

in assisting in this matter is, to provide machinery for the distribution at a moderate price of the best varieties of trees. They should be raised from seed on a large scale, and distributed when they have reached the proper time for transplanting. In many of the treeless parts of the country, land which is at present of comparatively no value would become readily saleable in the course of a few years, if reserves were set apart and planted out at once,—not merely owing to the value of the timber that would be grown, but though the influence that the rising forest would exercise on the climate of the district.

82. If by any alteration of the Land laws encouragement could be given to the planting of trees, would it not be extremely desirable?—I do not know anything that would prove more advantageous to the development of the agricultural interests of these Islands than a properly organized and carried out scheme of planting. There is a large part of the Middle Island that will remain practically valueless without such a scheme for planting, combined with one for the irrigation of the high level terraces.

83. *Mr. O'Neill.*—Should any steps be taken for the conservation of the existing forests?—The rapid destruction of the native forests I consider to be most wasteful, and as having the effect of rapidly reducing the natural resources of the country. It is not at all necessary that the forest should be completely removed in the way that it usually is, either for the purpose of agricultural settlement or the obtaining of timber for mills, firewood, or fencing. The thinnings of the forest would be ample in most cases to supply all the latter wants. By carelessly opening up tracts of forests, and especially the firing of the dead forests, the young growth of trees which comes up to supply the place of the trees that are removed is wholly arrested, and in a short time the air and sun dry up the surface soil of good quality which characterizes freshly cleared bush land, and it is washed away by the rains. Large tracts of land in the north of Auckland which naturally possess great capabilities for agriculture, have been rendered absolutely worthless for centuries to come, without a great expenditure, by the above wasteful process. With reference to drug plants, I may say that there are many native shrubs which possess medicinal qualities which have not yet been investigated.

84. We will now proceed to consider the manufacturing interests of the Colony; have you any observations with regard to them?—The most obvious advantage, at first sight, in all manufactures, which New Zealand possesses, is the immense command of water power, without having to go into the more inaccessible parts of the country. This is a point of special importance with regard to the manufacture of woollen goods. With regard to the manufacture of leather, there are several excellent tan soaps to be had from the native forest; but the black wattle occurs so freely and possesses such a superior quality of tan bark that I think it would pay better to grow it especially for the purpose than to destroy the native timber. The black wattle is spreading in some parts of the North of its own accord, so as to form thick dense copse. The bark is worth about £4 per ton, and the wood forms a most valuable kind of firewood. The manufacture of salt from the sea might be commercially successful in those parts of the Colony where the ratio of natural evaporation is high.

85. Are there any sands in New Zealand adapted for glass-making?—Yes, in several places, but especially in the vicinity of the North Cape.

86. *Mr. Studholme.* Is there sand in the Middle Island adapted for making glass?—Commonly the sands contain too great an admixture of iron for the manufacture of fine glass.

87. *Mr. O'Neill.* What is your opinion of the sand on the beach from Whangarei to Mahurangi? I think it would be adapted for glass-making. The sand at the North Cape is peculiarly free from impurity.

88. *Mr. Parker.* Is there any clay suitable for pottery ware?—Yes; there is an abundance of such clay in various parts of New Zealand. Some of the Auckland clays are equal to those clays manufactured in Bohemia. Common brick clays are very abundant; also fire-clays, which occur in conjunction with most of the brown coal seams. Some very excellent firebricks have been manufactured in Otago from these clays.

89. *The Chairman.* Are there any particular measures that you would recommend with the view of promoting the manufacturing and industrial interests of the Colony?—I am rather in favour of the system of premiums than any other method of inducing attention to special industries. Of course the market must exist, and proper means of internal communication must be provided. The latter condition lies at the foundation of all material progress in the Colony.

90. Are there any particular manufactures, in your opinion, which, with suitable protection in their infancy, would eventually be able to stand alone and unprotected afterwards?—Woollen goods would probably be at first manufactured of better quality than those that are ordinarily imported, and, in consequence, might cost more, and would labour under a disadvantage in the market until their superior qualities were ascertained. This is a trying period in the introduction of any new industry. There is no reason why, excepting the want of population, and the obstacles which attend the first introduction of a new industry in a new country, the Colony should not be independent of the majority of imported articles.

91. What are the manufactures which, in your opinion, are now most adapted to the circumstances of the Colony?—Woollen goods, and the using up of the collateral animal products, glue, leather, soap, preserved meat. These are obviously the class of industries that will turn to the best account the greatest natural capabilities of the country, which are in the direction of grazing. This country is more eminently adapted for grazing than perhaps any other country, and this is the direction in which the industrial resources should be developed.

THURSDAY, 28TH JULY, 1870.

Edmund Barff, Esq., M.H.R., in attendance, and examined.

92. *The Chairman.* You have an extensive acquaintance with the gold-bearing districts of the Middle Island: can you inform the Committee of any measures that might be taken by the Government that, in your opinion, would be calculated to promote those interests?—In accordance with a resolution introduced by myself in the County Council, some two years since, surveys have been made