

Have you anything to say in connection with the average of prices?—In connection with the average of prices and all matters connected with prices—that is, the commercial side of the business—I may say that that is being dealt with by the Department of Industries and Commerce—by Mr. Collins. I am quite prepared for cross-examination, although I would like to indicate to you that I have not made any special preparation, and at times perhaps some of my answers may tend to a certain extent to be my personal opinions.

*Mr. McCombs.*] Do I understand that it is absolutely necessary, in the farmer's own interests, that a certain amount of wheat should be grown, even if the price is down, say, to 4s. a bushel?—Yes; it unfortunately appears necessary for the farmer in Canterbury to grow wheat in order to balance his cropping programme properly.

Some wheat?—Yes, some wheat. He would, of course, sow as little as possible if the price prospects were exceedingly low; but if the price were exceedingly low he would still, in my opinion, be forced to include the wheat crop in his cropping programme. But the tendency, of course, is for the wheat-grower, unless the price inducement is high, to reduce rather than increase his acreage.

*Mr. Macpherson.*] You mentioned that wheat-growing land in parts of New Zealand was used for other purposes. I suppose you are aware that in many parts of New Zealand the housewife plays a very important part when it comes to the practical side of farming, and many farmers will not put up with the extra trouble required from their wives in connection with wheat-growing, and are satisfied with a lesser income. The farmer is satisfied with a smaller income rather than put up with the hardships and costs of wheat-growing?—One would undoubtedly say that in certain parts of New Zealand where wheat might quite well be grown at a profit the organization necessary is so troublesome that the farmer prefers to devote his farm to other purposes; but, so far as his net return is concerned, he can secure as great a net return as if he grew wheat.

What you say, in effect, is that in Canterbury the farmer cannot provide at the same cost the necessary feed required to fatten lambs or fat stock unless he can keep his teams working?—Unless he can keep his teams in full work. Otherwise his live-stock-feeding crops must become very expensive.

In other words, wheat-growing dovetails in with stock-raising?—Decidedly. And were it not for the fact that a very important crop in Canterbury is on the decline, one would not view with so much concern the wheat position. I am referring to the oat crop. The oat crop is definitely on the decline.

Therefore you recognize that, as an aid to stock-farming, wheat-growing is coming to be a necessity?—Yes, in those drier areas of New Zealand where the effects of phosphate in perpetuating young grass are not so apparent as in other parts.

Because of climatic conditions it is necessary to renew the pastures by cropping?—Yes, by the re-sowing of grass. I may say that the work we are carrying out at the Plant Research Station at Palmerston North, in combination with Lincoln College, at the present time would indicate that perhaps with a rearrangement of the type of rye-grasses for Canterbury pastures there may be a possibility of procuring types which will produce young feed for a longer period than the present distinctly temporary types existing in the South Island.

That is a recent departmental discovery?—Yes. The position in arable Canterbury at the present time is that you must have a farm team and work it efficiently; and to work that team efficiently you must crop. And you must have some major crops which you can crop each year. Wheat and oats naturally come to one's mind. Wheat should be a crop that by an increase in consumption in New Zealand should tend to increase. The possibility of oats reducing the cost of production of live-stock-feeding crops is on the decline.

*Mr. Bitchener.*] You have, I think, expressed the opinion that on the Canterbury land it is absolutely essential that the ground should come up very frequently?—Yes. There are certain indications on the horizon that the grass position in Canterbury may be improved, but, until it is, it is essential that the pastures of Canterbury should be turned over. At the present time they should be turned over oftener rather than kept down.

Would you say that the grassland would provide a profitable crop for the third year?—The general grassland on what we might call the moderate wheat country is giving very little yield of material, and is extremely poor for young stock, after the second or third year.

I have heard it expressed quite a number of times that the wheat-yields for the last three years have been greater than formerly. Can you give us any reason for that?—I would attribute it to two or three reasons. Firstly, the weather conditions have certainly been favourable during the last three years for yields above what one might term normal. Secondly, there has been a very considerable increase in the amount of manuring that has been done on wheat during the past five years. Unfortunately, I have not the figures here for the phosphating for five years back. Previous to that there was about 20 per cent. phosphated. Last year, approximately, out of 187,000 acres, 135,000 acres were top-dressed with superphosphate. That is quite a considerable increase. Of the wheat area 70 per cent. is phosphated, and this has taken place within the last few years; so that can be viewed as another factor which is tending, I think, towards the permanent elevation in the yield of wheat in New Zealand. The tendency of phosphating is to increase the average yield. There are probably two other points at the present time that are an influence in the making of the average yield fairly high. The first one has been the elimination, to a very considerable extent, of the farmer who grows wheat badly. The other point—and, of course, a great many farmers do not agree with this—is that the type of seed sown has been above the average.

*Rev. Mr. Carr.*] In quality?—Yes.

*Mr. Bitchener.*] I may say that I think that the increased yield is very largely due to the interest that the Agriculture Department has taken in instructing the farmers in the best methods.—I would very much prefer that you should say that than myself.