. We I have rendered it impossible for anyone to make a profit out of land situated at a distance from a large centre, and have thus completely destroyed its value, with the inevitable result, which we are all now feeling, that the value is fast going out of our cities, and their suburbs also.

By pursuing this insane policy we have rendered it impossible for the country to bear its fair snare of taxation, and have thrown that burden almost wholly on city and suburban property, a burden which it is found increasingly difficult to sustain.

I venture to say that the day is not far distant—it will come in a very few years—when curiosity-hunters will eagerly buy up copies of the present railway tariffs and regulations, and when they will be exhibited to the wondering gaze of thousands as monuments of commercial and financial imbecility.

As to the second cause of the failure of our railway system, let the following table speak:—

Nine Years' History of the New Zealand Railways.

NOTE.—Messrs. Maxwell and Hannay received their appointments as general manager and sub-manager in 1880.

Year. Population. Miles open. Capital expended. Passengers carried exclusive of season tickets. Tons carried. Train miles. Coaching revenue. Gross revenue. Net revenue. Interest earned. £ £ £ £ £ s. d. 1881 489,933 1,277 9,228,334 2,849,561 1,377,783 3,247,492 346,280 836,454 314,497 3 8 3 1882 .. 1,333 10,974,000 2,911,477 1,437,714 3,375,121 361,705 892,026 368,927 3 7 3 1883 .. 1,373 11,863,576 3,283,378 1,564,823 3,710,405 396,763 953,347 360,526 3 3 2 1884 .. 1,396 12,795,125 3,272,644 1,700,039 3,871,061 371,521 961,301 305,314 2 10 2 1885 .. 1,479 13,218,560 3,232,886 1,778,140 3,982,125 400,626 1,045,712 355,686 2 15 4 1886 .. 1,613 13,726,166 3,362,266 1,856,732 4,114,577 396,618 1,047,418 357,078 2 12 0 1887 .. 1,727 14,219,116 3,426,403 1,783,524 4,135,578 390,002 998,763 299,696 2 2 2 1888 .. 1,758 14,603,109 3,451,850 1,770,637 4,009,714 387,453 994,843 307,515 2 2 1 1889 607,000 1,777 14,875,187 3,132,803 1,954,125 3,794,080 357,548 997,615 350,570 2 7 2

NOTE.—This table teaches us that during the last nine years we have:—

- Increased the mileage of our working rail ways by 39.1 per cent.
- Capital invested by 61.2 per cent.
- Passengers carried by 9.9 per cent.
- Tons carried by 42 per cent.
- Train miles by 16.8.
- Coaching revenue (this includes ordinary passengers, season tickets, parcels, horses, carriages and dogs) by 3.2 per cent.
- Gross revenue by 19.2 per cent.
- Net revenue by 11.5.
- Rate of interest earned *decreased*, by £1 1s 1d per cent.
- In 1889 we carried 150,565 *fewer* passengers than we did in 1883.
- The train service to the colony was *less* by 76,981 miles than it was in 1884, and this notwithstanding that we had 381 more miles of railway open.
- Our coaching revenue was £4157 *less* than it was in 1882.
- The gross revenue was £48,097 less than in 1885, while our net revenue was £18,857 *less* than in 1882, and the rate of interest earned less by £1 1s 1d per cent, than in 1881.

During the period under review the population of the colony was increased 24 per cent.

These are the startling facts we have to face and deal with; and, if we are wise, we shall no longer put up with the trifling of the men who have brought our railways and the country to this pass.

Let it never be forgotten that the men who control our railways now are the same men who have controlled them all through this period. They are solely responsible for the policy pursued. It was not only within their power, *but it teas their duty*, to initiate any reforms they were able to make, but the results prove that they are

thoroughly incompetent to deal with the question.

The sooner the ill-considered Act of 1887 is repealed and the Government resumes the direct control of the railways—which they never ought to have parted with—the better it will be for the country.

What is the use of any longer continuing a system which, year by year, shows increasingly worse results—a system which the more millions we invest in it, the less rate of interest we receive; a system that, after an increased expenditure of over £3,000,000, gives us a less passenger traffic by 150,500 than we had six years ago, when our population was much less; a system that gives us £50,000 less gross revenue than we had four years ago, and £18,350 less net revenue than we had seven years ago? Is it not time to pause and ask ourselves the question, Is there not something seriously wrong both with the system pursued and the men who administer it?

If our railways were owned by 10,000 of our New Zealand colonists instead of by the whole community, what a feeling of consternation a perusal of the above table would create. Is it possible that the effects can be less disastrous because the evil is more widely spread?

Auckland, December 14, 1889.

decorative feature

No. 2.

When it is proposed to reform any institutution the first step is to show the need for reform, and to show that the men in charge have failed in making it carry out the objects for which it was brought into existence.

I do not wish to "pile up the agony," or to bring unmerited odium on our Commissioners, but this question of railway administration has become a very serious matter to all of us, so serious that we cannot allow personal considerations to come in.

Messrs. Maxwell and Hannay have now had a ten years' trial, and the table given in my last shows where they have landed us. To that table I ought to have added another column showing the loss made yearly. I now append it. In former statements of loss I have calculated interest at per cent., but as the rate we now pay is somewhat reduced, in this instance I have taken it at 5 per cent. only.

It will be seen that in 1889 an apparent gain of £29,451 was made. I say apparent because it is easy to show that it is not real. This is how it has been done. The train service of the colony was reduced in this one year by 315,634 miles. This, at the cost of the train mile in 1888, 4s 8d, is equal to £73,647.

This is a very wonderful way of making money, or "saving," as our Commissioners call it. It has, however, the advantage of being extremely simple and easy, and of not requiring much brain power. The revenue by some means or other must be made to show an increase; therefore, cut off train services to the extent of £73,000, in order that £29,000 may be "saved." By this process, all we require to do is to shut up the lines, and so save the whole expenditure.

It appears to me that the real problem is, how to increase our train mileage, and make profitable use of our railways, not how to shut them up. At an immense expense we have acquired a very useful and powerful machine, and in the name of common sense let us make some good use of it, and not allow it to rust to pieces.

Here is a curious instance of an effort to make railways pay. It seems that until within the last few days the various newspaper proprietors have had the privilege of sending their papers to country agents and customers free of charge, they in return doing a certain amount of the advertising of the department also free of charge.

Our Commissioners, however, must "get revenue," and in their wild efforts to accomplish this object they have conceived the brilliant idea of charging one halfpenny for each loose newspaper passing over the lines, and a somewhat smaller sum if sent in parcels.

Now I wonder what they expect to make out of this. In the first place, they will have to pay for their advertisements; and in the next, seeing that the charge by post is the same as by rail, the chances are that nearly all the papers will be sent by post.

This is another instance of how our Commissioners "kill the goose." Newspapers are certainly a powerful agency in the promotion of trade, and anything that tends to limit their circulation must, to a certain extent, retard the development of railway traffic.

Judge by what standard we may the administration of our railways seems to me to be a miserable failure. Compared with the United Kingdom they stand thus:—New Zealand, one mile of railway to every 349 inhabitants. United Kingdom, one mile of railway to every 1766 inhabitants. New Zealand tons moved, 3 per inhabitant; United Kingdom tons moved, 7 per inhabitant; New Zealand journeys made, 5 per inhabitant; United Kingdom journeys made, 21 per inhabitant. This is exclusive of season ticket business, which in England is enormous.

I am very far from believing the English system of railway administration to be good; I consider the policy that governs it to be as bad as it can be, and I merely give the above figures to show that under the same system,

with much greater transit facilities in proportion to population, and with a more wealthy people to operate upon, we do an infinitely less proportionate trade.

It appears to me that under these circumstances there must be something very wrong with our administrators.

The natural use of railways is to distribute population and wealth, but the selfish and unprincipled way in which they have always been administered has led to exactly the opposite result, and they have been made to concentrate population into the great cities, and wealth into the hands of a few families.

In the neighbouring colony of Victoria the railways are under the control of a well-known English railway expert, and this is what is taking place there.

The following table shows the proportion of the whole of the population of the colony of Victoria contained in the city and suburbs of Melbourne:—

From this it will be seen that two years ago (the latest figures obtainable) over 40 per cent of the total population of Victoria was concentrated in Melbourne alone. It will also be seen that during the last 27 years the population of country towns and districts has declined from 74.11 per cent, of the whole to 39 87 per cent. It will further be seen that this decline is not only continuous, but is going on with ever accelerating speed. Where will it end?

It is only those who have devoted considerable time and study to the subject who can form any idea of the commercial and social trouble that must shortly ensue if this state of things is to continue.

I have used the Victorian statistics because they illustrate what is going on close at hand, and I would draw particular attention to this fact. The railways of that colony were handed over to the Commissioners on the first of February, 1884, and the policy of converging everything on the capital was more fully brought into force, and the command went forth to work the railways on "*commercial principles."*

For the decade from 1861 to 1871, the proportion of increase of population in the capital to population in the country and country towns was 2.98 percent.; for the next decade, 1871 to 1881, the increase was 3.94. During the next two years the increase was .37, and during the next five years, 1883 to 1888, it was 6.95 per cent.

During this five years the Commissioners have held sway for four and a-half years, and pursued their concentration policy, with the result that the proportion of population in the capital has increased by 6.95 per cent., whereas, under the previous administration, it took 22 years to increase it 7.29 per cent. Dearly has Victoria paid for the temporary increase in her railway revenue. I say temporary advisedly; it will not continue unless the system is altered.

More than two years ago I published the following sentence:—"Melbourne is now enjoying the result of the absorption of her country districts. She rejoices; her turn will come—come more swiftly than she expects." Are not my words coming true?

What is going on in Victoria is going on here, going on in England, America, everywhere where railways are working on this pernicious principle.

All over the world the value is rapidly leaving country lands. For a while the value of city and suburban land is increased abnormally, and then the value goes out of that also, as to a large extent it has already done here.

In studying out the railway problem, two facts have very forcibly impressed themselves on my mind, and seem to me to be of great significance. The first is that the value of land, more especially country land, is seriously depreciated almost everywhere. The second is, that as a rule the profit on working railways is becoming less and less every year.

Land is far and away the greatest and most valuable interest in the world, and next to that I suppose come railways, which have cost four thousand three hundred millions of pounds (£4,300,000,000).

We cannot doubt the fact that these two vast interests are year by year becoming less and less profitable. Is there not a great field for thought here? What is the underlying evil?

It cannot be pretended that either the land or railways are in themselves an evil. The fault must be in the way we make use of them. Fortunately we are impotent to do the land itself much injury, but we can, and we have done much mischief in the way we handle and deal with its products and producers.

Railways are the greatest transit system in the world. They enjoy a virtual monopoly of land transit, and yet it is only with the greatest difficulty that they can be made to pay a small rate of interest.

Next to the railways as a transit system, comes the mercantile navy of the world, but as a rule this pays well. Why? Mainly because the system of charging freights and fares is a sensible one. The charge is made *per journey*. If ship owners' regulated their charges at so much per mile passed over, how much long distance traffic would they get?

It is population that gives value to land, and so long as we pursue a railway policy that continuously drains the population *from our producing districts*, and piles it up in the great cities, so long shall we not only suffer

commercially and socially, but our railway working must continue to become less and less profitable. No scheming of experts, no charging halfpennies on newspapers, no giving differential rates here and there, will alter this.

Nothing but a complete, a thorough and radical change in the whole system will ever give us any real relief.

My contention is that the prosperity of any country or any district will be and is in proportion to its transit facilities. It must not be assumed that because a country has railways that therefore it has transit facilities. That does not necessarily follow. It is true the instrument is there, but if it is not used there can be no result. Here we have the instrument, a more than fairly good one, but we play a very small and miserable tune upon it.

Our present policy is to levy the highest possible tax on the transit of the people and the products of the country. Could we by any possibility levy taxation in a worse direction? Could we by any possibility devise a more direct plan of arresting the commercial and social development of the country? Surely we ought to be able to find some better plan of raising revenue.

The question may, however, be very fairly asked, Is it necessary to continue to work our railways at a loss? 1 answer that it is not, and I emphatically assert that if our railways were worked intelligently in the interests of the *whole people that our passenger fares could be reduced to about one-fifth of the present charge and goods rates to less than half and our railroads yet to be made to pay greatly better than they do now*.

I say this deliberately and with a full knowledge of what I am saying, and I claim that I have given repeated proof that I have an intelligent knowledge of what can and what can not be done in railway working.

To me it seems an absurdity be suppose that a monopoly of the inland carrying trade of this country cannot be made to pay, and at the same time be made to meet the requirements of the people. The plain truth is this, that under the present no-system our railways do not provide for the wants of more than a fourth of the population, and that is the reason why they do not pay, either directly or indirectly.

It is now a year since we gave our railways away to the Commissioners. Can anybody tell of any benefit we have derived from that silly transaction? Is anybody better pleased with their administration Has there been the change of policy that was expected? Has there been any improvement?

My contention is that the railroads of any country are but its roads, its main roads, its great highways, and I maintain that it is one of the first duties of any Government to keep the direct control of the great lines of intercommunication, and not give them away in fee simple to three men to deal with exactly as they please, and without any responsibility whatever to anybody as to how they may use or abuse them.

For the Commissioner craze, which arose in Victoria and spread to this and other colonies, Australasia will yet pay dearly. In justice to Victoria, it must be said that there is nothing in common between their Act and ours; theirs contains some admirable provisions, ours is simply a helpless, contemptible abandonment of everything.

Let me repeat what I have many times said before. *They that rule the roads must and do ride the trade and commerce of the country, they hold it in their hands with an iron grip*. This is power that should only be held by the Government.

If, instead of creating the Railway Commission, the Government had set up a Commission, and had handed over to it the control of the Post Office Savings Banks, the Government Life Insurance, the Public Trust Office, &c., a real service would have been rendered to the country, for there is no doubt that the ease with which the funds of these institutions have been made available has led be much of the extravagant expenditure of the past.

Auckland,

January 22, 1890.

decorative feature

Railways: Mr. G. Findlay's Book.

The following article teas written in reply to a review of the chapter on Passenger Traffic, in Mr. G. Findlary's book, recently published in the "New Zealand Herald."

I HAVE carefully read the notice which appeared in the NEW ZEALAND Herald, of Saturday, December 4, of the work recently published by Mr. George Findlay, General Manager of the London and North-Western Railway, on the "Working and Management of an English Railway." The object is to make it appear that, no matter what the fares may be, people will not travel, and that a reduction in fares must necessarily mean loss.

I have more than once had occasion to remark that our railway authorities appear to be incapable of readme

the lessons that railway statistics teach, this reviewer seems to be in the same position, and before I have done I shall show that Mr. Findlay's facts and figures, so far from controverting my position, in the strongest manner support it.

All who know anything about railways know the name of Mr. George Findlay. He is one of the foremost of English railway experts, and no one is better able to argue the question from his point of view.

Mr. Findlay's statement simply amounts to this: That certain reductions in fares were made, and that those reductions have not paid the English railway companies.

It is a marvel to me that it ever could have been thought that they would pay.

In saying this, I am aware that I lay myself open to be charged with presumption. I know that some of the leading financial men of the great financial country were concerned in making this arrangement. Still, the result proves that they were out in their calculation, for it is certain that their only object was to make money.

At the risk of being thought egotistical, I must direct attention to the fact that on more than one occasion I have foretold that certain financial operations in connection with railways would not realise the expectations of the operators.

In March, 1883, three months after my first letter on railway reform appeared, the department reduced ordinary passenger fares by 25 per cent. As soon as this alteration was announced I wrote as follows:—"I am strongly of opinion that the concession made will simply mean loss so far as the revenue is concerned."

The result for the year showed a loss of £25,242, and 10,734 fewer people carried. Of what use was this reduction? It was similar I to that made in England. The sole object of Messrs. Maxwell and Hannay was to make money, and they failed

In 1884 Mr. Mitchelson put forward his famous tariff, which was to add £150,000 to the year's revenue. I pointed out that the gain was more likely to be £50,000 than £150,000. The result showed £50,372.

I could multiply instances, but these are sufficient to show that with the most meagre information at command, I am able to form a correct estimate of the effect of an increase or decrease in railway charges.

Let us now examine the reductions made on the British lines. They were as follow:—

First Class Fares. Distance. Old fares. New fares. Reduction. Miles. 2d per mile, 1½d per mile. £ s d £ s d s d 20 0 3 4 0 2 6 0 10 40 0 6 8 0 5 0 1 8 80 0 13 4 0 10 0 3 4 120 1 0 0 0 15 0 5 0 Second Class. 20 0 2 6 0 2 1 0 5 40 0 5 0 0 4 2 0 10 80 0 10 0 0 8 4 1 8 120 0 15 0 0 12 6 2 6 Third Class. No reduction

The object was, of course, to increase the volume of first and second class traffic. It could not have been intended to operate on third class traffic, because no reduction was made in that class. We shall see how they succeeded.

I have not the figures before me showing the numbers carried in the various classes in 1872, but in 1875 they stood thus: First and second class, 22 per cent, of the whole; and third class. 78 per cent.

With all due respect I submit that the ridiculous reductions quoted above, and these operating on only 22 per cent, of the traffic, could only mean financial disaster. I wonder how any sane men could have expected anything but loss from them. They were not enough to open up fresh trade, and must lead to increased proportionate expenditure.

That the operators intended, and expected, to increase the first and second class passenger traffic is obvious, or the reductions would not have been made. That they failed miserably in their attempt is proved by the fact that this class of traffic, year by year, steadily declined till from 22 per cent, in 1875 and no doubt a higher percentage in 1872, it fell to only 13½ per cent, in 1885.

It cannot be pretended that this falling off in trade was due to the fact; that these reductions were made—they simply had no effect whatever, and were only a gift to certain people.

In 1872 the revenue of the London and Northwestern Company from first and second class passenger traffic was £1,378,032. In 1882 it had shrunk to £951,313. Thus we see that notwithstanding the great increase in the population and trade of the Kingdom the revenue received from these two classes was actually less by £426,719 than it was ten years previously. Could there be a more complete failure of any financial operation?

During the same period the third-class traffic of the kingdom increased from 392,741,177 to 603,762,117 fares, and the revenue from this source from £12,985,829 in 1872 to £17,588,730 in 1882, but it is evident that this increase was not in the least respect due to the financial operation mentioned above.

By the end of 1888 the revenue of the London and North-Western Company showed a further *decrease* of £112,729 from first and second class passengers, and a further *increase* of £187,071 from third-class passengers.

The article goes on to show that on the London and North-Western line the receipts per passenger train mile have fallen from 52.30d. to 43.08d., and the statement is made: "This is due to the increased mileage run, the greater weight of the trains, and the reduction of fares."

If this statement is put forward in good faith (I understand it to be the statement of the writer of the article, and not Mr. Find-lay), it is another proof of the inability of the reviewer to understand the teaching of statistics

he ought to have perfectly at command.

Here are the facts. This is the result of the working of the whole railways of the United Kingdom:—

Did the reductions, etc., in 22 per cent. of the passenger traffic cause the falling off in the receipts from goods traffic?

This falling off has been steady and continuous year by year for the last sixteen or more years, and snows clearly that there are influences at work affecting the whole railway traffic. What are they? Clearly not—as our department would have us believe—the reduction in the fares charged for 22 per cent, of the passenger traffic.

I think I have shown that the statement made that, "The introduction of reduced fares and increased facilities since 1872 has led to these results" is not in accordance with facts and is misleading.

So far I have dealt with the construction the writer of the article puts upon Mr. Find-lay's work. I have not yet seen his book, but where his words are quoted he seems to me to say something very different.

He very distinctly states that a large trade is to be created by giving "low fares and season tickets between all the larger centres of population and places within a radius of 20 miles so as to build up a residential traffic." This is precisely what I propose to do.

Mr. Findlay further states that his remarks as to long distance traffic, "*of course*" do not apply "to the traffic between large towns and seaside or other holiday resorts." Now, if you take this out, what have you left? Is not the traffic mentioned fully nine tenths of the whole? It is more likely nineteen twentieths.

What we may gather from Mr. Findlay's facts and figures is this:—

- They prove incontestably the soundness of my oft-repeated assertion that a moderate reduction in fares must lead to financial loss.
- They also prove that the wants and requirements of the people are such that they can only avail themselves of the cheapest transit facilities.
- That when cheap and good transit facilities are provided the people eagerly avail themselves of them.
- That a reduction of 25 per cent, did not lead to any increase in the number of travellers.
- That there has been a large increase in the passenger traffic of the United Kingdom.
- That after the usual fashion of railway controllers, the companies in England withheld cheap fares and improved facilities until the demands of the public and the pressing requirements of trade forced them from them. It was not the companies that developed trade, but the increasing trade forced the hand of the companies, and wrung "concessions" from them that were very reluctantly given.

Thus I claim that Mr. Findlay's statements, so far from disproving my position, in the strongest manner support it.

I will now deal briefly with the conclusions drawn by the reviewer from Mr. Findlay's book.

He states that "it would appear that any great reduction in fares is likely to lead to heavy financial loss." I want to know why? The result depends on the system and extent to which the reductions are made.

There is no analogy whatever between the small reductions made on 22 per cent, of the traffic in England, and the sweeping reductions on the whole of the traffic which I propose to make here.

The reviewer is, evidently, quite unable to see the difference between reducing fares and rates on an even mileage basis, and giving low fares and rates on a stage system; and our Commissioners seem utterly unable to comprehend the vast difference in financial results obtainable by reckoning fares and rates by a stage system, *having several stopping stations within one stage*, and a system (mileage) where there are *several staves between any two stopping stations*.

On the one system low charges pay, because *each seal or truck mag, and, as a rule, does, earn the through fare several times in each stage*, while in the other the *through fare can only be earned once*.

This is the reason why low charges pay on the one system, while on the other they mean loss.

I ask attention to the following statement:—"The third-class fare for 50 miles of travel being in England 4s 2d whilst a scheme has been considered to make the fare for the same distance in certain parts of New Zealand four pence."

This is a repetition of the misrepresentation to which the advocates of the present system persistently subject me. They try to create the impression that I rely for financial results on carrying passengers 50 miles for 4d. They know well that in nearly every instance my lowest through fare for a 50 mile distance is 1s 8d, and this fare may be paid several times over.

In England 50 miles of third-class travel can only produce 4s 2d. Here under my system, even on the 50 mile stage for 4d, which is such a terror to our department, from 5s to 6s would often be obtained. The charge is fourpence for the whole or any portion of the stage, but there are from fifteen to twenty stopping stations *within these stages*.

The accountant of the railway department. Mr. A. C. Fife, has proved to demonstration and signed his name to the statement that two travellers paying my low fares will give a better financial result than one traveller paying the high fare they now charge him.

I have constantly pointed out that the chief cause of the failure of the railway system is the practice of reckoning fares and rates by the mile, which causes the area or circuit of profitable railway working to gradually but surely and continuously contract upon the great centres of population. Mr. Findlay seems to say that in the United Kingdom this circuit is now limited to 20 miles. In this colony it certainly does not exceed miles.

The reviewer states that the conditions of railway working in England and New Zealand are very different. Most certainly they are, and our railway department ought to be able to see that the conditions are all in our favour and not against us as they imagine.

In England railway traffic is very fully develop. Here, although we have railways, practically we have no traffic, especially the best paying portion—passenger traffic.

In England they work with two, four, or more lines of rails; here we work with one only. In England many, if not most, of the railways are taxed to their utmost carrying capacity. In some instances trains are started at a minute and a-half intervals, consequently even a small increase in the traffic must mean considerably increased cost—in some cases it means absolute loss.

For this reason it is doubtful if the passenger traffic of England could be increased even 10 per cent, without greatly increased cost. Here we have the testimony of Messrs. W. Conyers (late Commissioner of South Island Railways), R W. Moody, James Stoddart, and T. D. Edmonds, all railway men, that we can treble our passenger traffic without increased cost. We all know that our carriages run practically empty.

Before the Railway Committee of 1886, Mr. Commissioner Hannay gave evidence that the average number of passengers per car on the Hurunui-Bluff section was seven (7) only, whereas they are able to carry forty (40). Yes, the conditions are certainly very different. In England the traffic is all developed, here it is all to be developed. It is a pity our Commissioners cannot see the difference.

There is one other condition, population. We are told we have not sufficient population. It will be time enough to say this when we make use of the population we have. With more than five times the railway accommodation, in proportion to population, we do less than a fourth of the passenger traffic they do in the United Kingdom, also in proportion to population.

decorative feature

Wilsons and Horton, Printers, Quern and Wyndham Streets.

The Railway Problem in New Zealand.

The Railway Reform League Proposes:— *1. The Total Abolition of Differential Rating*.

Differential Rating.

BY SAMUEL VAILE.

I AM often asked, What is differential rating? Toll us exactly what it means.

To describe all that the term "differential rating" means, in a way that will be understood by the general public, is a somewhat difficult task.

Differential rates are known by various names, as—Discriminations, preferences, drawbacks, rebates, discounts, allowances, through rates, etc.

It will be well to go back a little, and trace how and why the practice arose.

Railways originated in England, and the Government of that country made the mistake of allowing them to be constructed by private people, and held as trade speculations.

The only object the constructors of railways had in view was to make money out of their investments, and this, indeed, is their only object now. To such an extent has this been carried on in some countries, and so much have their powers been abused, that in many parts of Germany, for instance, to call a man a railway "constructor" is more offensive than to call him a liar.

At the commencement of the railway era, fares and charges appear to have been arranged on a fair and equitable basis. On the first railway, the Stockton and Darlington, passengers were charged one uniform fare of one shilling each for the whole, or any portion of the 12½ miles. Parcels also were charged one uniform rate. This line was not intended to carry goods.

As time passed on railway construction and working became more expensive, and as making money was the only object, means must be found by which this money could be obtained.

It soon occurred to the railway managers to "classify" goods; that is, to charge one price for one kind of goods and another price for another class. Thus the price charged for conveying a ton of carrots would be much less than for a ton of broadcloths. This is not differential rating; it is "classification" and to a certain extent, it is not only justifiable, but necessary. For instance, it would be neither convenient nor profitable to attempt to carry live stock and crockery in the same vehicle. They must be separated. Classification, however, in the effort to get "all that the traffic will bear," has been pushed to an undue extent, and been made a grievous burden.

The Stockton and Darlington railway was opened on the 10th October, 1825. The Manchester and Liverpool followed in 1830, and the first *through* line, the Birmingham and London, in 1838. Then it was that the real trouble began, and the present vicious system was rapidly developed.

The change in the cost of carrying goods long distances by rail instead of by horsepower was so great, that the heavy charges made by the railway companies were hardly felt for a time, but prices soon began to adjust themselves, and experience showed that the rates charged killed the long distance traffic.

The companies, by their charters, were empowered to levy *tolls* (note the idea of a toll-bar) at so much *per mile*. After a time it was found out that these mileage rates could not be enforced, because the constant piling up of an additional toll or charge for every mile passed over, could not be borne except by goods which carried a large profit. This was the difficulty that first gave rise to the differential rating system.

The controllers of railways soon apprehended what a mighty engine this system

was for extracting money from the pockets of other people, and transferring it to their own. Not only did it give them great opportunities for making money directly for the use of the railways, but as I shall show further on it gave them an immense command over the trade, commerce, and land values of the country.

It is probable that the earliest form of differential rating was giving "through rates," that is to say, rates from point to point, as from Birmingham to London. These rates were often given at less than the price charged for only half the distance. This constitutes a differential rate in favour of the large centre, and against the weaker districts. It is manifestly unfair, especially when mileage rates are used.

As the necessities of the railway companies became greater, worse forms of differential rating crept in. Thus the companies, if they could not get their regular rate from a customer, would take a lower one, while a less powerful customer would have to pay the full rate, and in process of time it became such a matter of bargaining that everybody had to "inquire at the station" for their rate; and, according to Sir Edward Watkin, there were over *ten million* (10,000,000) different rates in existence in 1881, on one railway alone, the Great Northern of the United Kingdom.

Up to quite a recent period a pretence has been made of regulating railway charges by the "cost of service. We hear but little of this now, the railway men claiming instead that they have the right to charge "*what the traffic will bear."* That is to say, to take all they can get.

The forms of differential rating are very various. Perhaps the most common is the result of inquiring at the stations for a rate. Mr. Maxwell, in a letter to the Auckland Chamber of Commerce and in one of his reports, which I shall afterwards quote, has openly expressed his wish to drive the users of New Zealand railways into this position.

A man "inquires at the station" for the rate for conveying, say, 2000 sheep to a given point. He is told the rate as per tariff, and if he is absolutely dependent on the railway this rate will be adhered to, unless he has a friend at court, in which case, or if he can drive or send them by water, he will probably get his sheep carried at half the rate.

A poor man with only 30 head applies at the same station. He will get no consideration whatever, but must either pay the full rate or drive his sheep.

This is a differential rate in favour of the rich and against the poor man, as indeed all differential rates may be said to be. The railway men say it is given to "develop industries." Whatever the intention, the effect is to develope monopoly.

The following are some other forms of differential rating.

Largo users of railways arrange that in their monthly freight bills they are to receive a certain portion of the amount back by way of discount, rebate, drawback, or allowance of some kind. This practice has been almost universal in England and America.

A worse form is "secret rating." A speculator or manufacturer will enter into a secret contract with a railway company or owner to take his goods at a certain rate. He on his part undertakes to pay them not less than so much per month or per annum, and the railway owners on their part agree not to carry the same class of goods for any other producer at less than say double the rate they charge the contracting party.! Both parties to

this contract enter into: heavy bonds not to divulge its nature.

Imagine a transaction like this, being, as it now is. *perfectly legal on our New Zealand railways*.

Another form is to call 100 miles 50, 60 or 70 miles only. We have more than one example of this class of differential arting in New Zealand. On one railway in Canterbury 31 miles is "deemed" to be 15 miles only, and on another 21 miles is also "deemed" to be 15 miles.

There are differential rates in favour of Christehurch and against the rest of the colony.

Another form is to call 15cwt. or 30cwt. a ton, according as the railway controllers may wish to fix a rate in favour of or against any particular individual. This is the way the recent railway frauds in Now J South Wales were perpetrated.

Sometime ago differential rates were in existence in favour of certain districts in the Waikato; the object was not to favour these districts, but to ruin the Waikato Steam Navigation Company, which the Government succeeded in doing, and then I immediately raised the rates.

Another form is to charge one district a certain rate, and in another a rate and a-quarter or a rate and a-half for precisely the same service rendered; or to say with regard to certain districts all goods belonging to a certain class shall be charged as if they belonged to goods of a higher classifition—that is, a class paying a higher rate.

Both these two last forms have been and still are extensively used on the New Zealand railways. A few years ago agricultural produce generally (class E) was: charged a single rate in the South Island, and a rate and a quarter in the North Island, This has been removed as regards Auck- land, but still remains against Wellington, Napier, and Wanganui. Very heavy differential rates are also imposed against the weaker districts in the South Island.

Both these forms constitute differential rates in favour of the wealthy and against the poorer districts.

Parliament votes subsidies and bonuses to protect and assist weak industries, and at the same time passes an Act to empower the Railway Commissioners to levy rates that will effectually crush these weak industries and also weak districts.

Differential rates have often been given in favour of one manufactory, say, a woollen mill, or a coal mine, and against another mill or mine in the same district. The object of this form of differential rating was to ruin the mill or mine the rates were made against, so that those interested might not only get rid of the competition, but also acquire the property of the ruined owners at their own price.

This form of rating is also now legal on the New Zealand lines, and as, if the abominable Act of 1887 is not speedily repealed or amended out of existence, we run an imminent risk of having it put in force, I will quote instances of what has been done in this direction.

Professor R. T. Ely, of Baltimore, who has aptly described the present way of administering railways as "Our abominable no-system of railways," speaking of differential rating says, "It is difficult to tell where to begin or where to end on account of abuses, as they are so numerous and momentous. Equally difficult is it to find language in which to pourtray the sober, scientific truth in regard to these abuses, for their enormity is such as almost to baffle description."

He speaks of one company "of odious memory, whose history is marked not only by theft, wholesale bribery, and legislative corruption, but even *by violence and murder."* He says that effective essays might be written on differential rating under such titles as "Corruption not Harm," "Lying no Sin," "Theft no Crime."

I emphatically endorse Professor Ely's condemnation of this system. It is the vilest, thing the trading world has ever produced. There is no other thing, *not even excepting the liquor traffic*, that has brought so much social, moral, political, and commercial degradation and misery in its train as the present "no system" of railway administration.

Years ago I published the following paragraph:—

"If the whole history of commerce, from the earliest times, was searched with the minutest care, I do not believe it would be possible to find in its darkest records anything to equal the differential rating system for unmitigated dishonesty. How it could have come into almost universal use I cannot imagine, and still more do I wonder that our great writers have failed to notice and point out the enormous influence for evil it must have on commercial and social affairs."

Yet we have passed an Act, one of the main objects—if not *the* main object—of which is to fully develop this evil amongst us, and we have appointed as administrators of that Act two men who are its ardent advocates. Here is what one, if not two, of thorn says:—

Mr. Maxwell, in his report for 1884, says: "The system of rating differentially in this colony is not carried far enough, and the difficulty that stands in the way is the impatience of the public in submitting to different treatment in different cases, and the reluctance to place in the hands of the railway officers the power which would be necessary for carrying out the principle extensively. While retaining publicity by gazetting each rate, were such a principle more widely introduced, the public would not be able to do what it now, to some extent, essays to do—read and interpret the rates generally; but the practice followed elsewhere would be necessary;

the customer would appeal to the station each time he required a rate quoted; and, whether the railways were managed by a Minister or a Board, more power and freedom in respect to rating would have to be placed in the officers' hands. The sensitiveness of the public is, then, the chief difficulty; but this is not allowed to intervene in cases where many millions of revenue are concerned, and can be, no doubt, overcome here by patience and time, provided the colony recognises that the principle is a desirable one, and gives the proper power to administer it. Maximum rates might be fixed by law, and a suitable court of appeal constituted to prevent abuse of the powers given."

Anyone wishing to see what two of our present Commissioners can say in favour of this system, cannot do better than peruse Parliamentary Paper I.-9, 1886. Mr. Maxwell's evidence, when he was under cross-examination by myself, is particularly instructive.

He first of all took up the ground that it was justified by cost of service, and that it secured "equality of treatment." Driven from pillar to post in his defence of this abominable system, he then said that "you can get it" (equality of treatment) if "the conditions were precisely similar. Which is simply saying, if two things are exactly similar, they must be alike. Finally, ho was compelled to say that the sole object of the system was to "*get revenue*."

In most countries the passenger fare, for distances of from 10 to 15 miles round the great cities, is half the rate per mile that is charged for the longer distances. That is to say, dwellers in the country or small towns have to pay twice the price that dwellers in the city do. It will easily be seen how this must cripple the weaker districts, and make them poorer still.

This is one of the worst forms of differential rating in favour of the great cities and against the country.

As to the meaning of the term "differential rating" when applied to railway working, *I define it as meaning any system which gives to the officers or controllers of railways the power to alter or vary fares, rales, or charges at their pleasure, or to suit their idea of the requirements of trade*.

At the Parliamentary inquiry in 1886 the officers of the Railway Department asserted that my system was a differential rating system. I therefore submitted the following question to the author of "State Purchase of Railways," the late Mr. Charles Waring, of London.

Mr. Waring, I may state, was formerly a member of the British Parliament, and a very prominent man. His opinion is certainly worth more than that of Messrs. Maxwell and Hannay.

This is what I said to Mr. Waring, "If you can spare the time, I shall esteem it a favour if you will answer me this question:

"As in the system I propose all the fares and rates will be definitely fixed, for at any rate a number of years, and the officers will have no power to alter or vary them—Can my system be called a differential rating system?"

This is his reply:—"In answer to the specific question you put to me, I hardly see how any system in which rates and fares are established on a fixed basis can be properly called a differential rating system. *That is not what we mean when we speak of a differential system in England, and describes, indeed, the exact reverse."*

My contention is that all fares, rates, and charges ought to be brought down to the lowest possible point, and then arranged on a fixed basis for a period of years, and only altered then on a regularly defined system. There is no difficulty whatever in doing this; the only obstacle in the way is the self-interested prejudices of the railway officials.

Speaking of the differential rating system Mr. J. F. Hudson, of America, says:—"It cuts down the profits of one competitor, and enhances those of another; and thus acts as a perpetual disturbing force in trade, against which sagacity, energy, and integrity contend in vain."

This is absolutely true, and it is also true that we have legislated with the special object of working this system to the fullest extent. To such an extent has this system been worked in America, that the evidence with reference to it taken by the Legislature of New York alone fills nearly 5000 pages.

The author quoted above says: "Discrimination (the American, and better word for differential) between different localities or cities involves the daily exercise by railway officials who adjust freight tariffs of a power greater than that possessed by any civilised Government—except perhaps that of Russia."

What would this writer say to our Act? He would not need to except Russia, there is nothing there to equal it for absolute tyranny.

To give a very limited account of the evil effects of differential rating will occupy the full space of another paper.

decorative feature

A Few Examples.

As our Railway Commissioners have now full power to impose "differential rates" in any and every form,

and the public has no remedy whatever, either at law or by an appeal to Parliament, it may be as well if I give a few instances of what has been done under the iniquitous system which has now been legalised in New Zealand.

In order to work this vile "no system" effectively, the first thing to be done is to multiply and confuse the rates as much as possible, so that no one can understand them, and thus compel the public, as Mr. Maxwell says, to "apply at the station for their rate." Anyone who will take the trouble to study the Gazette will see how rapidly our Commissioners are bringing about this state of things.

On the Midland Railway of England there are over 30,000,000 rates. Who could pick the legal one from such a mass?

In my last paper I quoted Mr. Maxwell's statement that differential rating was not carried far enough in New Zealand, and also that "maximum rates might be fixed by law, and a suitable Court of Appeal constituted to prevent abuse of the powers given."

One hardly knows what to think of this suggestion of Mr. Maxwell's. Is he simply trying to throw dust in the eyes of the public, or is he so supremely in the dark as to what is going on in the railway world, as to believe that such a course could be any protection to the public.

Such a tribunal has been in existence in Great Britain since 1873; and here are a few examples of what the Railway Com panies do every day in open defiance of it; indeed, with such thorough contempt do the Companies treat the law and the Railway Commissioners (whose business in Great Britain is to protect, not oppress, the public) that they do not hesitate to publish these excess charges in their rate books.

LONDON AND NORTH-WESTERN LINE.

Fifty-five miles: Maximum legal rate for minerals, 5s 5½d per ton; rate charged 11s 8d, or 6s 2½d in excess.

Fifty-five miles:-—Manchester goods, &c.: legal rate, 10s 10d; rate charged, 22s 6d; excess charge, 11s 8d per ton.

Fourteen miles:—Boots and shoes, &c.: Legal rate, 24s 3d; rate charged, 55s; excess charge, 30s 9d, for transporting a ton only 14 miles.

CORK AND BANDON LINE.

Cork to Bandon, 20 miles. The following charges are made over and above the legal maximum rates per ton:—

Drain pipes, 2s 6d; hides, 3s 9d; wool, 2s 11d.

Cork to Drimoleague, 45 miles: 5th class, overcharge, 11s 11d per ton; 6th class, 26s 11d.

BIRKENHEAD RAILWAY.

Coal Rates: Legal rate per ton for 6 miles, 3d; rate charged, 9d. 10 miles: legal rate, 7d; rate charged, 1s 1¼d. 17 miles: Legal, 1s 1¾d; charged, 1s 8¾d.

As examples of preferential rating, I quote the following, given on the Caledonian Railway in favour of the Aberdeen Commercial Company

Ordinary rate: 3 miles, 1s 3d; rate to Commercial Company, 5d. 22 miles: Ordinary rate, 4s 6d: to Commercial Company, 3s 4d. 42 miles: Ordinary rate, 8s 4d; to Commercial Company, 5s 4d.

I speak within bounds when I say that thousands of similar instances to the above could be produced. I have selected these few at random; they are by no means the worst that can be found. Professor Hunter gave evidence before the British Royal Commission of 1881, that the companies charged from *three to ten times* their legal rates.

Mr. Findlay gave evidence before this Commission to this effect, "I believe that to certain stations north of Sudbury or Harrow we charge a higher rate than we do to London, *simply because it is within our power."*

Mr. Waring says that "The unalterable rule of the railway directors is to *get all they can,"* and shows that the law is futile to protect the public.

However, we need not talk of law in New Zealand. There is no law for the public in this country. The law has been most carefully drawn to protect the Commissioners from the effects of wrong doing in their efforts to "get revenue "from the public, but as to the people, they must take their chance as best they may.

Seeing that our railways are now worked as if they belonged to a company, and on "commercial principles," if such a term can be applied to a thing that is utterly and absolutely without principle, it may be as well to pursue the subject a little further, and show some of the things that have been done in America under the system we have legalised here. I present only a few of more notorious cases.

In America there exists, or recently did exist, a set of men called "eveners." A number of railway

companies agree to "pool" their traffic and profits, each line taking a certain agreed-upon per centage. The "eveners" enter into a contract to "even up" these percentages, in consideration of certain rebates allowed to them, but refused to everybody else.

A party of these men in Chicago entered into an engagement with the various trunk lines running East from that city, by which they were to receive from the companies forming the trunk line "pool" a rebate of £3 on every car load of live stock that passed over their lines. This rebate was paid them not only on live stock shipped by themselves, but also on all the live stock sent over these hills by other people. The effect was that they secured an advantage of £6 per truck load over those competing with them, Whom they soon brought to ruin, and thus secured a virtual monopoly of the trade.

As showing the power this differential rating system gives the controllers of railways over any particular industry these gentlemen may chose to speculate in, I direct attention to what was done with the coal trade of Pennsylvania.

The owners of certain railways in that State were also owners of certain coalmines and they wished to acquire a monopoly of the coal trade, and also to keep down the wages of the men employed in the mines. The miners had struck for higher pay, and the private mine owners yielded to their demand. The railway companies, however, determined not only to keep down the price of labour but also to ruin these owners, and acquire their property for themselves.

They therefore raised the freight rates to the private owners to three times the former rate, the result being that they soon secured 105,000 out of a total of 270,000 acres of coal land. Having thus acquired the monopoly they proceed led to limit the output so as to keep up the price. This they did by suspending operations for a quarter of the working time in each year.

I commend this fact to the careful consideration of what are called the working classes, and would impress upon them the fact that our Railway Commissioners have it quite within their power to do these things, here, and that there is no law or power of any kind that can punish them for no doing.

There is no class of trade or commerce that the abominable system it is intended to fully develop among us cannot reach and destroy, or turn to the private advantage of the controllers of the railways, or those they may wish to favour.

The New York Central Railway Company entered into a contract with a firm of millers by which they undertook to carry all their freight for *forty-seven per cent*, of the current rate, "provided, however, and this agreement is made upon the express understanding and consideration that the said millers shall regard and treat this agreement as confidential, and will use all reasonable precautions to keep the same secret."

By means like these dozens of mill-owners were ruined and their property acquired by the favoured few who had "gotten in on the ground floor" with the railway magnates. To one unfortunate fellow who complained that the freight charged him absorbed nearly the whole of his profit, they said "Send us a statement showing the details of your business, in order that we may see that your profits are not more than you represent them to be." Knowing that he was entirely in their power, and hoping to make friends, he sent them the statement They immediately raised his freight rates, so as to absorb the whole of his profits, and very speedily had him in the Bankruptcy Court and his property in their possession.

The most notorious of all these cases is that of the Standard Oil Company. It would be impossible in the space of this paper to give a description of the transactions of this company with the Railway Companies. Briefly, the railway people entered into a secret contract with the Standard Company, by which they undertook to give them such special freight rates as should effectually secure them against all competition in the petroleum oil trade. The result has been that the Standard Company soon ruined all their competitors, and now enjoy a complete monopoly of the oil trade, a monopoly the effects of which have been felt all the world over.

It has been proved in evidence that the differential rates given in favour of this company amounted during ten years to the enormous sum of *one hundred million dollars* (£20,000,000). This was almost as disastrous to the shareholders in the railway companies as it was to the competitors of the Standard Company. This case is a good illustration of what the controllers of railways have the power to do.

I commend the examples given above to the earnest, careful consideration of ray fellow-colonists, and I direct their special attention to the fact that we have given to three absolutely irresponsible men—two of whom are known to be wedded to this system, such powers to enforce it as have never before been held by any company or other set of men in any part of the world.

If we are simple enough to imagine that sooner or later these powers will not be taken advantage of, we deserve the fate that will surely come upon us.

I know that our Commissioners say that these practices "are not in force on the New Zealand railways and never have been." Perhaps so, but in their mad attempt to "get revenue" out of their "abominable no-system" they will soon be driven to their wits' ends, and what then? Ah, what then? I say they will resort to more differential rating.

The question is, is there any necessity for using this system? I assert emphatically, that if the intention is to use railways honestly, in the interests of the whole people, that there is none whatever.

The only legitimate excuse that has ever been urged in favour of differential rating is the statement that it brings the distant producer nearer to his market. The introduction of a stage system would effectually do away with this excuse. Then all fares, rates, and charges ought to be taken down to the lowest possible point and made fixed and definite for a number of years.

If this were done, and there is no legitimate reason why it should not be, the expansion of trade and commerce would be something enormous. People would have confidence in establishing industries in suitable localities; now they never know when the railways may be used to ruin them, therefore manufacturing industries are only started in the immediate neighbourhood of great towns.

Under such a system our railways would act as fosterers of our national industries. As it is, the Railway Commissioners use our railways, and exert themselves to the utmost to destroy our coastal and river steam companies, our tramcar, coach, omnibus, dray, and lorry proprietors.

What an act of folly! How can we expect to prosper? If our railway transport charges were made fixed, and at the lowest possible point, these other transport agencies, instead of competing with the railways, would naturally adjust themselves to their proper positions, and act as feeders to them. They would, as it were, work at right angles to, instead of, as now, on parallel lines with our railways.

Auckland,

4th December, 1889.

decorative feature
Wilsons and Horton, Printers, Queen and Wyndham Streets.

The Railway Problem in New Zealand.

by Samuel Vaile.

No. 3.

THE excuse for passing the Government Railways Act of 1887 was the pretence that it would remove our railways from political influence. A very ordinary amount of reflection will show that it is utterly impossible to remove any railways from this influence.

The real question at issue in this matter is this: Shall the Government of the I country influence and control the railways, I or shall the railways influence and control the Government?

For many years the railways of America controlled the Senate, and did what they liked in railway legislation. There was political influence here of the worst possible kind, although every mile of railway was owned by private people.

In Great Britain, the railway interest exercises a most powerful political influence. Fifty-one railway directors are members of the House of Lords, and eighty-four are members of the House of Commons. It has already been found difficult to deal with this interest in the British Parliament.

If the ill-considered Act of 1887 is not speedily repealed, our railways will soon govern this country.

All that has been done is to remove them from the direct control of Parliament and place them under the control of three absolutely irresponsible men *and the Ministry of the day*. If the Ministry has no power over the railways, why do the Commissioners require to consult the Minister so frequently?

I do not believe in the sincerity of the wirepullers who promoted the Act of 1887. The worst form of political influence in connection with our railways is the log-rolling as regards lines of railway to be constructed. This matter (construction of railways) is left just where it was, except that under certain conditions corrupt influences could more easily be brought to bear.

Construction being still left as it was before, there are but two other ways in which the members of Parliament might exercise undue influence. First, in soliciting appointments for friends. I understand this to be the chief complaint; and second by securing concessions in rates and the granting of free passes.

The ready reply to charges of this kind is this: If the officers of the Department are so weak, and so corrupt, as to be amenable to influences of this sort, the evil has not been made less by their being placed in a position where no one can call their actions in question, and where they cannot be called upon, even by Parliament, to account for anything they may choose to do.

If it was desired to do away with the evils said to exist, there were far more effectual means of dealing with

them.

When our Act was being framed, those who framed it had the Victorian Act before them, and Parliament and the country were deceived into the belief that this and our Act were identical. They have little or nothing in common.

In the Victorian Act there is a most admirable provision for the selection of employe's; neither the Government nor the Commissioners appoint them. The Government appoints examiners for the various grades of railway work. When the Commissioners want men they are obliged to advertise for them. All who choose may apply to be examined, and those who pass *ballot among themselves* for the vacant posts.

Thus it will be seen that not only is it impossible for the Victorian railways to pass into the hands of a clique, but that fresh blood is always being introduced.

By passing an Act embodying this plan of appointment, our railways in this respect would be in reality, and not in name only, removed from political influence.

As to rates and free passes. The way to deal with that difficulty is to take all rates, fares, and charges down to the lowest possible point, and make them fixed for a number of years, and when alterations are made let them be made on a properly-defined system that shall be applicable to the whole colony. Free passes ought to be absolutely abolished.

By adopting these measures our working railways might remain under the direct control of the Government, and yet be completely removed from such political influences as are complained of.

It is in the matter of construction that the worst form of political influence has always been exercised.

Price, 4d.

All profits go to the Funds of the Railway Reform League.

It is well worth considering whether it would not be a wise thing to form a commission, say of the Judges of the Supreme Court, and four commercial men—two from each Island—and leave it to decide what lines in future shall be constructed.

If a system so open to corrupting influences as our system is to remain in force, corruption will sooner or later creep in; it is only a question of time; because we may commence with right men is no reason why we should continue with them, and we must never forget that the Commissioners have the right to delegate their powers. They also have the right to grant as many free passes as they choose.

What influence are our railways to exercise on the elections of the future? They may, and probably will, exercise a very serious influence. Of course it is dreadful to hint that this influence might be corrupt; but I have something to tell.

I contested Auckland North at the last general election. My committee went through the electoral roll, and struck out all that they knew to be "dead-heads," a very large number. Then they marked off all that they knew would vote for certain either on one side or the other. Finally, they sent through the post some 1500 circulars to those who were regarded as uncertain.

As I write I have before me 433 of these circulars returned through the Dead Letter Office, and marked "not found," although all these names were on the roll which had only recently been made up.

During the last eight months of 1889 my firm has sent through the Post Office nearly 13,000 letters and circulars. These were sent, not only all over Auckland city and suburbs, but all over the colony, and of these only 344 have been returned.

Thus we see that during an election 433 could not be found out of 1500 people whose addresses were on a recently-formed roll, and in one quarter of the city, while of 13,000 people, but not at election times—all are found with the exception of 344.

Is it possible that the Post Office was used for a political purpose; and if so, who used it, and what is to prevent our railways being used in a similar manner?

By the passing of the Act of 1887, the entire power and patronage of our railway system, with its 4326 appointments, has been placed in the hands of some six or eight families. A nice close borough has been formed here, and a plentiful crop of future trouble will arise. It is surely easy to see that a political influence is rapidly being created of a far worse character than anything we formerly had to contend with. Imagine what is meant by giving three absolutely irresponsible men the power to make 4326 appointments, and remember that in a few years, in the ordinary course of things, the number of these appointments must be enormously increased. Is there no political influence here? Will it not be far worse than anything we have hitherto experienced.

It is difficult to see what this matter may lead to. All these thousands of men hold their posts absolutely by the goodwill of the Commissioners. They therefore dare not offend them. Whatever may happen, they have no appeal, no remedy of any kind. If such powers are not sooner or later abused, then we shall have developed a new phase in human nature.

It must be remembered that there are no other railways in the colony on which discharged men can find employment.

In whatever interest the Government Railways Act of 1887 was framed it is quite certain that that interest was not the public interest, for there is not one syllable in it for the protection of public rights and interests. The whole thing looks to me like a bold, daring attempt on the part of an interested few to seize the whole power and patronage that a supreme and unbridled control of the railways of the colony would give them. If this was their object, for a time they have succeeded.

A heavy responsibility rests on the Hon. Edwin Mitchelson for forcing this important measure through a wearied House at the fag-end of a session. Very few of the members gave it a cordial support, most of them spoke very doubtfully as to the prospect of its leading to any good results, and many opposed it strongly. It was simply forced through the House by the Government majority.

A great deal more could be said, but I think it is apparent to everybody that the present system of railway administration is about as bad as bad can be. Its days are surely numbered.

What We Want.

We want a truly national transit system, one that shall meet the wants and requirements of *the whole people*. Our system does not provide for the wants of one-fourth of the community, hence its utter failure, financially and socially.

No man having a family to provide for, and an income of less than £300 a-year, can afford to use our railways, except to a very limited extent. This cuts out the whole artizan and labouring classes, shopmen, clerks, small shopkeepers, small farmers, and numerous others. What I say is this: that this vast mass can only use our railways very occasionally, and to a very limited extent, while a very large portion of it, would if it could, make very great use of them.

If my statement is correct, and I will show further on that it is, it follows that what railway revenue—more especially passenger revenue—is now earned, is obtained from a very small proportion of the people.

We want and must have, a system that will develope the trade that lies hidden among the great bulk of the people. This I say is a very easy matter, and our railway administrators must have been simple indeed not to have seen how to do it long ago.

We want, and badly want, cheap transit, but we want far more, an *equalization of transit charges*, on a fair and just basis.

We want a system that will open up, not close, our great producing districts, a system that will enable the distant farmer to bring or send his produce to market without having all his profit eaten up in transit charges.

We want a system that will enable the city artizan, clerk, or labourer to make use of his special knowledge or strength in a town or district 100 or 300 miles away from the city he may now happen to find himself jammed up in.

We want a system of *fixed charges*. A system that will enable our producers and manufacturers to calculate accurately the cost of their various productions, and that will enable them to erect their factories in those situations that nature has pointed out as most suitable for their requirements.

We want a system that shall attract population to our shores, and promote settlement on our land; a system that shall make the barren lands of this country able to contribute their fair share of taxation, and so relieve the pressure of the heavy burden that now rests on a few only.

We want a simple system that can be understood by everybody; a system under which it shall no longer be necessary to "inquire at the station for your rate," but under which everyone will know what he has to pay, and will have to pay, for the same service for several years to come.

We want a system that shall reverse the present order of things, and make our railways act as *distributors of population and wealth* instead of concentrators of wealth into the hands of a few families, and population in a few great cities.

In short we want a system that shall practically annihilate distance as regards the cost of transit of passengers and goods; a system that will meet the requirements of every class, the poorest as well as the richest; a system that shall be thoroughly clear of the trickery, fraud, and mystery of the present one; a system that will go on ever widening instead of contracting its sphere of beneficial action: a system that, stead of showing a yearly increasing loss, shall show a yearly increasing gain, both directly and indirectly; and one that shall add to our happiness and prosperity; instead of to our misery and poverty as the present system does.

The question is, Can we have all this, and will not the cost be too great? I emphatically assert that we can have it all, not only without any increased cost, but with immense relief to the taxpayer.

The great financiers of the old country have many times increased revenue by reducing taxation. We could do the same if we would. Here the only idea seems to be that to increase revenue you must increase taxation.

It is quite true that in this country no great increase of revenue could arise from reductions in the taxation on the necessities of life. The population is too small and too well off for that to have any effect. As regards food and clothing, nearly everybody is fairly well supplied. In the matter of travelling it is very different. There

is a large field for development here, and I unhesitatingly assert that by largely reducing our charges we can greatly increase our revenue.

To do this, however, means a revolution. We want no namby-pamby work; no man at the head of affairs who must wait till the experiment has been tried somewhere j else. No "concessions;" no mere "modifications in the direction of lowering rates; on produce and merchandise for long distances," will do. Nothing short of the entire abolition of the present system, and the substitution of an entirely new one, will effect our purpose. This is now being done in other countries, and the sooner it is done here the better it will be for all of us.

Auckland, February 12, 1890.

NOTE.—Nos. 1 and 2 of this series were published in the HERALD of December 24, 1889, and February 5, 1890, respectively.

MEMO. The papers on "Differential Rating," published previously should have formal No. 4 of this. They were published out of the regular order to supply the information asked for by the Railway Commissioners as to what was the meaning of the term "differential rating."

No. 5.

The Difference; Between Mileage and Stage Rating.

IN order to fully understand the railway problem, it is very necessary to have a clear idea of the essential difference between reckoning fares and rates on the present and on the proposed system: the vast importance of the difference between these systems is very imperfectly understood. This is not to be wondered at, as, indeed, the issue has only recently been raised. So far as I am aware, the proposal to reckon fares and rates by stages was first made in this city in 1882, and subsequently in 1886 in London by the late Mr. Charles Waring.

Up to quite a recent period the railway men have asserted that their *basis of rating* was actual "cost of service" per mile, and they contend that charges can only be fairly made *at per mile*, modified by differential rates, the controllers of railways to have the right to make these differential rates as they please.

Other writers and myself have so mercilessly assailed and exposed this fraudulent system, that we now hear nothing of the pretence of "cost of service," but the railway men openly assert that they have the right to regulate their charges by "*what the traffic will bear*." In plain English, to take all they can possibly get from the users of railways, the only limit to their impositions being the fear of losing their trade.

I speak of this system as "fraudulent" advisedly, and assert that it was invented for the sole purpose of defrauding the public. That I am justified in speaking thus strongly is proved by the recent severe legislation of England and America against it. In those countries it is now prohibited under very severe penalties.

In March, 1889, the American Senate passed an amendment to their Inter-State Commerce Bill, imposing penalties of any sum up to £1000, *and two years' imprisonment* for each and every differential rate given. Must not differential rating be worse than fraudulent to draw such an Act from the Americans, of all people in the world?

This then is the system in force on the New Zealand railways, and the real object of the Government Railways Act of 1887 was to give special facilities for working it to the fullest possible extent. Differential rates are now being imposed as fast as possible on some of our branch railways, that is to say, against the poorest and most un-developed districts, with the inevitable result that these districts must become poorer and poorer every year. Could any policy be more insane.

I am well aware that this was not the intention of Parliament, but I emphatically say, that it was the intention of those who framed and procured the passing of this most disastrous piece of legislation.

The great defect of any mileage system is that it must of necessity, and actually does, force trade, commerce, and population back on the great cities, and depopulates the country districts.

What I mean is this: Under the present system, almost invariably, the *rate per mile* for passenger fares in city and suburban districts is greatly less than the rate per; mile in country districts. For 15 miles round Melbourne the rate is only half the country rate. This is also the case in most city and suburban districts in England, America, and, indeed, almost every where.

Now, this system of rating appears to me to be extremely vicious, it is unjust to a degree, its social effects are most disastrous, and it is financially unsound.

It is unjust, because it places country residents and producers under such fearful disadvantages. Its social effects are disastrous, because it is, undoubtedly, the chief cause of the congestion of population in the great cities of the world, and this, again, is the chief producer of disease, poverty, and crime. It is financially unsound, because it preys on its own vitals, by destroying the country districts and towns, and thus, ultimately, crippling the trade of the great cities and seaports.

That this must be the effect of mileage rating the railway officials themselves have given the most convincing proof.

In Parliamentary paper I.-9, on page 89, will be found a table prepared by Mr. A. C. Fife, the accountant of the Railway Department, and this is what it tells us:—The total number of passengers that travelled on the Auckland lines during 1885-86, was 424,914, and the gross amount they paid was £39,909.

Of this number 292,949 travelled distances of 10 miles and under, and paid £9596. They represented the city population, and formed 68.8 per cent, of the whole; they, however, paid only 24 per cent, of the revenue.

Travellers of over 10 miles and not exceeding 50 miles numbered 107,202, and they paid £15,647. They represented the most favoured of the farmer class as regards railway rating, and formed 25.2 percent, of the whole, but they paid 39.2 per cent, of the revenue.

The unfortunates who had to travel over 50 miles numbered only 24,762, and they had to pay £14,666. Thus only 5.8 per cent, of the travellers paid 36.7 per cent, of the whole revenue.

It must be remembered that all goods rates are levied on the same system. Is it any wonder that people crowd down upon the cities? Is it possible for them to do anything else? Can we ever settle the country and develop its resources under such a system?

I commend these facts to the consideration of my country friends. A great effort has been made lately to convince them that they will secure an advantage over the cities if they obtain cheap mileage rates for manures, produce, and stock. Can any such reductions redress the wrong pointed out?

The railways of the colony belong to the whole people. Why then should 292,949 colonists be able to reach their homes and transact their business for a payment of £9596, while another 24,762, or say one-twelfth of the number had to pay £14,666. I am not arguing for the universal fare, but I say that a discrepancy like this is not only a grievous injustice, but as a financial arrangement is as silly and unsound as it can possibly be. As a colony we shall have no real progress until this is altered.

As to a stage system, it must on no account be a system of equal stages, as such a system would, although in a less degree, embrace all the evils of milage rating.

I fully expect to find our Commissioners, before long endeavouring to introduce a system of equal stages, and I warn my fellow-colonists to resist to the utmost any such attempt.

The system proposed for New Zealand is one of unequal stages', and the *basis of rating is average cost and population*. This, I hold, to be the only true basis.

The following letter to the Chairman of the Railways Rates and Charges Committee of 1886, briefly describes this system:—

Mr. S. Vaile to the Chairman, Railway Management Committee.

Wellington,

9th June, 1886.

SIR,—In compliance with your request, I have the honour to submit in writing a description of my proposals for altering the system of levying the fares and rates payable on the New Zealand railways.

- I propose to abolish computing fares and rates by the mile.
- To abolish all differential rating.
- In place of the present system, I propose to reckon all fares and rates by stages in the following manner:—

  Starting from any capital town (for this purpose I treat any town having a population of not less than 6000 as a capital town), I propose to place on every line running out of that town four ticket stations or stages, as near as may be, seven miles apart, and then, should there be a stretch of country of fifty or more miles not having a town of 2000 inhabitants, to make the stages fifty miles each. Outside each town of 2000 inhabitants I propose to place one seven-mile stage on each line, and outside towns of 4000 two seven-mile stages; towns of 6000, as before stated, to be treated as capital towns.
- All fares and rates to be of one uniform charge, from stage to stage, for the whole or any portion of the distance.
- Passenger fares to be charged 6d first and 4d second class for the whole or any portion of a stage.
- All parcels and goods rates to be reckoned in the same manner—that is. one uniform charge for the whole or any portion of a stage; but as there are no statistics published on which I could found a reliable estimate, I am unable to fix any scale of rates: those I have previously quoted being, as I have many times said, merely suggestions.

- From time to time, as the revenue shall stand it, the fares and rates from stage to stage to be reduced to the lowest possible limit.
- When the lines become filled up with seven-mile stages, and the revenue will admit of it, then I propose that the outside seven-mile stage from each capital town shall be removed, then the next stage, and so on, until the stages are only between towns of 6000 or more inhabitants. By persistently following this plan we may ultimately see our way, as regards passengers, at any rate, to making one fare only for any distance within the colony.

  Memorandum.—I do not propose to fix the stages arbitrarily at the distances mentioned, but at the best collecting and distributing points nearest to them.
- That the Government should be relieved of their present responsibility as carriers.
- That an insurance department should be established in connection with the Railway Department, where, by payment of a small fee, either life, limb, or goods could be insured.
- That, in place of the present tickets, railway-stamps should be issued and sold by every licensed stamp-vendor.
- That stamps of a different colour or description should be issued which would entitle the holder to pass from a station immediately preceding a ticket-station to the next station beyond it, and thus save him from paying a double fare for a very short journey. The same will apply to goods traffic.

From the adoption of the proposed plan I should expect the following results to take place:—

- The. rapid settlement of the country;
- The creation of numerous inland towns;
- The doing away with the great evil of massing large numbers of people in a few centres;
- A more even distribution of population and wealth;
- A more equitable adjustment of the burden of taxation;
- A very large increase in the railway revenue.—I am, Sir, very faithfully yours.

SAMUEL VAILE.
E. Mitchelson, Esq., M.H.R.,
Chairman Railway Rates and Charges Committee.

No. 6.

The Difference Between Mileage and Stage Rating, Continued.

UNDER the stage system, described in paper No. 5, which is based on population, all the evils mentioned would be done away with. This will be best understood by the following examples:—

At present fares and rates are charged by *the mile*, and thus Cambridge, being 100 miles from Auckland, has to pay for 100 removes or charges. Under the new system Cambridge would be 6 removes away, and would pay only 6 times. The 100-mile man would therefore, as regards *relative cost of transit*, be in as good a position as the 6-mile man is now. Christchurch instead of being 100 would be only 6 removes from Timaru, and only 22 instead of 230 from Dunedin. The whole distance from Waikari to the Bluff would be but 37 removes apart, instead of 436 as now, and every other line and district would be placed in an equally advantageous position.

The present average goods rate being 3¼d per ton per mile, the man who is 100 miles from the market has to pay 100 times 3¼d—£1 7s 1d, while the man 10 miles out only pays 10 times 3¼d—2s 9d, thus the 100-mile man must inevitably fail in competition. *It is this that has taken all the value out of country lands, and rendered settlement in the interior impossible*.

Suppose a man having a farm 150 miles from Auckland, Wellington, Christchurch, Dunedin, or Invercargill; this is how he is now situated. Say he has 50 tons of produce ready for transport to either of these markets.

When his produce is at the railway shed, there would be in it a certain gross profit, out of which he would have to pay his transit charges, commission on sales, etc., the balance, if any, being his net profit.

Say 10 tons bear a profit of 10s per ton, 30 tons 15s per ton, and 10 tons 20s per not.

Mr. Maxwell states that the average distance goods are carried in New Zealand is only 25 miles, and that the average price paid is 6s 10d per ton, consequently the average charge is 3¼d per ton per mile.

I may remark in passing that the average charge in the State of New York is eight-tenths of a cent.; in the State of Ohio, nine-tenths of a cent.; and the average for the whole of America is in cents 1.057, as near as can be one halfpenny (½d) per ton per mile.

Suppose the New Zealand farmers' rate to average only 2d per ton per mile, instead of 3¼d, his profit at 10s

per ton would all be exhausted in railway charges when his goods had travelled 60 miles, the 15s profit at 90 miles, and the 20s profit at 120 miles. On arrival at his market he would find himself in the following position:—

Thus he would not only lose the whole of his profit of £37 10s, but in addition he would have to pay £25 *for railway charges alone*, and the heavier his crops were the greater would be his misfortune.

This is no exaggerated picture. It is what occurs every day, and shows how in possible it is under such a system to settle the interior of the country. What possible value can there be in land so situated, and how can it bear its fair share of taxation?

From the example given above it will be seen that a system of equal stages would have the same defects as the mileage system, though for a time in a less degree. It will also be seen that no mere reduction in rates, no matter how great, can remedy the evil, for if the rate were taken down to ¼d per ton per mile, the man at 150 miles would have to pay 3s 1½d, while the man at 10 miles would only pay 2½d, and prices soon adjust themselves.

It is to remedy this defect that I propose a system of unequal stages placed in the manner I have described.

I propose to readjust these stages after every census. Thus, should the population of a small town have increased to 2000 souls, or a 2000-town to 4000, an additional stage would be placed on each line out of it.

Should no alteration be made in *the stage rate* this would, of course, increase the through rate; but it is manifest that if the increase or alteration in the location of the population admitted of an increase of 33 per cent, in the number of stages, *the stage rate* could be reduced by 25 percent., and thus the through rate would remain the same, while the burden of transit charges would be more evenly distributed.

It is an open question whether it would be advisable to increase the number of stages and reduce the stage rate, or whether it would not be better instead to remove an equal number of stages from the weaker districts, and so give them a chance of acquiring strength. My own opinion is that this would be the best plan for some time to come, if not always, for it will be seen that by following it up persistently we should ultimately arrive at the nearest approach to the *universal fare* that the finances of the colony would admit of.

As regards the position of the stages in relation to population, when my system was first placed before the public the universal opinion was that railways ought to be managed on "commercial principles." I therefore knew that it was useless to propose any system that would not show good financial results, so I located my stages accordingly, as I will explain when we come to consider the financial aspect of the question,

Now, a better feeling is rapidly gaining ground, and most thinking men acknowledge that the first duty of a railway is not to "get revenue." Had the feeling in 1882 been even as it is now, instead of proposing four stages of seven miles on each side of a great centre of population, I should have adjusted them thus:—First stage, seven miles; second stage, 10 miles; third stage, 15 miles; fourth stage, 25 miles; making the first four stages cover from 57 to 60 miles instead of from 28 to 30 miles. I believe that this would be a more fair and just distribution, and that it would ultimately give the best results, but in the meantime it is very doubtful if financial success could be assured; with the seven mile stages this is absolutely certain.

I have. said that the mileage system of railway rating is chiefly responsible for the congestion of population in the great cities of the world. This is necessarily so, for the example I have given above as to how the farmer is treated applies with equal if not greater force to the manufacturer. Having large quantities of goods to transport, he must crowd as closely on the city as he can, because every mile he is away from his market he has an additional toll to pay on all his products. His workpeople, too, must crowd round him; for every mile they move away adds to their daily expenditure.

Workpeople must be near their work; they cannot, under mileage rating, get away if they would. Under this miserable system both factories and population are forced into unnatural positions, and into a few great centres, to the detriment of trade generally, and the physical, mental, and moral degradation of vast multitudes of people, and to the ultimate loss of profit in railway working.

Under a system of unequal stages all this would be altered, for the rating instead of being as now, all in favour of the great centres, would *for the time being* be in favour of the weaker districts, and thus enable land in those districts to be utilised, and population to settle there. While the cost of transport to and from the great centres would be enormously reduced.

Take the town of Hamilton in the Waikato, as an example of numerous other towns in the colony. All round this town there are large areas of land very thinly populated, and very poorly utilised. It is a junction town. The north and south trunk line, the Cambridge branch, the Rotorua, and the Thames-Te Aroha lines all converge upon it, but notwithstanding this fact, its population has for years past steadily decreased and is now considerably less than 1000 souls. There must be something wrong.

Naturally, we should say, these railways ought to be a great advantage to this town, as a matter of fact, they are its curse; but under the system proposed they would help it greatly. It would command three long and two shorter stages. The inevitable result must be that certain manufacturers and traders would establish themselves

there, because they would be able to send their goods over a distance of, say, 50 miles in three different directions at the same uniform price. They would not have to consider whether they could afford to send 20 or 30 miles, but would know that they could command the whole 150 miles just as easily as they could command ten miles.

The effect of such a system must be to create fresh centres of trade and commerce, and to develop an inland or internal trade, which is what we want, and the railways themselves more especially want. As it is we have really no internal trade. The colony is now fifty years old, and yet it does not possess a single inland town worthy of the name, and such towns as we have are fast losing their population. During the ten weeks' discussion of this question by the Parliamentary Committee of 1886 the railway officials never once used the words "internal trade," the export trade was eternally on their lips. It appears to me that their great effort then was, and is now, to export everything, the value of the land and its inhabitants included. Where would America and its railroads be without their internal trade! It does not require any deep thought to see where we shall be soon if more attention is not paid to this important matter.

It must always be borne in mind that under the proposed system the aid given to the poorer districts is only temporary, and that as their population increases, so will their share of the burden of transit charges increase, and other districts be proportionately relieved, until ultimately the charges will be the same everywhere.

It is my belief that *the great aim of railway administration ought to be the distribution of population.*

Regard it from what point of view we may, this is the sound theory. Distribution of population must mean distribution of wealth, for it is population that gives value to land, and if the value of land was more equally distributed, a much greater number of people must possess a fairer share of wealth.

This question of the more equal distribution of wealth is the greatest of all social problems. What we want is a less number of men possessed of millions, and a far greater number possessed of from £5000 to £50,000, while everybody ought to be able to provide themselves with the necessaries of life.

Such a state of things, I contend, can only be brought about by a wise administration of the railways of the world.

Auckland,

February 28, 1890.

No. 7.

Financial Results

I shall now proceed to argue out the financial aspect of the question, and to prove that the proposed stage system; will give greatly better financial results, both *directly and indirectly*, than the mile-age system now in use.

Having proved my position as regards finance, I shall point out the effect the new system will have on some of the great; social questions of the day, and also draw j attention to the difference in this respect; between the proposed plan and the Hungarian "Zone" system. I shall also show how I would apply the Now Zealand system to the British railways.

Before plunging into this part of the subject, it may be well to pause and ask ourselves the question, Ought the direct payment of interest to be the first business of a railway? I have always held, and after seven years of the closest study, hold still more firmly, the opinion that the direct payment of interest ought to be a very secondary consideration.

Is there any government of any English-speaking—I think I might say, any civilised people under the sun—that would dare to propose to sell or lease the common roads of its country, to any man or set of men, for the purpose of making money out of them? Why then should they do this by the rail roads?

The only difference I can recognise between a railroad and a common road is this, on a common road the user provides and works his own rolling stock, while on a railway that portion of the service is necessarily done for him, and, consequently, in all fairness, must be charged for. My contention then is, that the user of the railroad ought not to be charged for interest on the cost of construction of the permanent way, but that he ought to be charged for the use of the rolling stock and its manipulation, with a fair profit added. That is to say, that the charge made should be the same in kind as that made by an ordinary carrier on the common roads. If this were not done it would not be fair to those who are obliged to content themselves with the use of the common

roads.

As to the financial outcome. The fair business profit on a monopoly of the inland carrying trade, if it were intelligently carried on, would be so enormous that it would far more than pay working expenses and interest on the £15,000,000 we have invested.

Our Railway Commissioners have a valuable monopoly in hand, but they do not know how to make use of it. I repeat my assertion that the sole cause of our railways not paying is clue to the fact that those who have control of them have neither the breadth of mind nor the business ability to enable them to frame a policy of administration suited to the wants and requirements of the *whole* people. Our present no-system does not provide for more than one-fourth of them.

In devising a new system of railway administration, the great object I have kept steadily in view is *distribution* as opposed to *centralisation*, and to produce a system that would provide for the wants and secure the business of the poorest as well as the richest classes. It is only in such a scheme that we can hope for financial success.

I take up the ground that it is absolutely impossible to secure *permanent* financial success in railway working by any system of mileage rating, no matter how skilfully it may be manipulated. We have now had fifty years experience of this system, modified by differential rates, twisted, distorted, contorted into every conceivable shape, and not only has it failed utterly to meet the world's requirements, but the Board of Trade returns conclusively prove that it is a financial failure also.

The only reason why it has existed so long is because the conditions have been different from what they ever can be again. In Great Britain, for instance, the railways, when they first came into existence, had to deal with a country thickly populated, vastly wealthy, and with a trade having an enormous margin of profit. It took a long time to make such a country feel the evils of its new transit system. In America the railways had to deal with a country having a large and wealthy population located on its sea coasts, a vast and fertile unappropriated inland territory, a constant and immense inflow of population, bringing with them great sums of money, and a ready market in Europe for their grain and other products at a large profit on the cost of production. These conditions have either disappeared or are rapidly disappearing, and can never appear again.

The conditions in Victoria were somewhat similar to those of America, but the country being smaller, poorer, and the inflow of population much less, it has taken less time for the evils of the system to manifest themselves. In New Zealand the conditions applying to America exist in a still less degree, and it will take a very few years of the present administration to use this colony up entirely.

Having arrived at the conclusion that mileage rating must be abolished, my task was to find something to take its place. Naturally a system of even stages, say, of

I seven or ten miles each, presented itself, but a little thought made it obvious that such a system would have all the evils of mileage rating, although for a time in a less degree. Then I thought of the arrangement of stages at 7, 10, 15, and 25 miles, as described in my last paper, but I was pulled up by the financial difficulty.

It is a pity that on this great question of public policy the present pound should be of such paramount importance. It is, however, sometimes necessary to bow to circumstances.

To insure financial success I had to consider the following points:—

- Should we commence with goods or passenger traffic? It did not take long to decide for the passengers, because, in the first place, it is the natural order of things. We cannot have products without producers, therefore we must first place our men on their land. Next, men do not follow goods, but goods follow men, that is to say, goods have no wants to he provided for by men, but men have numerous wants to supply, for which goods have to be provided, and wherever you place men a goods traffic must follow. Then again as to finance, if sufficient inducement is given there is hardly any limit to the number of times passengers will pass up and down the lines, but no matter what the price charged, no sane man would send his goods twice over the lines if once sending them would do. If we increase passenger traffic an increased goods traffic must follow.
- It was necessary to ascertain the present *average* passenger fare. This proved to be 1s 11½d.
- It was also necessary to ascertain the *average* distance travelled. This I found was 13 miles.
- The relative position of first to second class passengers. I found that three and a-half second-class tickets were issued for one first-class.
- How to adjust the stages so as to make sure of securing an amount, at least, equal to the present average fare, in one, two, or three sums. This would, of course, depend on the inducement offered to people to travel, and the average length of journey they could fairly be expected to take.

Now the question of financial success or failure rests on the answer to this question: Have I so adjusted these stages, and will an average fare of one shilling (1s) be secured?

In order to make quite sure of this point, I ought to have had before me a table of the passenger bookings from every station to every station. Three times through various members of Parliament I asked for this return,

but the department always refused it, on the ground that it was too costly. I therefore had nothing to guide me but the tables attached to the annual report on working railways.

After full consideration, I decided to make the passenger stage fares sixpence (6d.) first and fourpence (4d.) second-class, and to endeavour to secure the present average fare in two sums of one shilling each.

In order to do this, it was necessary so to locate the stages that the average distance travelled would land the passengers past the second and into the third stage. I calculated that the great reductions made in long distance fares would extend the average distance travelled at least from two to three miles, say, from thirteen to fifteen of sixteen miles. This it was that made me decide for the seven-mile stages, the second of which is from one to two miles within the' estimated travelling distance, and the other two seven-miles stages were so placed as an extra financial precaution. This arrangement, I have always maintained, made me absolutely certain of an average fare of 1s., and, as I have said, the whole result hangs on the answer to the question: Is this a correct estimate?

When I laid my plans before Mr. Maxwell, he simply met me, by telling me in plain, straight English that I did not understand the question at all; that he had no doubt I thought I did, but that I had not the necessary information, that the officers of the department alone could deal with the question, as they alone had the correct information, and that I could not obtain it. I tried to show him that it was only the policy of administration and financial portion of the subject I was dealing with. But it was of no use; he wound up the interview by recommending me to try and educate the public up to my idea*. I need hardly say that this is the only personal interview I have ever had with Mr. Maxwell.

Well, I have taken his advice, and done some little in public education. I hope he is satisfied with the result. Most certainly I am not; the apathy with which the general public treat this vitally-important question is a marvel, and a great discouragement to me. We shall, however, wake up to its importance before long—I hope before it is too late.

The hostile attitude Mr. Maxwell then took up he and his chief subordinates have ever since maintained. There has been no attempt on their part to investigate; simply an assumption of superior knowledge, which their own accountant has conclusively proved they do not possess, it would be scarcely possible for any set of men to be so hopelessly beaten by their own figures as these men have been.

As this matter of the financial result is very important, I may again remind my readers that all my calculations and estimates in regard to revenue have been carefully examined and reported upon by Messrs. W. Conyers (late Commissioner of South Island Railways), R. W. Moody, J. Stoddart, and T. D. Edmonds.

These are all railway men of, to say the least, equal experience with our Railway Commissioners, and they have all signed a statement to the effect that the introduction of my system would lead to an increase of 200 per cent, in the passenger traffic; that my average fare could not sink below one shilling (1s), and that the increased traffic "would not perceptibly increase the working expenses." This means that £200,000 per annum would be added to the net railway revenue.

This, then, is their statement and mine;, the statement of five men who have carefully examined the whole question.

On the other hand, we have the unsupported, and certainly not very disinterested opinions: that is, if people who have not investigated can be said to have opinions, of four railway officials, Messrs. Maxwell, Hannay, Grant and Hudson. I must now show what these opinions are worth, or rather show how utterly worthless their own figures prove them to be.

After some contention, the committee ordered the production of the return I had asked for, so far as regards the Auckland lines. In order to prepare it I was asked I to lay down a diagram of my system as; applied to the Auckland lines, and to mark j on it my fares from every station to every station. This was handed to Mr. A. C. Fife, the accountant for the Railway Department, and he was instructed to prepare a table showing the number of passengers that actually travelled at various distances in 1885-6, with the amount of money received for those distances, and he was also to say what number of fares would require to be taken under my system to produce the same financial results.

The references which follow in parenthesis are to the minutes of evidence taken by the Parliamentary Committee of 1886 on I "Vaile's System of Railway Fares and | Charges," I—9. It can be seen in the Public Library. The figures refer to the question and answer.

Mr. Fife first brought up the table on page 86. This the committee declined to receive as sufficient, because it made no alteration in the relative position of first and second-class fares, and he was instructed to produce the table which appears on page 89. Most, if not all, of the committee being of opinion that under the new system there would be at least an equal number of each class, while some thought there would be two first to one second.

I should mention that these tables were only brought up the day after the committee work closed. I managed to get a sight of the first table, and sent in a few hurried remarks. Had it been produced a week earlier

it would have been hardly possible for the committee to have done other than report in favour of an unconditional trial. Auckland, March 22nd, 1890.

No. 8.

Financial Results, Continued.

IN order that my readers may be able to clearly comprehend what follows, I reproduce the table which appears on page 89 of Parliamentary paper 1-9. A perusal of it in connection with the remarks that follow, will show how completely the committee was misled by the evidence of Messrs. Maxwell, Hannay, Grant, and Hudson.

NEW ZEALAND RAILWAYS.

Summary of Passengers carried on the Auckland Section, under different Stages (Helensville to Morrinsville), for the Twelve Months ended 31st March, 1886. The column Is added by Mr. Vaile. This Calculation is based on equal numbers of each class.

Distances. Total No. of Passengers carried at Government Fares. Total Revenue. Number of Pass, liners computed to give the same Revenue at Mr. Vaile's Fares. The Increases I require for the various distances are as follows:— Equal Nos. of each Class. Two 1st class to one 2nd. £ s. d. Not exceeding 3 miles .. .. 55,518½ 1,215 12 1 59,588 55,860 3 miles and under, 1-14th of a fare Over 3 and not exceeding 5 miles .. 94,781 2,801 17 5 130,100 121,975 3 to 5 miles, ? of a fare Over 5 and not exceeding 7 miles .. 96,604½ 3,435 2 0 157,176 147,356 5 to 7 miles, 3-5th of a fare Over 7 and not exceeding 10 miles 46,045½ 2,144 4 3 60,012 56,259 7 to 10 miles, ? of a fare Total .. .. 292,949½ 9,596 15 9 406,876 381,450 Over 10 and not exceeding 30 miles 75,562½ 8,324 10 10 194,445 182,292 10 to 30 miles, 1½ fares Over 30 and not exceeding 50 miles 31,640 7,322 17 6 81.842 76,731 30 to 50 miles, 1½ fares Over 50 miles .. .. 24,762 14,665 13 1 134,291 125,900 50 miles and upwards, 4½ fares Gross total .. .. .. 424,914 39,909 17 2 817,454 766,373 Accountant's Office, Wellington. A. C. Fife, Accountant.

Most, if not all of the committee were of opinion that under the new system at least an equal number of each class would be carried, and many of them thought there would be two first-class to one second. For this reason they ordered the production of the above table.

Those who wish to follow the whole argument can do so by referring to the above-mentioned Parliamentary paper.

The railway officials argued that my system could not prove a financial success because they said:—

- That for the distances the bulk of the people travelled over, ten miles and under, I proposed to *increase* not decrease the fares.
- That, for this reason, it was impossible that I could secure two fares where one is taken now.
- That my average faro could not possibly reach one shilling, and consequently that two fares for one would not give the required result.
- That, no matter what the inducements given, people would not travel.
- That carrying two passengers for one would vastly increase the working expenses.

In 1885 Mr. Maxwell was ordered to report on my system.

His report forms Parliamentary paper D-3, 1885. In it he states clearly and distinctly that my proposals, "if adopted, would involve an *excessive increase in fares*" for more than *one-third of the journeys taken*, and he seeks to establish his position by comparing a purely imaginary and fictitious season-ticket fare with my ordinary fares.

As regards ordinary fares, he as clearly states that "by far the larger proportion are for distances under ten miles, for which Mr. Vaile's proposals provide either increased fares, or fares not very materially differing from those prevailing." He further states that to Onehunga I propose to charge 1s first-class and 8d second, when I have never proposed any other fares for this distance than fid and 4d, and he makes many other statements equally truthful.

This, then, is Mr. Maxwell's statement in support of their first contention.

Mr. Hannay, in the most unqualified manner, stated (491A), "Twenty percent, of passengers, that is, five miles and under, are not reduced," and further on led the committee to believe that no reduction was made for "*half of the passengers travelling note."*

Mr. Grant stated (173) that "up to three miles our scale is under Mr. Vaile's, up to five miles I do not think there is so much advantage as would increase our traffic at all."

Mr. Hudson stated (335) "for the three mile journey the fares would be somewhat more than they now are."

A reference to the table on (86) will show that their own statement is that for distances of 10 miles and under 292,949 people travelled and paid £9596, and that I should require 468,120 fares to produce the same result.

What becomes of Mr. Maxwell's statement? If I make no reduction, but as he states *increase* the fares, how comes it that according to their own showing I require 175,171 more fares to make up the same amount of money?

For distances of five miles and under Mr. Fife says 150,299 travelled and that I should require 222,315. What becomes of Mr. Hannay's statement? Why do I require an extra 72,016 fares if no reduction is made?

For distances of three miles and under, Mr. Fife says 55,518 people travelled, and that I should require 66,880 to produce the same amount of revenue. What becomes of Messrs. Grant and Hudson's statements? Why do I want the extra 11,362?

Were all these men supremely ignorant of the business of their own department, or did they combine to deceive and mislead the committee? They had their own tarriffs before them; they had my tariff; and on every line and to every station in the colony it showed a large reduction except in one instance, and that showed no increase. [See pages 56 and 57.] Their statement was not true in any one particular.

The first and second statements of the officers of the department, therefore, on the showing of their own accountant, completely fall to the ground.

My readers will please bear in mind that the above argument necessarily refers to the table on page 86. What follows refers to the table which is reprinted above.

We now have to consider their third statement, that the average fare under the proposed system could not reach one shilling. This they were determined to convince the committee of, if they possibly could. They had all the information before them: the information without which Mr. Maxwell told me I could not calculate correctly. They then ought to have been able to ascertain my average fare to the greatest nicety, but this is what they did:

On page 21, paragraphs 27 to 29A, will be found an elaborate attempt on the part of Mr. Maxwell to prove that my average fare for 10 miles and under could not be more than 4½d, and for over ten miles, he says, "it is most unlikely that so high an average as Is and 1½d could be reached." He also deliberately makes this statement, *"and in the country districts the average fare for 50 miles if only* 4½d."

When Mr. Maxwell made this assertion, not only had he my printed papers before him, but for days he had listened to the most searching inquiry as to this average fare. It is not therefore possible for me to believe that such a gross misstatement could have been made in error.

Mr. Hannay stated (491A) that the average rate for half of all the passengers travelling now "cannot be more than 5d," and that "I do not think the average fare will be Is."

Messrs. Grant and Hudson were not examined as to my average fare.

As the whole question of the financial result of the application of the new system depends on what would be the average fare under it, it is important to note that on the one side we have Mr. Maxwell's statement.

- That the average fare for distances of 10 miles and under could not be more than 4½d.
- That for all distances of over 10 miles it was "most unlikely" that it could average as high as 1s 1½d.
- That in the country districts it would only average 4½d *for 50 miles*.

Mr. Hannay stated that the average fare for nine miles and under could not be more than 5d, and he did not think the general average could be one shilling.

These wild statements of two of our Commissioners were totally unsupported by evidence, of any sort or kind.

On the other side, we have the evidence of Mr. W. Conyers (769, 770, 818, and in numerous other places), who stated in the most positive manner (979) that "it (the average fare) cannot sink below 1s."

Mr. T. D. Edmonds also stated that the average could not be less than 1s, 1001, 1065, 1105, and in other answers.

Mr. R W. Moody gave evidence to the same effect, 1119, 1120, 1135, 1170.

Mr. James Stoddart, formerly of the Great Western, and in charge of the Swindon district, was too ill to attend committee, but he also signed a statement that my average fare could not sink below 1s.

My own statement with reference to the average fare was—

- That the general average could not be less than 1s.
- That the average for seven miles and under would not be less than 5d. [Page 58, paragraphs 28-30.]
- That the average fare for the eight to ten miles distances could not sink below 8d. [Page 58, paragraphs 28 30.]

This is what Mr. A. C. Fife, *their own accountant*, has, in the table given above, proved to be *the actual facts*.

- That the general average fare in 1886, based on the average distance then traveiled (13 miles only) would

be eleven pence three farthings (11¾d).

- That the average fare tor all distances not exceeding seven miles would be 5.15d.
- That the average for seven to ten mile distances would be 8.57d.
- That the average for all distances of ten miles and under would be 5.66d.
- That the average fare for all distances over 10 miles would be 1s 5¾d.

Thus, it will be seen that, with the most meagre information at command, I safely and correctly estimated all these average fares, while the estimates of Messrs. Maxwell and Hannay were so wild and absurd, as to be absolutely childish, and this, too, in spite of the fact, as Mr. Maxwell told me, that they had access to the records, and I could not get to see them.

I claim that the facts quoted above, and the results of their management, as shown by the table given in my first article, *prove, that Messrs. Maxwell and Hannay are utterly incompetent to deal with any question of railway finance*.

The fourth statement of the officers was that reduction of fares would not induce people to travel, at any rate to the extent of doubling the traffic.

All the gentlemen who supported me gave evidence that the increase would be at least 200 per cent.

The result of the Hungarian experiment shows that they and I were right. The reduction of fares in Hungary is not nearly so great as that proposed here, but the increase of their passenger traffic is 160 per cent.

This is another instance of Messrs. Maxwell's and Hannay's inability to correctly estimate results.

TABLE OF SOME OF THE PRESENT AND PROPOSED FARES.

Present fares. Proposed fares. Station to Staion. 1st. 2nd. 1st, 2nd. Class. Class. Class Class. Auckland Lines: s. d. s. d. s. d. s. Kaukapakapa to Te Kuiti .. .. .. 35 5 23 8 5 6 3 8 Kaukapakapa to Auck- and .. .. .. 9 2 6 2 2 6 1 8 Auckland to Penrose .. 1 0 0 9 0 6 0 4 Auckland to Manurewa .. 3 2 2 1 1 0 0 8 Auckland to Drury .. 4 7 3 1 1 6 1 0 Auckland to Pukekohe .. 6 3 4 2 2 0 1 4 Auckland to Frankton .. 17 11 10 2 6 1 8 Auckland to Te Kuiti .. 26 17 6 3 0 2 0 Hurunui-Bluff Lines: Waikari to Bluff .. .. 90 11 60 9 18 6 12 8 Waikari to Rangiora .. 6 3 4 2 1 0 0 8 Waikari to Christchurch 10 5 7 0 2 6 1 8 Christchurch to Rolles ton Junction .. .. 2 11 2 0 1 0 0 8 Christchurch to Bank- side .. .. .. 6 6 4 4 2 0 1 4 Christchurch to Trmarn 20 10 13 11 3 6 2 8 Christchurch to Oamaru 31 8 21 2 6 6 4 8 Christchurch to Dunedin 47 11 32 0 11 0 7 8 Dunedin to Grey town .. 3 2 1 1 0 0 8 Dunedin to Kaitangata .. 11 7 7 9 2 0 1 4 Dunedin to Wairuna .. 16 3 10 10 2 6 1 8

Is it possible to doubt that a man would travel twice at the proposed fares for once he travels now, or that he would take a wife, child, or friend with him when now he goes alone, or would he give his family a pleasure or health trip twice instead of once?

Their fifth statement was that to carry two fares instead of one would greatly increase the cost of working the lines. Not to weary the reader I will merely refer to Mr. Hannay's evidence.

He was very positive in his evidence (515 to 518) that to double the passenger traffic on the Hurunui-Bluff line would add £55,000 per annum to the working expenses. Afterwards, under cross-examination, he stated that on this line the average number of passengers carried *per carriage* was seven (7) only (603—606). These carriages are each capable of seating from 30 to 40 passengers. So much for Mr. Hannay's evidence on this point.

Messrs. Conyers, S tod dart, Moody, and Edmonds, on the other hand, distinctly state that carrying three—not two—passengers for one now carried would not "perceptibly increase the working expenses. The result of the Hungarian experiment again proves them to be right, for the Hungarian Minister of Commerce says that by the adoption of the stage system, and the reduction of rates, he has added 3,000,000 of florins to the revenue at *no extra expense whatever*.

Mr. Charles Waring also, speaking of the English trains, says they often run "with only 100 tons of load when they could just as easily carry 300 tons *at no extra cast."*

I claim that the above-mentioned facts, which cannot be disputed, prove one of two things—either Messrs. Maxwell and Hannay must be the most incompetent pair that ever had charge of a railway system or they must have wilfully and designedly misled the committee.

To recapitulate: The officers of the Department all stated that for certain distances I proposed to increase the fares, while I professed to reduce them.

The table compiled by their own accountant conclusively proves that not one of them—to put it mildly—gave correct evidence in this respect. The printed tariffs of 1886 and the table of fares on (56 and 57) prove Mr. Fife's statement to be the true one.

With reference to the average fare under the new system, which as regards finance is the most important point; we have on the one side Messrs Maxwell and Hannay's ridiculous assertions unsupported by evidence of any kind. On the other we have the evidence of four trained railway men, my own statement, and, best of all,

the indisputable evidence of Mr. A. C. Fife's table, which *proves* that my friends and I were right, and that Messrs. Maxwell and Hannay were as far out in their calculation as it was well possible for any two schoolboys to have been.

Thus we see that on the one hand we have two men, whose own accountant has proved them to be wrong in every one of their statements, who say that the adoption of my system will entail severe loss on the revenue; while, on the other hand, we have five men whom Messrs. Maxwell and Hannay's own accountant has proved have made accurate and safe calculations in every respect, who say that the adoption of my system would add at least £200,000 per annum to the net railway revenue.

Whose advice ought to be taken in this matter?

Auckland, April 9, 1890.

P.S.—In this and my previous article I have made statements reflecting very seriously on the integrity or the professional ability of two of our Railway Commissioners. These gentlemen have lately thought proper to expend some of the public money in printing and distributing some very useless papers with reference to the Hungarian system. I challenge them to publish a paper refuting my statements, if they are able to do so.

No. 9.

The Financial Argument, Concluded.

WHEN I first laid my scheme for reforming the administration of our railways before the public, the passengers' fares, first class, were, for 7 miles, 1s 9d; for 21 miles, 5s 3d; for 100 miles, 25s. Three months after they were reduced 25 per cent., and the present absurd arrangement re return tickets made. I immediately stated that this reduction would mean loss. A year's trial showed that I was right. The stupid transaction led to a loss of £25,000, and no increase of traffic.

The fares were then raised again to the present rates, which are for the distances given 1s 6d, 4s 5d, and 20s 10d. When, therefore. I proposed to replace these by fares of 6d, 1s 6d, and 3s, and asserted that two of my fares would produce a larger amount of money than one of the old fares, it is no wonder that most people thought me a lunatic, as the statement seemed to defy the laws of arithmetic. The explanation of the seeming anomaly is simple enough; it lies in the fact that the present average fare is only 1s 11½d, and that I have so adjusted my system of stages that under it the average fare cannot be less than 1s, unless there is such a development of wayside traffic" that the total revenue would largely exceed the amount calculated upon, and in that case we should of course all be pleased.

I have no doubt, whatever, that in the economy of working the new and much simpler system, at least 20 per cent, of the working expenses might be saved, which would equal £130,000 per annum. This statement is borne out by experience on the Whangarei-Kamo line, where my system has been applied so far as it is possible to apply it on so short a railway.

The immediate effect was to reduce the working expenses by no less than 48.9 per cent. In Whangarei it is openly stated that since the appointment of the Commissioners orders are frequently sent from

Wellington to debit to the working expenses of that line, items of expenditure that have never been incurred there, but notwithstanding this the working expenses for 1889 were 29.6 per cent less than they were during the last year of the old system.

Experience in Hungary also supports my statement. There the passenger traffic has been increased by 160 per cent, and there-venue by 2,000,000 florins, while the working expenses have not been increased in the least; indeed, it is claimed they have been decreased.

It may be, and has been, asked, how is it possible that reckoning fares and rates by stages of several miles in length, can give a better financial result than reckoning by stages of only one mile each. For this reason.

When you reckon by stages of one mile only, *there are several stages between each stopping station,* except in rare instances, and even then the charge being by the mile the through fare can only be earned once by each seat in a carriage. When you reckon by stages of several miles each, *you have many stopping stations within each stage;* as, for instance, in the stage from Pukekohe to Frankton Junction there are fifteen stopping stations within that one stage, and the charge being the same for the *whole or any portion* of a stage, it is manifest that each seat *could* earn the stage fare fifteen times over, or 5s instead of 4d, during the one journey, and as a rule the stage fare would be earned several times over. This is how the Manhattan Railway of New York makes such vast sums of money by charging twopence half-penny (2½d) only for *the whole or any portion of 38 miles*.

This Manhattan Railway is a splendid example of what may be done by working a line on the stage system. the Manhattan Company has a lease of this railway, and in 1885—the latest information I have to hand —after

paying £291,808 for rent and interest, they disbursed £312,000 in dividends. The net earnings were 41.62 per cent., all out of a universal fare of 2½d, and this on a line that cost £168,743 per mile to construct, while ours cost less than £8000.

The London Metropolitan is the most costly line in the world. It cost £656,000 per mile, and yet it daily carries multitudes of people at a fare of 2d only for the whole or any portion of 16 miles, which is equal to 200 miles for 2s 1d, and yet our Railway Commissioners tell us that on our cheap lines we cannot carry a passenger 100 miles for 2s without severe loss. But what is the pinion of our Commissioners worth? In very line they write, every word they utter, every act of their administration, hey prove their thorough incapacity to form a correct estimate of what railways can and cannot do, and I say this country will not be true to itself if it does not insist on their speedy dismissal. They have harried the colony long enough.

Many of my supporters have said to me, "Your proposals are too extreme, your reductions are too great." My reply is, that it is the sweeping reductions that will secure the financial success. We must have such a reduction as will arrest the attention of everybody, and compel them to travel. We have seen that a reduction of 25 per cent., both in this colony and in England, did not secure one additional fare, and I very much doubt if a reduction of 50 per cent, would do much better. Unless the reduction is so great that every labourer in want of work can travel 150 miles to get it there will be no financial success, and the labourer cannot afford to pay higher fares than those I propose, nor is there any valid reason why he should do so.

One great advantage this stage system has over the mileage system is this, if for revenue purposes it is necessary to collect a larger amount, this can be done without disturbing local traffic at all. Suppose, for instance, on the Auckland lines it was thought desirable to introduce a stage station at Mercer and another at Huntly, the effect would be to raise the through fare to Te Kuiti from all stations north of Mercer and *vice versa* by 1s first and 8d second class, but the local traffic, that is the traffic between the shorter stages, would remain as before. Under the mileage system the effect would be felt all over the lines.

As to the question—can passengers be profitably carried at the rates I propose?—reply that the examples given above absolutely prove that they can be carried at far less rates. The Manhattan railway costs per mile twenty-one and a-half timesas much as ours have cost, but the *only* fare charged on that line is not one-eighth part of my *lowest* through fares. The London Metropolitan cost eighty-two times as much as ours, but their lowest fare is only half that which I propose. There can be no doubt that this low rate pays them, for they are so overloaded with traffic that they can hardly work it, and therefore are not obliged to carry at low rates to secure fares.

I have given numerous illustrations of how cheaply passengers can be carried; and our Railway Department has met me by stating that my calculations were ridiculous, but they have never made even a decent pretence of demonstrating them to be unsound.

A simple illustration will show how cheap transit by railway may be made. The combustion of *one ounce of coal* in a locomotive engine, will move one ton, one mile on a railway, 15 passengers weigh one ton. So after making ample allowance for all other charges it is evident we ought not so have to pay what we do pay in transit charges.

The tact is our railway controllers have been in complete and blissful ignorance of what railways are capable of doing, and they are so wrapped up in official conceit that they will not learn. The Hungarians will soon wake them up. If our railway magnates had been blessed with a little common sense, a little decent courtesy, a little power to investigate, they and this colony might have taken the load in the great forward movement that is now taking place, as it is we must follow in the rear. They smile complacently in their official chairs, and fondly imagine that by obstruction they can arrest progress and preserve their cherished "no-system," but they are just as powerless to stay the present movement as with their puny arms they are to arrest the mountain avalanche.

This is what the Hungarians have been doing in passenger traffic by means of their stage system.

Thus during four months passenger traffic was increased by 2,677,306 fares, and the revenue by 680,982 florins.

These figures are derived from information very courteously sent by the Hungarian Minister direct to the Railway Reform League. Since then we have the result of five months' working of the new system, the outcome being an increase of 2,000,000 florins in the revenue. Mr. Baross, the Minister, states that this vastly increased traffic has been secured without the Government "having to buy a single additional carriage or to add to their staff of servants. On the contrary, it is proved that the new tariffs have enormously diminished incidental expenses, and particularly the cose of the booking-offices. Formerly 697 categories of tickets were sold at the terminus of Buda-Pest; now there are but 92 categories, which means that six-sevenths of the labour of booking, sorting, controlling, and auditing have been abolished. A single booking clerk can now do the work which formerly required two or three clerks, while in the administrative department of the railways the saving on clerks' salaries is even greater."

This is very important. It fully bears out my oft repeated statement that we could treble the traffic on our lines without increased cost.

On committee Mr. Commissioner Maxwell (see page 57) stated that on the main line alone from Auckland to Te Awamutu, there were 1156 changes, or journeys requiring as many different tickets. On my system there would be only forty-nine (49) changes, which means there would be not one twenty-third part of the above described work to perform. What a saving there would be here.

Again Mr. Hannay stoutly asserted that to double the passenger traffic on the main Hurunui-Bluff line alone would add £55,000 per annum to the working expenses, but he afterwards stated that the average number of passengers carried per carriage in this section was only seven (7). What becomes of his estimate in the light of the Hungarian results?

This is how their carriages were occupied before the recent changes: nine-tenths of the first-class seats were unoccupied, four-fifths of the second class, and about two-thirds of the third class. Mr. Hannay has shown that on the Hurunui-Bluff line 33 out of every 40 seats are empty, and yet he says that to double the traffic on a part of the line only will cost an additional £55,000 per annum.

There is one point of special interest about this Hungarian experiment. Our Commissioners and their friends have always loudly asserted that people will not travel, no matter what inducements are offered, and that the proposed scheme would fail because the *long distance* travellers could not be obtained. What do we find in Hungary?

Prior to the introduction of the new system, no account was kept as between long and short distance travellers; there is now. During the four months of 1888 the total number of travellers was 1,618,550, while during the four months of 1889 the long distance travellers alone numbered 1,991,944, or 373,394 more than the total of travellers under the old system.

Is not this another glaring proof of the inability of our Commissioners to estimate what railways are capable of doing? Should similar results be obtained here—and they would be better—the financial success would be enormous.

Do not the facts given above prove that I am justified in saying that two of our Railway Commissioners are merely traffic managers, and that apart from that they are supremely and contemptibly ignorant of everything pertaining to a railway; or worse. I ask any candid man to read my article No. 8, and then say if it is possible for me to believe that such evidence was given honestly, or any other assumption than that the men giving it were commercially and financially incapable.

Strong language, says somebody; yes, and why not? It appears to me that there is great need of strong language. These men, by their ignorance or selfishness, have barred the progress of this country for years past, have brought ruin on thousands of its colonists, and they have robbed New Zealand of the glory of leading the world in the great forward movement which is now taking place.

Again, I ask my fellow-colonists to remember that those who control the roads of any country, absolutely control its trade and commerce, and most of its other social conditions; and I also again ask what can we expect in this colony but misery and disaster, when we allow such men to remain in such positions? I do hope that we shall wake up to a true sense of the position, and during the next session of Parliament repeal the existing Act, and send our Commissioners to some post where they may be more useful.

Auckland,

3rd May, 1890.

Correspondence Relative to Railway Reform League's Proposals.

Extract from the Circidar of the Railway Reform League, Auckland, forwarded to he Railway Commissioners, Wellington.

"This is the object of the League, and, in its endeavour to obtain such a rectification of the system of management as will more effectually knit the country producing districts with the centres of industry and population, and both with the outlets of trade, the following are the principal points which it has, as yet, adopted as its platform, viz.:—

- The total abolition of differential rating.
- The abolition of mileage rating, and the substitution of a stage system.
- The stage system adopted must be of such a nature as to give special facilities to districts and settlers far

removed from a market.

- A reduction in the charges for the conveyance of passengers and goods.
- A simplification in the classification of goods.
- A simplification and amalgamation of terminal, weighing, cranage, and other charges."

Extract of a minute forwarded by the Railway Commissioners with letter of 28th September to Messrs. Devore and Cooper, of Auckland, for their opinion.

The Railway Reform League has for one of its objects, as stated in its circular, "the total abolition of differential rating."

It is somewhat difficult for those who have studied and dealt with railway rates extensively, and who understand the magnitude and intricacy of the subject, to understand the precise nature of this object, as the term "differential rating" may cover a large field. In English law relating to railways such an expression is never met with; nor is it in American law, which is very extensive both in the individual and general State legislation.

The expression has been somewhat loosely introduced in England conversationally and critically, and during parliamentary inquiries, without a very precise meaning being attached to it. It has no precise technical meaning in railway working.

In New Zealand it has been used very loosely. It is susceptible of various interpretations, and may be held to express daily practice of such great variety, and has such different interpretations put on it by different people, that, if it is possible, it would be desirable to ascertain what is meant by the circular in this respect.

As it appears that one of the members of the firm of Devore and Cooper, the solicitors employed by the department in Auckland, is a member of the Railway Reform League, it might be as well to request the firm to give the Railway Commissioners a brief opinion as to the meaning generally of the term "differential rating" as applied to railway traffic. This opinion is needed to enable the Commissioners to obtain an accurate view of what is involved by the total abolition of differential rating, and to enable them to judge whether the substitution of what is termed "the stage system" will bring about the total abolition of such a style of rating.

Messrs. Devore and Cooper's reply to the Railway Commissioners.

Dear Sir,—We have given your letter of the 28th September, and the enclosures forwarded therewith, very careful consideration, and have delayed replying to it until we had obtained from various quarters some definite information as to what the Railway Reform Leagueconsider "differential rating'

We may mention that our Mr. Cooper is connected with the League, as is the case with many professional men and merchants here, by virtue of his subscription, but is not a member of any committee connected therewith; and we may also say that the Commissioners are quite right in stating that the term "differential rating" has not received, as far as we can ascertain, any judicial interpretation either in any country! under English law or in America.

We have also been unable, although we have examined the authorities within our reach, to find any precise meaning to the term in railway working, and we have no doubt that the Commissioners are correct in saying that the term has in railway technicalities no precise or definite meaning. We have therefore confined ourselves to ascertaining, as far as we were able, what the Railway Reform League here understand by the term.

The result of our inquiries is as follows:—

- They consider "differential rating" to include and to be synonymous with the terms "discriminations," "drawbacks," "rebates," "discounts," and "allowances."
- They define it generally as "meaning; any system which gives to the controllers of railway traffic the power to alter or vary fares, rates, or charges at their discretion, or to suit their idea of the requirements of trade "
- As particular instances of "differential rating," and from which perhaps may be gathered the more precise meaning which the League ascribe to the term, our inquiries elicited the following:—

  "Through rates:" for instance, rates from one large centre to another large centre, with higher charges for intermediate Stations.

  "Rates" which can only be ascertained by inquiring at particular stations, and which are not based upon any uniform rule,

  The charge as per tariff to consignors by the railway of large quantities of goods, and the return under a system of drawbacks, discounts, or allowances of a portion of that charge.

  "Secret rating," as instanced by the following example: A secret contract entered into by a manufacturer or large producer or exporter of goods, whereby the railway company or controllers agree to take his goods at a certain rate, he on his part undertaking to pay not less than so much per month or per annum, and they on their part agreeing not to carry the same class of goods for any other person except at higher rates, both parties entering into heavy bonds not to disclose the nature of the contract. This instance cannot, we feel sure, apply to the New Zealand railways, nor to the system under which they are worked.

(c) Calling an ascertained distance, say 100 miles, a less distance for the purpose of charge. And the following are quoted as examples of this in New Zealand: Two instances on the Canterbury section, in one of which it is said that 31 miles is by regulation deemed to be 15 miles, and in the other 21 miles is deemed to be 15 miles, and rates for the whole true distance are charged calculated on the distance fixed by such regulations.

(d) Calling an ascertained weight, say of 30cwt., 15cwt. only, and charging on the lesser amount.

(e) Charging a rate and a quarter or a rate and a half on one section for what is only charged as a single rate on another or in another district.

(f) Lowering rates on one section to enable the railway to compete with road or river traffic.

(g) Prescribing that goods carried on one section shall be charged in a higher class than goods of the same nature carried on another section.

All these instances they consider come within the term "differential rating," and from these the Commissioners will, we have no doubt, be enabled to gather the meaning the managers of the League ascribe to the term. We cannot state precisely which of these instances the League claims to have arisen in New Zealand, except examples (*e*), (*f*) (*g*), (*h*), and (*i*). Each of these, we believe, they claim is either now obtaining or has in the past obtained the sanction of the railway authorities in this colony. Nor can we say whether the introduction of the "stage system" is or is not open to the same objections and liable to the same abuses as they claim arise or may arise in the present system under which the railways here are managed.

We wish the Commissioners to understand that we have in this communication strictly confined ourselves to set ting forth the result of our inquiries made on the basis of the extract from their communication forwarded to us by you, and we do not pretend to give an opinion as to whether or not the instances quoted above are sound or accurate examples of the term "differential rating," we entirely agreeing with them that that term has no fixed meaning either in legal or in railroad parlance.

In conclusion, we think we may sum up the sense in which "differential rating" is used by the League here, in the words of section 3 of the United States Inter-State Commerce Act, as any system of rating which may tend "to give any undue or unreasonable preference or advantage to any particular person, company, firm, corporation, or locality, or any particular description of traffic, in any respect whatsoever, or to subject any particular person, company, firm, corporation, or locality, or any particular description of traffic to any undue or unreasonable prejudice or disadvantage in any respect whatsoever."—We have, etc., DEVORE AND COOPER.

C. Hudson, Esq.,
District Traffic Manager,

Railway Department, Auckland.

The Railway Commissioners to the District Railway Manager, Auckland.

Your memo., No. 89/1673, of 22nd October.

"Differential Rating."

The Commissioners are indebted to Messrs. Devore and Cooper for endeavouring to learn and explain what the Railway Reform League means by "differential rating."

The many meanings said by Messrs. Devore and Cooper to be attached by the League to the term "differential rating" might be supplemented by a great many more according to individual views.

The objectionable practices such as are known as unjust discrimination, undue or unreasonable personal preferences, drawbacks, rebates, discounts, allowances, secret rating, etc., are not in operation on the New Zealand Government railways, and never have been.

The practice in rating in operation on the New Zealand railways does not go beyond that sanctioned by the Inter-State Commerce Act referred to.

Messrs. Devore and Cooper state they cannot "say whether the introduction of the stage system is or is not open to the same objections and liable to the same abuses as they claim arise, or may arise, in the present system."

The Commissioners have looked up information supplied to the Parliamentary Committee of 1886, to whose report the Secretary of the League has referred them.

They find this "stage system "introduces such fares as the following, according to some data furnished to the Committee:—

It appears to be the defect of this "stage system" that such extreme divergencies in fares should be created. The passenger from New Lynn to Auckland is to be charged 1s for 10 miles, while one from Mercer to Frankton is only to be charged 6d for 42 miles.

This makes a local preference to an extent quite unknown in ordinary practice.

As Messrs. Devore and Cooper do not seem to have learned of this aspect of the "stage system" to which the Commissioners have been referred by the Secretary of the League, you may refer this letter to them for their information.

The "stage system" is, of course, as liable to abuse as the ordinary practice.

For the Commissioners,

E. G. PILCHER, Secretary.

The District Manager, Auckland.

The Railway Reform League and the Commissioners.

MEMORANDUM IN REPLY TO MESSRS. THE NEW ZEALAND RAILWAY COMMISSIONERS.

As with your letter of the 7th instant, you were pleased to forward some printed correspondence between yourselves, your Auckland solicitors, and your local traffic manager, the League presumes that this is intended to be part of your reply.

You commence by stating that the League has for one of its objects the total abolition of differential rating, and then say "It is somewhat difficult for those who have studied and dealt with railway rates extensively, and who understand the magnitude and intricacy of the subject, to understand the precise nature of this object, as the term 'differential rating' may cover a large field. In English law relating to railways such an expression is never met with; nor is it in American law, which is very extensive both in the individual and general State legislation."

The first portion of this paragraph clearly implies, if, indeed, it does not state, that those who have had most to do with railway working have the greatest difficulty in understanding what is meant by differential rating. It appears to the League that this is one of the strongest arguments why such a pernicious practice should be at once abandoned. It is evident on your own showing that it must be a serious drawback to the successful working of our railways, for no one if they can help it will attempt to do business under a system that neither they nor you can understand.

You next state that "In English law relating to railways such an expression" (as differential rating) "is never met with." This may be, but it matters little to us. It occurs in our colonial law.

For the wording of the Government Railways Act of 1887, there can be no doubt that you are largely responsible. What meaning then did you attach to the words when you allowed them to appear in the following by-law:—"*(m)* For imposing *differential rates and charges* for the carriage of passengers and goods upon any railway, and the circumstances and conditions under which the Commissioners will make special rates for the carriage of goods in quantities." The League may also point out that one of your number, Mr. Maxwell, in his report for 1884, argues that "differential rating" is not arrived far enough in this colony. He at any rate should have a clear idea of the meaning of the term.

The League now, however, has before it your official declaration that you do not understand the meaning of the words "differential rating," and also the fact that you have applied to your solicitors to interpret them for you.

The following paragraph appears to the League to be a very extraordinary one:—

"As it appears that one of the members of the firm of Devore and Cooper, the solicitors employed by the department in Auckland, is a member of the Railway Reform League, it might be as well to request the firm to give the Railway Commissioners a brief opinion as to the meaning generally of the term 'differential rating' as applied to railway traffic. This opinion is needed to enable the Commissioners to obtain an accurate view of what is involved by the total abolition of differential rating, and to enable them to judge whether the substitution of what is termed 'the stage system' will bring about the total abolition of such a style of rating."

You here state that Messrs. Devore and Cooper's opinion as to what the term "differential rating" means is necessary to enable you to judge whether the substitution of a stage system for a mileage system will secure the abolition of differential rating.

In the first place, the League has to remark, without intending any disrespect to that firm, that it fails to see how Messrs Devore and Cooper's opinion can affect the question either one way or the other; and, in the second place, it says that the absurd suggestion that the adoption of a stage system would secure the abolition of differential rating did not emanate from the League. The League's propositions with reference to these two

matters are very clearly and distinctly laid down, and are as follows:—

- The total abolition of differential rating.
- The abolition of mileage rating, and the substitution of a stage system.
- The stage system adopted must be of such a nature as to give special facilities to districts and set tiers far removed from a market.

These are all separate and distinct propositions, and, we think, stated in language that should have prevented the confusion of ideas that has evidently arisen in your minds.

We may, however, remark that the adoption of a stage system such as the one proposed would do away with the only legitimate excuse for differential rating—namely, bringing the distant producer closer to his market.

Further on you say: "The objectionable practices such as are known as unjust discrimination, undue or unreasonable personal preferences, drawbacks, rebates, discounts, allowances, secret rating, &c., are not in operation on the New Zealand Government railways, and never have been."

This statement is perhaps correct, but the League would direct your attention to the fact that the Act of 1887 legalises and gives you the power to enforce them. You may firing them into operation any day at your own pleasure, and the public has no appeal either at law or to Parliament.

The League says Great Britain and America have found it necessary to suppress these practices by very stringent legislation, and the League further says that power to enforce them in New Zealand ought never to have been given to any man or set of men.

The League directs your attention to the fact that these practices, which have been made legal in this colony, are now punishable in America by fines up to £1000, and two years' imprisonment.

You quote certain fares under the proposed system, and state that they "make a local preference to an extent quite unknown in ordinary practice."

The reply is that under the proposed system the existence of the mile is ignored, as it is in postal and telegraphic practice, and all fares and rates are based on average cost and population.

On the 42 miles referred to as between Buckland and Henderson, and for which the first-class passenger fare is 3s 6d, there is a population located of between 65,000 and 75,000; while on the 42 miles between Mercer and Frankton the population is probably less than 1200.

The facilities for doing business over a district containing 75,000 inhabitants are so great as compared with a district of similar extent, but containing only 1200 inhabitants, that it appears to the League to be a sound policy to charge a higher rate in the thickly-populated district, and to give the lower rate in the thinly-populated one, in order that people may be induced to settle there and utilise the land.

We presume you desire to make it appear that the system the League wishes to have tried is a differential rating system. The League has good authority for stating that it is not.

The minutes of evidence taken before the Parliamentary Committee which inquired into this system were sent to Mr. Charles Waring, of London, and he was asked to say if it is a differential system. He replied as follows:—"In answer to the specific question put to me, I hardly see how any system in which rates and tares are established on a fixed basis can be properly called a differential rating system. *This is not what we, mean when we speak of a differential system in England, and describes, indeed, the exact reverse."*

This is Mr. Waring's opinion; he is an undoubted authority, and as you have publicly stated that you do not understand the meaning of the term, the League is more than justified in accepting his opinion in preference to yours.

As examples of what is done under the present system, we direct your attention to the table on page 89 of Parliamentary Paper I-9, 1886. This shows that on the Auckland section of railways, during the year ending 31st March, 1886, 424,914 passengers travelled, and that they paid collectively £39,909 in the following proportions:—

It appears to the League that such a state of things is neither fair nor desirable in the interests of the community generally.

As instances of "local preferences" now in existence, the League directs your attention to the following examples:—

For the worst examples of these "local preferences" you are solely responsible. The three miles of railway between Anckland and Remuera is used by the richest portion of the community, and they are charged at the rate of 2d per mile.

The three miles between Avondale and Kingsland are used by the poorer portion of the people, and they are charged 4d per mile, or just twice as much as their richer fellow-colonists.

Passengers from Avondale to Auckland must pass Newmarket, and yet you charge them 1s 4d, while for carrying them past this station, and two miles further on, you charge only 1s. It appears to the League that "local preferences" like these are not only unjust, but senseless and injurious to the best interest of the

community.

Such things could not occur under the proposed new system.

It is the object of the League to introduce a system that shall be alike fair to every section of the community.

Auckland,

November 27, 1889.