

12. *Mr Field.* ] What is your occupation, Mr. Hansen?—I have various occupations. I am director of the Auckland Tramways Company, and a director in several other concerns.

13. You come from Auckland?—Yes.

14. You are not in any way personally interested in the sugar industry?—Not in the least.

15. Absolutely disinterested?—Yes.

16. Where have you seen the beet growing and the operations connected with it?—In Austria and America.

17. I suppose it has been carefully cultivated and improved by experts for years?—Yes, each year. It is such an important industry, there is so much sugar used.

18. The question of test: You are quite satisfied that the test is an easy one?—Yes.

19. Is it true that when a farmer delivers his beet to the factory he can have the test made without any trouble?—Say a cartload of beets arrives at the factory; they take off this cartload a small quantity of the beets, and they are cleaned, because there may be some of these beets that have much earth on them. Then they find out how much earth there is on these few beets, and they calculate this on the lot. The beets are immediately tested, but how long it does exactly take I cannot say.

20. How long have you been in New Zealand?—Fourteen years.

21. Have you travelled over New Zealand?—I have been right down to Invercargill and right up north.

22. You say that you feel confident from what you have seen of this country that it is possible to grow sugar-beet successfully?—I feel confident that between Lake Taupo and Mercer there is much suitable land for growing beets.

23. In other countries, is it grown close to the sea?—Beets should not be grown close to the sea.

24. *Mr Okey* ] There is no way of making small factories suit instead of one large factory?—A number of small factories would be disastrous. It would result in people wasting their money, and it would kill the industry. Besides, to grow beet on a small scale is more expensive than on a large scale.

25. What about the carting question?—I looked into the question, and found that if beet-root is grown on a large-enough scale, light railway-lines could be laid down, and the beet-root sent by gravitation to the manufacturing place.

26. Suppose there could be a guarantee given, when the amount of sugar could be produced in the Dominion sufficient for the needs of the Dominion, that the tax would be put on to prevent the outside sugar coming in. Would that do instead of a bonus?—I do not think that would do as well.

27. Do you think some scheme of the railway charging the same freight per ton for long or short distances would help the industry?—It would certainly help the industry. Of course, as the industry would grow, no doubt two or three more plants would be established in different districts.

28. Suppose you took a ton of beet to the factory and you found it below the average, would that be the test of the field?—Not necessarily, but now you go into matters which we have not had sufficient experience of in New Zealand.

29. Would the air affect the amount of the saccharine after it has once been pulled?—No, it would not. When they take out their beet-root in America they put the beet in heaps if it is not at once required, and they put a slight covering of earth over it, and leave it for weeks sometimes.

30. Are the by-products only worth about 2s. per ton?—In America they get as much as 7s. per ton.

31. Would that be manufactured at the factory into anything?—They just make cakes of it, and they can be sent to Australia or England and used as feed—mixed with hay or chopped straw.

32. Would the same plant as is used for cane-sugar do, or would you want a different plant?—No doubt a somewhat different plant, but, really, as I have not sufficient knowledge of the cane-sugar industry I cannot say definitely.

TOM WALLER LONSDALE, Farmer, and Acting-manager of the Ruakura State Farm, examined.

(No. 4.)

*The Chairman* What is your name, please?

*Witness* Tom Waller Lonsdale.

*The Chairman* Your occupation?

*Witness* Farmer. I am the Acting-manager of the Ruakura State Farm. Mr Chairman and gentlemen, after the evidence given by the preceding witnesses there remains very little for me to say. I suppose the chief thing that I can do is to give the results of the experiments at the Ruakura Farm during the last few years. I can only go back to the season of 1906, my first season there, and find we put in one acre along with the ordinary crop of mangolds in the same paddock. The cultivation was just ordinary cultivation, which we would give to any root crop, but our crop there followed oats. Of course that was necessary, as, bringing new land into cultivation, our crop had to follow oats. The method pursued there had been to sow on ridges, as we happened to have an implement which ridges the land, and it will also sow the seed at the same time. As regards cultivation, the plants are all singled, and afterwards hand-hoed, and every few weeks thoroughly cultivated with horse cultivation. The result of that year's crop was 15 tons per acre of beets, in 1906, and that gave an analysis of close on 17 per cent., approximately. In 1907 we again grew sugar-beet, following the same lines as in the preceding year. The seed that we used was specially sent out, amongst other seeds, by Messrs. Sutton and Sons,