

in the cask. The champagne is bottled before all the sugar is turned into alcohol. If the sugar is turned into alcohol it is necessary to add a syrup made of the best sugar. If all the sugar had turned into alcohol it would be necessary to put in half an ounce per bottle. If you put in less the wine would not have the proper amount of effervescence; if you put in more it would smash the bottle.

233. *Mr. Mackenzie.*] Do you think we could produce wine here to compete with that of other countries?—I believe that on a very large area of New Zealand the grape could be profitably cultivated for wine-making, either for home consumption or for export.

234. *Mr. Dodson.*] What kind of sugar do you use for bringing the wine into condition—glucose or grape-sugar?—The ordinary cane-sugar is used for making champagne. If you made champagne of beetroot-sugar it would be most distasteful stuff. Beetroot-sugar is most abominable stuff in wine. You can bring wine up to any strength you like by adding 2½ oz. of sugar per gallon to the juice. If it is a bad season, and the juice is very poor with little glucose in it, by adding 2½ oz. per gallon you would elevate it 1 per cent. of alcohol up to a certain limit. If you put too much in you make it an unpleasant drink. There should be that harmony between the natural taste of the grape and the amount of alcohol that makes wine a pleasant drink. If you exceed that you have an intoxicating, unpleasant drink.

235. *The Chairman.*] You have made a considerable quantity of cider?—I have made 200 gallons of cider every year for some years.

236. Is this a fair sample of your cider?—It is some I made last year. It was drawn out of the cask and put into the bottle yesterday. It will make beautiful sparkling cider if bottled now.

Mr. W. M. MASKELL to G. BEETHAM, Esq., M.H.R., Chairman of Flax and other Industries Committee.

SIR,—

Wellington, 11th September, 1890.

In accordance with your desire, I send you the following on the matters of which we conversed in your Committee-room yesterday:—

1. *The General Question.*

I very strongly urge upon the Committee the necessity of establishing in New Zealand a properly-equipped Department of Agriculture. In saying this I do not at all mean the appointment of a Minister of Agriculture or the creation of a parliamentary department. On the contrary, the thing required is a branch of the public service, in which the head officer should be specially selected for ability and capacity, and should be entirely, or, at least, as far as possible, removed from the interference of members of Parliament, or persons with political objects in view.

New Zealand is not in the least likely to differ from other countries in the introduction and ravages of animal and vegetable enemies to agriculture. It is even probably more likely than many other lands to be subject to such pests on account of the absence of extremes in its climate. Now, if it pays—and certainly the people of those countries think that it does pay—England, France, Germany, the United States, the Cape of Good Hope, Australia, and India to establish fully-equipped agricultural bureaux, common-sense would seem to show that it would likewise pay New Zealand to do so. I very strongly urge, also, that the head officer of the department which I propose should be obtained from some other country. We have not, I am sure, in New Zealand anybody properly qualified for the position. We have several specialists amongst us, but I have no hesitation in saying that no resident in this country has sufficient knowledge of all branches of agricultural science to take charge of an Agricultural Department. An acquaintance with entomology, or with botany, or with horticultural or field work, taken alone, is not enough. Here in New Zealand are many insect-pests, many fungoid pests, many enemies to orchards, and gardens, and field-crops, and stove or greenhouse plants, the attacks of which have to be met in a number of various ways. And I repeat that I believe there is no one now in the colony qualified for the position of head officer in an Agricultural Department.

The question whether such a department as that which I propose might not be made to pay, at least, its own current expenses, in the same way as, I believe, the Stock Department does, is one quite within the scope of parliamentary discussion. But your Committee, sir, is not by any means the first which has sat on the question of “enemies to industries;” probably a similar inquiry to yours has been held every year in the last decade. And it may be safely affirmed that, if a proper Agricultural Department had been in existence, no Committees would have been necessary, and many scores of thousands of pounds would have been saved to the colony in the way of improved methods of agriculture.

2. *The Phylloxera.*

I venture to enforce very strongly the recommendation contained in a memorandum of mine on this question, dated, I think, in January last, and which is amongst the papers laid before the Committee. At the time that memorandum was written I knew of the existence of phylloxera only in the Town of Auckland and its suburbs. Since then I know that it exists largely about Whangarei, and I have reason to believe that it has spread to the Bay of Islands, to the Bay of Plenty, and to Napier, if not, indeed, still further south.

I take it for granted that, in the mind of your Committee, the vine industry in New Zealand will be considered as of considerable importance. I remarked to you yesterday that if the growing of grapes in this country is a thing merely on a par with the growing of roses, or camellias, or pansies—that is, merely a luxury—then there is not the least necessity for troubling about phylloxera at all. If this insect spreads and flourishes, then we shall merely lose a good deal of nice dessert fruit, and there will be an end of it. But if, on the contrary, vine-growing is looked on as a probable colonial industry for purposes of making wine, or raisins, or even vinegar, then the recommendation made in my former memorandum is entirely necessary and urgent.