

especially young animals. Top-dressing has proved of great assistance in this where it is practicable to carry it out, and for this purpose phosphatic manures are most generally useful, though cases have occurred where lime has been needed.

In connection with dairy cattle, a carefully planned experiment has been conducted in the feeding of concentrates in conjunction with pasture grazing, and this is being carried on into another season in order that results may be as certain as possible. Dairy-farmers now adopt much better feeding-methods than was the case a few years back, winter feed in the form of roots, hay, or ensilage being more generally provided, with good effect as regards the health of cows, and their productivity when they come into profit. At the same time, there is room for an extension of the Department's activities in the direction of animal husbandry as applied to dairy cattle as well as other farm stock, and proposals for this are under consideration.

The further increase in the number of sheep in the Dominion is satisfactory, and breeders and large flockowners are fully alive to the necessity for maintaining a high standard of quality in their sheep and improving it. The amount of land-subdivision which has taken place of late years has brought into being a number of owners of small flocks, many with insufficient experience of sheep-farming, and in connection with these there is considerable room for improvement, particularly in the methods of breeding and management adopted. Too many inferior rams are used and the fat-lamb trade, combined with the poor market at present for fat ewes, tends to induce the keeping of old ewes longer than is desirable.

Considerable stimulus has been given to pig-keeping by the efforts made to develop an export trade in pork. The natural line of extension is among the dairying community, who have dairy-factory by-products available for pig-feeding. But the conditions existing as regards supplementary foods create difficulties, seeing that the South Island is the principal grain-producing district, while the greater bulk of the Dominion's dairying is carried out in the North Island; and the costs involved by carriage and handling during transit from the South Island farm to the North Island dairy farm are sufficiently heavy to hamper the development of pig-keeping on up-to-date and profitable lines in the large dairying districts. How this difficulty can be overcome constitutes a distinct problem.

ANIMAL-DISEASE.

Cattle.

The Dominion's freedom from really serious animal-disease has been fully maintained; moreover, those diseases which do exist have been distinctly less troublesome, though still demanding the closest attention from all points of view.

Stringent precautions against the risk of the introduction of foot-and-mouth disease have been continued—in fact, they have been strengthened—and the manner in which farmers and the commercial community have supported these restrictions is highly appreciated.

The gradual decline noted in last year's report in the number of cases of tuberculosis found in cattle and pigs has been continued, a further small decrease being recorded.

A group of dairy-cow diseases—contagious abortion, failure of conception, and contagious mammitis—have been given special attention by the Department. These cause much loss to dairy-farmers, who naturally feel badly lacking in specific and reliable remedies for them. All are troublesome to combat, and here, as in all other countries, much has yet to be learned regarding the best methods for overcoming them. As regards contagious abortion, vaccine treatment has been tried to some extent in New Zealand, though to a much greater extent in the United Kingdom and other countries, but it cannot be said to have proved sufficiently satisfactory to warrant its adoption as a reliable form of treatment. In the 1926 annual report of the Royal Agricultural Society of England Sir J. McFadyean, who may be regarded as the highest veterinary authority there, states that "it must be confessed that more evidence is required regarding the practical value of inoculation, and that in many cases conclusions in its favour have not been justified by the facts."

The Department, in addition to its other investigational work, is now testing a form of vaccine treatment different from any hitherto tried in the United Kingdom, which is reputed to have given promising results in Rhodesia. Other control methods advised in Great Britain are already in use by the Department in New Zealand. They are valuable up to a point, but they do not provide what is really needed. Information regarding these will be found in the Veterinary Laboratory section of the Live-stock Division's report.

As regards failure of conception, a considerable volume of investigation work has been done, and consequent upon the fact that in many cases an inflammatory condition of the cervix (the opening