

not be allowed to come in and exploit existing concerns, and probably make them close their doors. I have not given any consideration to what steps might be taken. It is a matter for the authorities. We have no records of the return of butter-fat per cow in each district in the Dominion. We have done everything possible to bring under the notice of farmers the necessity of herd-testing. Our experimental farms have endeavoured to interest the farmers in that respect over a number of years. There are no experimental farms in the South Island. I believe that repeated requests have been made for such farms to be established there—in Canterbury or Otago. The use of the milking-machine generally is a drawback in regard to the carrying-out of herd-testing, as it is impossible to get samples from each cow when the releaser system is used. The facilities for obtaining bulls are not as great in the South Island as in the North Island. If there were an experimental farm in the South Island and it went in for breeding cattle there would be some of the animals for sale. If that policy had been followed in the South in the past it would no doubt have been of assistance to farmers.

7. *To Mr. Veitch.*] It is a fact that we have got 'past the stage when we were dependent on experimental farms for the supply of purebred cattle to the farmers. The purpose of the experimental farm of to-day is to demonstrate rather than to provide live-stock.

8. *To Mr. Hudson.*] It is the intention of the Department to run some sections of the experimental farms on a commercial basis. It cannot be expected that experimental farms will be self-supporting. Experimental farms are a necessity in these times and not a luxury. If properly conducted they must be a source of great value to the farmer. In the North Island there are three experimental farms, and in the South Island none. On the west coast of the South Island the dairy industry is extending, and there is room for expansion. Some of the country there is well suited for dairying. The prospects are worthy of fostering, as there is a future before the West Coast as a dairying district. I should not like to express an opinion as to whether an experimental farm should be placed on the West Coast. I think something will be done shortly to give the farmers assistance, but I cannot say the nature of it. I think each farmer should have a bull of his own. In the case of small farmers who cannot afford to keep a good bull, several farmers in a district might arrange to buy one together. The Government could help in the selection of the animal. It would not be necessary to assist financially.

9. *To the Chairman.*] The average yield of butter-fat per cow in Denmark is 200 lb. Considering the bad climatic conditions in Denmark at certain parts of the year, and the fact that they have to house their stock for a portion of the year, I think the production of butter-fat in New Zealand should be largely in excess of that in Denmark. I have figures showing the exports of butter and cheese from New Zealand, with the value of the same. I also have the figures for casein. I could get the figures for other dairy-products. I will supply them to the Committee. If milking-machines were not available the industry would go back. Electric power can be applied successfully to milking-machines. Quite a number are being run now by electricity. I do not know that farmers are at the present time encouraged to visit the experimental farms by allowing them low railway fares. If a number of farmers desired to visit a farm it would be a fair thing to give them a railway concession.

10. *To Mr. Hornsby.*] In all cases in which it is proposed to establish a dairy factory we send an officer to confer with the settlers as to the building, its equipment, and all details. That officer goes back and forward until the factory is in running-order. If necessary, he will assist the manager to get a good start. No monetary assistance is given. At one time the Government had a system of lending to dairy companies, but it was hedged about by too many restrictions. In the case of returned soldiers farming a settlement, I would recommend that the Department should consider the question of helping them. I think the Government should assist them.

11. *To the Chairman.*] *Pinus insignis* is quite satisfactory for butter-boxes. The trials of this wood have not been on an extensive scale, but so far as they have gone they have been quite satisfactory. We have made successful trials of red-beech timbers for butter-boxes. There was no sign of taint in the produce. There are millions of feet of red-beech in the South Island. We have not tried the white-beech. Red-beech is suitable for both butter-boxes and cheese-crates. Only a limited number of officers is available for the inspection of milking-machines and the inspection of dairy-farm premises. Other officers ought to be engaged in order that a more thorough inspection might be made. In many cases the milking-machines are in a deplorable condition, and as a result the quality of the product suffers. We are doing a fair amount of this inspection work now, and the farmers welcome our men when they go about it in the right way, but we are only touching the fringe of the work. I have recommended that ten additional men be appointed as a start. I think it would require at least twenty to cope with the work. That would, in my opinion, increase the value of the product materially. The inspection could be made to include the housing of the employees on dairy farms.

12. *To Mr. Veitch.*] If a cow is suffering from disease of the udder the disease can be spread by means of the milking-machine right through the herd. The disease is not as common as it was at one time. The farmers are more careful than they used to be.

F. W. MACLEAN, Chief Engineer, New Zealand Railways, examined. (No. 24.)

On the question of paint I wish to say that in the Maintenance Branch at the present time we are testing locally made paints. It is possible to make laboratory tests, but we have found that these tests are not satisfactory from our point of view. What we require is to test a paint under actual working-conditions as far as possible. In some cases paint is subjected to conditions which hasten the effect that climate might have on it. In other cases it is tested in different latitudes. The Permanent Company's paint is now being tested in Auckland and in Dunedin. I think the Locomotive Branch is also testing it. Under ordinary conditions we can test a paint