Dairy-factory Managers Registration Board.

The Dairy-factory Managers Registration Board, which consists of eight members and which was set up to administer the Dairy-factory Managers Regulations, held four meetings during the year. In all, 596 applications for certificates were dealt with, of which 590 were granted certificates, 554 of these being renewals from the previous year and thirty-six new registrations. The balance of six were declined registration.

A further amendment to the regulations, known as Amendment No. 2, dealing mainly with qualifications necessary for applicants to be successful in being certificated as a Creamery and/or Cheese Factory Manager, was gazetted on 5th December, 1935.

Inspection of New Zealand Dairy-produce in Britain.

The examination of butter and cheese on its arrival in Britain has been carried out as in the past by Messrs. F. H. Taylor and G. V. Were, assisted during a portion of the year by Mr. C. C. Robertson, formerly Dairy-produce Grader in charge at New Plymouth. That these officers have had an extremely busy time is demonstrated by the exceptionally large number of quality reports received by the Division for distribution to the dairy companies concerned. The value of these reports as a means of keeping dairy companies in close touch with the quality and condition of the produce as it reaches the selling market is greatly appreciated by the producers.

Dairy Laboratory, Wallaceville.

The work carried out at the Division's Laboratory at Wallaceville has been continued under the direction of Dr. G. M. Moir, Dairy Chemist.

As in previous years, a feature of the work has been the examination of starters in use in cheese-factories throughout the Dominion. In many cases better equipment and more careful handling have enabled starters to be kept in better condition. In some factories, however, either the equipment or the personal element, or both, still leave a great deal to be desired. While the most recent researches suggest that contamination may not have quite as important a bearing as was formerly thought upon the sudden failure of good starters, a few simple precautions easily enable a man to keep his starter in the clean condition which is desirable. The presence or absence of foreign germs in the starter is therefore some indication of the general interest and care which a manager takes in maintaining his starter in the best possible condition.

A small number of starters from butter-factories have been examined, but in most cases these have not been in the best condition. If the practice of using a little starter to make the best butter is to be extended, butter-makers will need to learn to take more care of their starters, and to this end they should be provided with much better facilities for the purpose. A simple test has been successfully used to indicate the amount of the desirable butter-flavour substance (diacetyl) present in starters. One starter which gave a very good result by this test has been cultured and supplied at the request of the Division's Butter Instructor to a number of his factories, and very satisfactory reports have been received upon the butter made with it.

Since the beginning of the summer samples of butter for bacteriological testing have been regularly received from the Dairy-produce Grader at Auckland. Simple methods have been developed whereby some idea can be formed of the numbers and undesirable types of germs present. Lower-grade butters have predominated, and in an appreciable proportion of these the bacteriological quality has not been satisfactory. A number of samples of finest butter were similarly tested, and some of these were found to be of satisfactory bacterial content, while others were not so good. Further investigations are necessary to determine the importance of certain undesirable germs which might later affect the quality of finest butter. Although it is not to be expected that all butter defects are of bacterial origin, there is a sufficient amount of lower-grade butter manufactured to warrant larger numbers of these tests being made to investigate defects which may be due to excessive numbers or bad types of germs.

The testing of butter for alkalinity has been continued, chiefly in collaboration with the Auckland grading store, for the purpose of checking the neutralizing of the cream. In some factories insufficient care is given to this operation, while in others excessive amounts of neutralizer are used. The increasing tendency to use starter in butter made from the best cream may lead to the development of an acidity which, though not excessive, may border on that which is likely to affect the keeping-quality. Closer control of butter alkalinity and acidity seems, therefore, desirable.

As in the past years, a variety of other dairy-produce samples have been tested for various purposes. A considerable number of water-samples from factories have been examined, and recommendations made for improvement or treatment where necessary. Further work of this nature is especially desirable to ensure the purity of water used for butter-washing purposes.

Certificate-of-record Testing.

Statistics relating to C.O.R. testing for the calendar year 1935 indicate a marked falling-off in the number of first-class certificates issued, the figure for the year under review being 554, as compared with 639 in 1934, a decrease of 85. Of the 554 certificates issued in 1935, 450 were in the yearly-test division and the remaining 104 in the 305-day division, as against 536 and 103 respectively for the preceding season. Twenty-nine second-class certificates were also issued in 1935, as compared with 41 for 1934.

Third-class C.O.R. certificates issued during 1935 totalled 140, as against 212 for the preceding season, a decrease of 72. The third-class certificate is of fairly recent origin, having been in existence for the three last seasons.

The average butterfat-production for the 450 first-class yearly certificates issued in 1935 was 516·30 lb., as against 527·45 lb. for 1934, a decrease of 11·15 lb. butterfat per cow. The 104 first-class 305-day division certificates issued averaged 417·76 lb. butterfat, compared with 426·23 lb. for 1934, a decrease of 8·47 lb. butterfat per cow.