

FIELDS DIVISION.

REPORT OF A. H. COCKAYNE, DIRECTOR.

THE SEASON AND CROPS.

Agricultural operations in the earlier part of the season were considerably hampered by unsettled weather, but conditions much improved about New Year, and a good summer and autumn from the pasture point of view have been experienced generally, particularly in the North Island. The exceptional growth of grass resulted in greatly increased amounts of both hay and ensilage being made in most localities. There is every prospect that the coming winter will be a good one from the stockowners' point of view.

The season's cereal harvest has proved to be an exceptionally good one so far as actual threshings to date have disclosed. While actual figures are not yet available, it is estimated that 222,000 acres of wheat were sown, as against an actual sowing of 151,673 acres in the previous season. For the 1925-26 season the 151,673 acres yielded a total of 4,617,041 bushels, or 30.44 bushels per acre. The estimated Dominion average yield per acre for 1926-27 was 33.92 bushels, or approximately 7,500,000 bushels total yield. Actual threshings to date show that the yield per acre is 38.02 bushels, which is approximately 4 bushels above the estimated yield. At the yield of 38.02 bushels per acre 5,436,622 bushels have been secured up to the present. This yield is obtained from about 143,000 acres. This leaves approximately 79,000 acres still to be threshed. Even if the average yield of this 79,000 acres dropped to between 26 and 27 bushels the total yield would equal the estimated 7,500,000 bushels. It is hardly likely that the average for the remaining 79,000 acres will drop from 38.02 bushels (obtained for the first 143,000 acres) to 26 or 27 bushels, and I feel confident our actual wheat-supply will exceed the estimated supply.

As far as the oat crop is concerned, threshings to date average 43.25 bushels per acre. This is between 5 and 6 bushels per acre above the Dominion average for the last five years, and over 3 bushels above last season's actual yield. The area in oats for 1926-27 was estimated at 405,000 acres, as compared with 347,511 actually harvested in the previous season. The position in respect of oats and oat chaff is therefore highly satisfactory.

The area in potatoes in 1926-27 was estimated at 24,500 acres, as against an actual area of 23,484 acres in 1925-26. The yield per acre in 1925-26 was 6.09 tons per acre, giving a total yield of 143,781 tons. Assuming that the yield per acre in respect of the crop now being dug equals the Dominion average over a number of years of 5.55 tons, we will produce about 140,000 tons. This would leave a fair quantity above Dominion requirements available for export, but unfortunately our nearest market—Australia—is at present closed to us.

The top-dressing of grassland with phosphatic manures has increased enormously. The extension of this top-dressing practice must be reflected in an increased output of the Dominion's primary products, the more so as the top-dressing of grassland is not being restricted to areas on which the manures can be applied by machinery, but is extending to hilly sheep-country where the fertilizers have to be applied by hand. In connection with the top-dressing of hill country at least two good patent distributors have been invented. These lighten the work considerably and make it possible for a man to cover a much larger area per day, and with greater comfort, than he could otherwise do.

SECOND-GROWTH COUNTRY.

The experimental work on the hill country reverting to secondary growths in the centre of the North Island has been carried on, and full reports published, as information became available, in the Department's *Journal*.

A commencement has been made by the Lands Department to start demonstration farms under the provisions of the Deteriorated Lands Act. These farms it is intended shall be run by a committee comprising the Chairman of the Deteriorated Lands Board, the Commissioner of Crown Lands for the district, and the senior Instructor in Agriculture for the district. The work at present being performed by this Division's field officers for the Lands Department in connection with advances under the Deteriorated Lands Act, particularly in the King-country, has assumed large proportions, and it will probably be necessary to appoint additional officers if the work in connection with the loans in question is to be properly carried out.

INSTRUCTION IN AGRICULTURE.

The instructional staff was strengthened during the year by the appointment of several additional Instructors. This extra assistance is greatly appreciated, but more men are necessary before instruction can be as widespread as one would like. However, it is quite recognized that expansion must of necessity be gradual, and that sufficient staff to put instruction on an intensive basis cannot be provided with great rapidity.