H.—29.

Staggers in Cattle.—This is a condition which was seen in almost every district in the North Island in the late autumn on pastures where rye-grass predominates. It is manifested by a peculiar nervous condition with muscular inco-ordination. The District Superintendent, Wellington, remarks, "Investigation leads to the opinion that one of two factors influence its production—viz., either a toxin in the rye-grass itself, or a stage in the development of the ergot." With this opinion I agree. Investigation was carried out at Wallaceville with a view to estimating the cause, but so far the opportunity for carrying out research in this direction was limited by the short period of the duration of the trouble. Affected stock in most cases made a quick recovery when given a change of pasture or when the autumn rains brought on a new growth. This complaint is not a new one, it having been seen previously in various districts through the Dominion, and always under similar circumstances. A number of years may elapse before the combined circumstances are again such as will produce the conditions. On this account opportunities for further research into the cause of the disease must be limited. A change of feed or autumn rains speedily bring about a cessation of the symptoms.

Mortality due to Dietetic Causes.—A number of cases of impaction of the stomach in cattle occurred in several districts. This was due to the animals being compelled to exist on dry, innutritious feed, and on account of the dry season such conditions were somewhat prevalent. A number of these cases ended fatally before the owners realized the cause, but it is remarked by the Veterinarian at Stratford, "if taken in time the majority of cases yielded to treatment."

Cattle-tick.—An increase in the infestation of stock with cattle-tick is reported from the Whangarei, Tauranga, and Coromandel districts. With the exception of the foregoing, the indications from the remainder of the affected districts are that ticks are decreasing. In the infested area at Waitara the position this season is very satisfactory, only one tick having been found during the year. Indications at present point to the fact that there is every prospect of ticks being eradicated from this district. I regret to report, however, that a fresh outbreak occurred on a farm at Tataramaka, situated on the coast about twenty miles south of Waitara. Every precaution was taken to prevent the spread of the ticks, by spraying the stock, ploughing, and cutting and burning the scrub. As regards the Poverty Bay district, on farms situated from Tolaga Bay northwards, it may be mentioned that at a meeting of the settlers, convened by the Department, held at Tolaga Bay in January, arrangements were made to extend the area A boundary to a few miles south of Tolaga, while at the same time B boundary was extended to provide a good buffer area between the infected and clean country. Both sheep and cattle dips are in process of erection, and no stock will be permitted to leave the district without a permit. By this means it is hoped to protect clean areas from infection.

Ragwort Poisoning.—This is a condition which still exists in many districts, more particularly in Southland and the King-country. The deaths arising from this cause have assumed no great proportions on any one farm, yet if taken collectively they would amount to considerable proportions. The weed is poisonous to all classes of stock, and its control has become a matter of considerable difficulty on properties where it has obtained a hold. Probably the best method of control is by a judicious pasturing of sheep on the affected areas. Care, however, needs to be exercised to see that the sheep are not kept for too long a period on the infested pastures, otherwise mortality is sure to follow.

"Bush Sickness" or Soil-deficiency.—As stated in my last report, we have now reached the stage in farming this particular type of country where we are justified in looking for fairly satisfactory results. With judicious manuring and top-dressing, the growing of root crops and the saving of hay, together with the use of citrate of iron and ammonia as a curative agent when an animal becomes sick, or as a preventive, is practically all that is required for successful dairy-farming. This method of farming bush-sick country has met with a considerable amount of success; in fact, greater than was anticipated some years ago. Any ordinary intelligent farmer with a knowledge of this country could take over the Government farm at Mamaku and run it as a dairy farm with every prospect of his operations meeting with success. In the light of our experience, however, we are hardly yet justified in advising settlers to take up this land as a farming proposition. Personally, I would besitate before giving such advice, on account of the fact that too much capital and time would have to be spent in bringing the land into the condition where stock can be carried at a profit, and during this period the occupant has to live and spend more money than the soil produces. What is wanted is some cheap method whereby the land can be brought to a state where it will carry stock with a reasonable amount of success and afford the settler a living at the same time. It has been proved that the above-mentioned iron salt acts as a curative agent when cattle are suffering from bushsickness, but it has not been proved that the addition of iron salts to the soil will act as a preventive. It has been demonstrated that top-dressing with suitable phosphates will, in time, give fairly satisfactory results, but the process is too slow and costly for the average settler, who must get a living from the land. As stated previously, a cheap method is wanted, and if this can be attained by the aid of iron salts to the soil without the addition of phosphates, then a better future can be predicted for this bushsick country. Further experiments in this direction are being carried out.

SHEEP.

During the past season sheep have done exceptionally well throughout the North Island, and fat lambs have arrived at the various freezing-works in greater numbers than for some years past. It is claimed in the Auckland District that the season just ended has been one of the best experienced so far, and fat-lamb buyers report that they have been able to buy better-finished lambs than usual. This is accounted for by the dry season experienced in the North, which suited sheep. At shearing time the ewes were noticed to be in first-class condition, which enabled them to bring a large percentage