

I was in a mill once and saw a lot of wheat that was too starchy, and the miller had to condemn a whole shipment simply for that reason. It was either cut too late or it was threshed at the wrong time.—I would not for one moment say that was due to the inexperience of the farmers concerned at all, but was due to the exigencies of the moment, and one cannot get over that phase of the matter.

*Mr. McCombs.*] The wheat-research work in Canterbury College may be helpful in that direction?—Yes, it may be very helpful.

*Mr. Jenkins.*] After listening to the questions and answers, I am almost forced to the conclusion that this country will not maintain a grass pasture, and that you are almost compelled to grow wheat?—That is, over the wheat areas.

No; as an Aucklander, we were under that impression many years ago. We had to break up our pastures every three or four years. We have overcome that greatly by going in for top-dressing, and I conclude the Department of Agriculture has exhausted almost every avenue in that respect—that is, making this country maintain grass. Have all opportunities been exhausted?—No, they have not all been exhausted. There are innumerable problems in connection with grassland-management that have to be solved, but one lays it down as definite that the phosphate response on established grassland in the drier parts of Canterbury, although appreciable, is not sufficient yet to enable you to have permanent pasture of the rye-grass type.

Is the rye-grass type the only type suitable?—The rye-grass type is the type that makes for Canterbury fat lamb, just in the same way as the whole of the grassland of the Auckland District, with the exception of the *paspalum* area north of the real high-production type of pasture, is one in which rye-grass is coming in largely.

*Mr. Jenkins.*] They would like to grow clover, but are forced to grow danthonia.—That is the lower country.

What is the economic value of this land—are we boosting that land so that it can profitably grow wheat if protection is given?

*The Chairman.*] That is a matter of policy. The question must be confined really to matters of absolute fact.

*Mr. Jenkins.*] You say the farmers who grow wheat badly should be eliminated?—They are being eliminated.

If the men are eliminated, what do you suggest they should do? The land will not grow grass, and you are getting down really to the basic value of the land. If you eliminate them, they must do something?—To use a New Zealand term, the farmer walks off his property. That has happened in quite a number of cases.

*Mr. Jenkins.* : In my opinion, there is a limit to the amount of protection any industry should have.

*The Chairman.* : All that is a matter of policy, with which we shall have to deal later by ourselves.

*Mr. Jenkins.*] The Department in looking on that as just wheat land, with the possibility of growing more wheat on it—will they look at the aspect, possibly, that the land may have to grow stock?—The position perhaps can be best put forward by saying that it looks as if over a great deal of Canterbury, in order that it shall produce an abundance of live-stock products, the elimination of the farm team cannot come about, whereas over a great deal of New Zealand the virtue of the elimination of the farm team and the giving of special attention to pasture management has been the sufficient production of good grass.

*Mr. Macpherson.*] Referring to the question of the elimination of the incompetent grower, that would apply only to individuals, and it has nothing to do with the land?—That is so; and where wheat was badly grown previously there is a tendency for it to be better grown now.

We know that some of the best farm lands in the Dominion have been absolutely ruined by incompetent men?—Yes.

*Mr. McCombs.*] With regard to the question of the certification of seed, what guarantee has the grower, when buying the seed, that it is pure?—He should buy a line of certified seed.

I went to the Farmers' Co-operative Association and wanted a sack of very thin-skinned wheat—Pearl—and they charged me the extra price, but I was absolutely dependent on the honesty of the firm as to whether it was pure seed or not?—There is certification.

There was no certification in this case.—You have, unfortunately, selected one which we have not yet been able to bring under the certification scheme—Pearl.

They said it was certified wheat.—If it was certified wheat it would be marked, "Certified by the Department of Agriculture," and the bag sealed in the proper manner. If they told you that the seed was certified seed, and it did not carry the Department's impression that it was certified, they were not telling the truth, that is all.

If there is a safeguard it is all right?—Yes.

They may have given me quite good value; I have no reason to believe otherwise. In regard to those Canterbury pastures, could anything special be done by a combination of nitrate of soda and nitrate of lime with other manures?—A tremendous amount of work in that line is being carried on at the present time. The nitrogen factor, the phosphatic factor, and the potash factor are all being studied to a very considerable extent over Canterbury at present. We have somewhere between 180 and 200 special experimental plots where that is being done.

I wanted to know if the nitrate industry—the development from air—was likely to be a valuable industry in New Zealand, and would it help generally?

*The Chairman.*] That is another question?—Yes; I am afraid that so long as Lord Melchett has charge of the nitrate industry of Great Britain it will be rather difficult.

*Mr. Macpherson.*] Are you satisfied in your own mind that with the weather conditions and soil conditions mainly obtaining in South Canterbury and North Otago you are more or less governed by the season you get?—Yes, quite