H.—29.

## SHEEP RETURNS.

The interim returns, to hand at the time of writing, show an increase of 1,877,637 head over the preceding year, bringing the total flocks up to an aggregate of 29,011,447. This is very satisfactory, and suggests that the increased carrying-capacity gained by top-dressing sheep-country, together with the great reduction of the rabbit pest, have been factors in bringing it about. There has also been a marked decrease in the number of sheep slaughtered, when the previous year's increase in the total number of sheep in the country is considered. Also, while lambs show an increase of 254,690 in the number slaughtered, this has to be considered in relation to the fact that the returns at the 30th April, 1928, showed an increase in breeding-ewes amounting to 702,321.

## FRUITGROWING AND HORTICULTURE.

The past year must be regarded as having been a satisfactory one for the fruit industry. The quantity of apples and pears exported in the 1928 season was greater than in any previous year, and payable market values were obtained for the bulk of the shipments, the call upon the Government guarantee proving very small—namely, £526. Fruitgrowers generally did their best to assist in ensuring that fruit of good quality, conforming to requirements, was sent forward for export, and while there were occasions when unavoidable delay occurred in securing shipment, the fruit, generally speaking, reached overseas markets in good condition. This matter of minimizing as far as possible the time elapsing between harvesting and grading fruit and placing it on board the overseas vessel constitutes an important factor in the success of the export trade. The industry has made a big advance towards establishing itself upon a basis of stability, and, given continued business-like management of its overseas trade, and progressive improvement in local marketing methods, its outlook is distinctly good, provided overproduction is guarded against.

The officers of the Horticulture Division have worked strenuously in carrying on their instructional activities among growers, also in conducting a considerable volume of experimental work, inspecting and grading export fruit, and generally taking their part in furthering the advancement and improvement of the industry. Citrus fruitgrowers have experienced a better year, and are reaping the benefit of improved practice in the curing and marketing of lemons.

An interesting feature of the year lies in the development of tobacco-culture. Already, a proportion of leaf of high quality is being produced, and improvement in the average standard of quality can be anticipated. With a still limited production, a good portion of the crop was purchased for manufacture in the Dominion. The ultimate success of tobacco-growing here, however, must depend mainly upon a stable overseas market being found for the surplus not required for our own internal use.

Grape-growing, both outdoor and under glass, is making steady progress, and where soil and climatic conditions are suitable the production of outdoor crops should be capable of some extension, as the markets in our centres of population appear to give paying returns to growers. The wine-making industry continues to develop satisfactorily, a good article of its type being produced.

Full details of the various activities of the Horticulture Division will be found in the Director's report.

## BEE-KEEPING.

This excellent minor industry has experienced an uneven season, with a total production below the average, but the quantity exported during the period under review (comprising most of the preceding season's heavy crop) constituted a record. That the marketing and advertising methods adopted in Great Britain are good is shown by the satisfactory prices obtained and the evidently high appreciation with which New Zealand honey is regarded there. The industry has been well served by the section of the Horticultural Division dealing with it.

## FARM ECONOMICS.

The major function of the Farm Economics Section of the Fields Division is the study of farm-management methods and the effect of different factors on production. It has shown quite conclusively that production per acre must be looked upon as the basic principle in dairy-farm management, and that to this end the number of cows milked on a given area is of relatively greater moment than individual cow records. The fact that production per acre is directly correlated with the amount of manure used as top-dressing has been proved; also that by understocking and heavy manuring it is possible to raise herd averages, but that if done deliberately the practice is unsound. Where labour is fully exploited, the amount available is also directly correlated with production. It has been shown that where the farm-labour organization has been upset by the introduction of extra cows into the herd farmers should raise more heifers for sale rather than employ additional labour on milking. The production efficiency of small farms has been clearly demonstrated, and likewise the soundness of expenditure on improvements on farms producing about 200 lb. of butterfat per acre.