

216. Can you get a market for all you grow?—Yes, if you have dry weather; but wet weather spoils the fruit for the market.

217. How much wine do you sell in the year?—It depends upon the season. I make about a hundred casks of wine every year, each cask containing 30 gallons.

218. Does it really pay to produce wine?—It does not pay at present. Should the Bill referred to pass, it will pay.

219. It only pays to make wine for New Zealand?—It would pay well to send wine to France or any part of the world.

220. Could you compete with Australia and California?—Yes.

221. You say you pay 2d. or 3d. a pound for grapes?—Yes.

222. In California grapes are sold at £1 5s. or £1 10s. a ton. If you have to pay so much more for your grapes how can you compete with such countries?—Of course we have to sell the wines at a higher price. We have to pay more wages here. When more grapes are grown we shall pay less for them, and be able to sell the wine at a cheaper rate.

223. If the Government encourage the industry by the passing of this Bill, you think it will be a success?—Yes, of course. I speak from practical knowledge. I have been making wine for twenty-one years in Wanganui, and for many years before that in Spain. In fact, I have been at it all my life.

Mr. W. H. BEETHAM examined.

224. *The Chairman.*] You have had some experience in growing vines?—Yes; for the last seven years I have been growing vines. I planted a vineyard seven years ago—a very small plot, the eighth of an acre—and the success that attended my efforts makes me believe that over a very large area of New Zealand the vine can be cultivated profitably, and an excellent wine could be made. I think that the average strength of New Zealand wines, if the right kind of grape were planted and the right situation chosen, to judge from the little knowledge that I have gathered during my sojourn in France, would be about from 10 to 12 per cent. of alcohol. In an exceptional season it might reach 14 per cent. In Bordeaux, where there are the best vineyards, the grapes in an exceptional season produce up to 15 per cent. of alcohol. These are the light natural wines. The strong wines, such as port and sherry, are not grown so far north as Bordeaux, or in any country where the light wines can be produced. The stronger wines, port, sherry, and liqueur wines, are grown in the south of France and in Spain. Even in those countries, where the heat is much greater, and the maturity of the grapes is superior to what it would be in the other countries, it is very rarely they get natural wine that comes up to 20, 22, or 23 per cent. of alcohol. The process of making these strong wines is by evaporating a portion of the juice, adding it to the remainder, and then fermenting it. The quantity of sugar required in the juice of the grape to give 1 per cent. of alcohol would be about 2½ oz. per gallon. A little more than 1½ lb. of grape-sugar per gallon would give a wine containing 10 per cent. of alcohol. These are approximate figures; I do not say they are exactly accurate. A wine containing 10 per cent. of alcohol is an excellent wine to drink with your dinner, when you can drink a bottle without doing you any harm. You will have absorbed in your system a small wineglassful of spirits. Now, I think the wine to encourage in New Zealand—and I think it could be grown upon a very large area—is a wine ranging from, say, 8 to 12 or 14 per cent. It would require technical knowledge how to cultivate the grapes, how to prune, and how to train them. I have tried experiments in my little vineyard, and I find that if a bunch of grapes is 4ft. from the ground it will not ripen, or, if it ripens, it does so very imperfectly; but if, instead of 4ft., it is within 4in. of the ground, it would be a very bad season indeed if it did not arrive at perfect maturity. By growing grapes close to the ground the ground acts as a wall to an espalier. In my opinion every grape of the vine should be certainly within 10in. from the ground. They will then always ripen, they can be kept perfectly clean, and are easily managed. They are perfectly protected from wind; no amount of wind will hurt them. If the grape-culture is to be a success in New Zealand, I believe that is the mode of training them.

225. How do you train them in that position—is it by wires?—I have made a little sketch that will explain my method of training. I plant the vines in lines about 5ft. apart. I allow two branches to shoot up. These are tied to stakes 4ft. high. One of these branches is cut off in the early spring, leaving the two lowest buds. These two buds throw up two branches for the following year, while the other branch is trained horizontally within 4in. of the ground. Half-way between the 4ft. stakes I plant short stakes protruding from the ground from 12in. to 14in. On the top of these a small No. 12 galvanised wire is stretched. To this wire the short bearing-shoots are tied, each shoot producing two bunches of grapes. These shoots are broken off two leaves above the highest bunch. In this way the fruit is kept close to the ground; it ripens, and is easily attended to, and kept free from blight, and from fungus, and insect-pests. I have found dusting the vines with sulphur to be beneficial. In any variety prone to mildew or fungus, about ½ oz. per plant of finely-powdered sulphate of iron spread about the roots keeps them perfectly free from mildew. My experience in wine-making is very small. I have seen the process in France, and for two or three years have made some wine; but I should be very sorry, having recommended the vine-culture in New Zealand, to give my wine as a sample of the wine that could and ought to be produced in this country. Firstly, when I planted my vineyard I had no knowledge of the variety of grapes that I was planting. I put in cuttings that I obtained from here and there, and I find that I have twelve different varieties in my little vineyard of four hundred vines. Unfortunately, there is a very small proportion of the grapes that ought to be cultivated in New Zealand. The Black Burgundy grape is a very early and excellent grape. It is the one Mr. Soler recommends. I have very few plants of that kind. If my vineyard had been planted of that kind, my wine would have been infinitely better. The white-wine and the red-wine [samples produced] are from the same grapes, picked at the same time—a mixture of a dozen different sorts. I would represent that the soil of my vineyard is not soil that one would choose to grow good wine. It is a very strong rich