5 H.—29.

The Farm Dairy Instruction service is giving good results. The cost is shared between dairy companies and the Department. The system is not yet in operation throughout the Dominion, but there is a general desire that it should become general, and be systematized in such a manner that each Instructor will carry out his work in a defined area irrespective of what dairy factories are drawing supplies from it. In principle this has much to commend it. The question of cost needs to be gone into thoroughly, seeing that if a Dominion scheme is established, and operated upon present lines, an additional charge upon the Consolidated Fund would be involved in order to provide the Government's share of the expenditure.

Herd-testing continues to progress, the number of cows under test showing an advance, according to the latest available figures. The allocation of the subsidy paid by the Government was placed in the hands of a small committee, which functioned quite satisfactorily. The gentlemen composing it deserve sincere thanks for their voluntary assistance, which was highly appreciated. Nearly the whole of the testing carried out under the more complete system known as the "group" system was done under the voluntarily established Herd Testing Federation. A few independent groups also operated. Further, a considerable number of cows were tested under the original association method, carried out through dairy factories, and in the case of some forty associations by officers of the Dairy Division. With a view to assisting in furthering the interests of the movement, a new central body has just been established, consisting of representatives of the Federation, the Dairy Board, Massey College, and the Department, whose function it is to direct the policy of the Federation and to control the expenditure of Government grants or subsidies.

The Certificate-of-Record Test continues to provide a useful service to breeders of purebred dairy stock, and entries for this test are now again distinctly on the ascendant. The Official Herd-test, also applicable to purebred stock, is progressing and extending.

The bacteriological work at Wallaceville Laboratory, well carried out by Mr. G. F. V. Morgan, has proved of great assistance to the Division, dealing as it does with current difficulties met with in factories by Instructors. It in no way clashes with the deeper research work in progress at Massey College, with which institution harmonious co-operation exists.

The Division's Inspectors in London have been active in carrying out their duties, and the information they provide is of great aid to the New Zealand staff in their work of assisting the industry in maintaining the quality of exported produce.

The Director of the Division, Mr. W. M. Singleton, is now making a visit to the United States, Canada, Great Britain, and the Continent of Europe, in order to gain first-hand information relating to our export trade and manufacturing methods. His keenness and earnestness of purpose will no doubt enable him to return with increased knowledge which will be of marked assistance towards the continued progress of the industry upon the best lines.

## ANIMAL HEALTH.

The influence of pasture conditions upon the health of sheep, particularly hoggets, was well illustrated in Canterbury during the 1928 late autumn and winter, when an unusual growth of late autumn feed (not influenced to any extent by top-dressing) occurred, and, as a result of the animals being unable to properly digest it and assimilate its nutritive elements, hoggets lost condition and became an easy prey to internal parasites—a heavy and (for Canterbury) quite unusual mortality occurring. In the present winter, with more normal conditions, very little trouble of this kind is being experienced in the South Island or in Auckland Province, but in Wellington Province, with a plentiful growth of autumn feed and a mild winter, extensive losses among hoggets are occurring where they are grazing on pastures carrying feed of too watery, indigestible, and unsuitable a nature for these young animals.

The top-dressing of pastures on the richer lowlands has an important bearing upon this, and it is evident that, as farming methods advance, live-stock management in the form of sound animal-husbandry methods becomes more and more necessary, especially perhaps with sheep, which thrive best upon short feed that is of not too "watery" a nature, and keep in the soundest health when they have to take plenty of exercise in order to obtain their daily ration. Stockowners not unnaturally in these days are sometimes prone to look to research to find easily applied methods of preventive treatment which will enable their stock to be kept in sound health under unsuitable and unfavourable natural conditions of pasture and climate, but this is expecting too much even of the advanced science of the present day. Science can and does help, but it cannot override the physiological conditions imposed by nature.

Other sheep troubles induced primarily by dietetic causes are ante-partum paralysis (so-called "sleeping-sickness") and extrusion of the vagina in ewes, and pulpy kidney in lambs. Of these the