

grading, and grain-grading. These services, with their established staffs, have hitherto been controlled by myself with the direct assistance of Mr. A. H. Cockayne, who will now become the Director of this branch, which will be designated the Fields Division. With the efficient staff under Mr. Cockayne's control, together with his personal energy and high attainments, one may confidently predict a further advancement in the efficiency of these services and a resulting increased value from them to the Dominion.

#### NAURU AND OCEAN ISLAND PHOSPHATES.

A good volume of business was done in the importation of high-grade phosphate rock from these islands, the actual quantity brought into New Zealand during the financial year being 51,430 tons. The accounts of the Commissioners controlling the business are made up for a different period, their trading-year ending on 30th June. For the ten months ending 30th April, 1923, the importations into New Zealand comprised 16·96 per cent. of the total output, and thus our quota of 16 per cent. is already slightly exceeded.

Consequent upon the falling freight market, contracts for sea carriage were, up to 30th June last, made for six-monthly periods only, and successive reductions in freight rates were secured, which, with a reduction made during the year in the f.o.b. price, enabled the selling-price of the raw material in the Dominion to be correspondingly reduced from time to time. These reductions, however, could not be immediately reflected in the prices of the manufactured fertilizers, consequent upon the overcarrying of stocks of raw material bought at the previous higher rate. Material reductions in selling-prices to farmers came about in due course, and the prices now charged compare satisfactorily with those ruling in Australia, when the relative conditions applying to the two countries are considered.

The Government's commercial agents handled their business well, and their intimate knowledge of every phase of it has proved of great value in enabling all details to be carried out satisfactorily. The shipping contractors have also rendered good service at reasonable rates. All administrative charges of the Department have been met out of the business, and the margin which necessarily had to be allowed for unforeseen contingencies proved not to be needed, a small profit to that extent resulting.

The New Zealand representative on the British Phosphate Commission, Mr. A. F. Ellis, has done excellent work throughout, and I must express my sincere appreciation of the keen interest he has shown and the complete manner in which he has co-operated with the Department.

The business having now been well established, with the Dominion absorbing its full quota, arrangements have been made for its conduct to be placed in the hands of the Commissioners as from 30th June next. The arrangement between the Government and the commercial agents terminates at the same time, the agents thenceforward acting for the Commissioners only. Continued success may be confidently anticipated.

#### LIVE-STOCK DIVISION.

The Live-stock Division, under the control of Mr. A. R. Young, M.R.C.V.S., with its extensive and varied responsibilities, has had a year of solid work, and the results must be looked upon as highly creditable to the staff.

*Stock Conditions generally.*—The more or less unsettled and unseasonable weather conditions which were experienced throughout the Dominion during practically the whole of the year under review militated somewhat against the condition of sheep and lambs intended for slaughter. Nevertheless, stock wintered well, thanks to a somewhat mild winter generally, and a good lambing resulted, the estimated Dominion percentage being 86·77 per cent., equal to 10,843,005 lambs, an increase of 575,095 over the previous year's actual results.

All classes of stock have, on the whole, continued in a satisfactory state of health, but it is regrettable to have to report that, as the result of an investigation into some deaths which took place on one farm in the Waikato district, the Dominion's long freedom from anthrax among its stock can no longer be asserted. While certain very peculiar circumstances have attached to the history of the cases in question, casting some doubt as to anthrax being the cause, the bacteriological examination seemed to be sufficiently conclusive to have the cause of death officially recorded as anthrax. Fortunately, the experience is an isolated one, and the Dominion has otherwise remained remarkably free from serious diseases. The maintenance of strict regulations ruling the entry of cattle from countries where these diseases are known to exist should enable this satisfactory state of affairs to continue.

*Animal-diseases.*—Blackleg: During the year an alteration was made in the districts comprised in the quarantine area in the Auckland District by putting Area A into Area B. This was done after very careful consideration of the question, and it was considered that the position as regards blackleg-control warranted this action. The results so far bear out the anticipation that control can be quite as well maintained under these new conditions as under those existing in the past, and with less inconvenience to the settlers and less cost to the Department. The inoculation of calves against the disease was continued within the boundaries of the areas in Taranaki and Auckland districts defined in the regulations. The vaccine used was, as in previous years, prepared in the Department's Veterinary Laboratory, and the results were entirely satisfactory.

Contagious mammitis: This disease is still giving considerable trouble in dairy herds throughout the Dominion, and the advice and assistance of the Department's officers has been much sought after. Unfortunately, however, before the cases are reported they are, in a large number of instances, in an advanced stage of the disease, and little help can be given. The District Superintendent, Dunedin, advises that he has met with some encouragement from outward applications of iodine and he proposes to further continue this treatment. Of 1,051 samples of milk received at the Veterinary Laboratory from cases of suspected contagious mammitis, 404, or 38 per cent., proved on examination to be of the contagious form; 218 were from cases of the non-contagious type; and the remainder (429) were normal. As previously reported, wrong handling of milking-machines is often responsible for setting up udder troubles, and also for the spread of contagious-mammitis infection. The necessity for the exercise of every care cannot be too strongly emphasized.