

TESTING BUTTER AND CHEESE FOR MOISTURE, ETC.

During the year 156,967 churnings of butter were tested for water content, the average percentage of water being 15·32, as compared with 15·29 for the previous year. Churnings over the legal limit of 16 per cent. amounted to 0·5 per cent., and these were returned to the factories to be reworked with drier butter. The standardization of milk for cheesemaking has necessitated the testing of each vat of standardized cheese for moisture, fat, and other solids, and during the year 95,399 vats were tested in order to ensure that no cheese of this class was exported containing less than 50 per cent. of fat in the dry matter. An extra grading fee of 1d. per crate on standardized cheese is payable for this service, to cover the additional cost involved.

CREAM-GRADING.

The compulsory grading of cream has now become firmly established, and cream-graders, on the whole, are endeavouring to closely adhere to the standards set by the Division for "Finest," "First," and "Second" grades. The wisdom of this method of general grading is amply demonstrated by the uniformly high standard of quality of the butter manufactured during the year.

FARM-DAIRY INSTRUCTION.

It is regretted that farm-dairy instruction on a national basis, as generally desired by the majority of dairy companies, has not yet come into operation. The improvement in the quality of the milk and cream supplied during the year to those dairy companies co-operating with the Department in the employment of the 38 Farm Dairy Instructors at present engaged in this service has been freely commented upon, and has been amply reflected in the improved quality of the produce manufactured therefrom. It is to be hoped, therefore, that during the coming session of Parliament the necessary legislation will be enacted to enable the system to be made operative throughout all the dairy districts of the Dominion.

CHECK TESTING OF SUPPLIERS' MILK AND CREAM SAMPLES AND CHECK TESTING OF CREAM AT DAIRY FACTORIES.

The check testing of milk and cream samples at dairy factories for content of butterfat has been continued during the year by the two officers detailed for this purpose, and their reports indicate that at the majority of the factories visited the testing is carried out in an efficient manner. A few irregularities, due principally to poor equipment, came under notice, but these in most instances have since been rectified. In order that the scope of this work may be extended it has been arranged that the Butter and Cheese Instructors should assist as opportunity offers. The officers have also assisted in the work of check grading of cream supplied to dairy companies.

INSPECTION OF MILKING-MACHINES.

Special attention has been given to the inspection of new and renovated milking-plants installed during the year. This service is much appreciated by both the users and the makers and their agents. Little or no difficulty has arisen in connection with the enforcement of the regulations bearing on this matter.

DAIRY BACTERIOLOGY SECTION.

The work carried out at Wallaceville Laboratory under the direction of Mr. G. F. V. Morgan, N.D.A., N.D.D., Dairy Bacteriologist, is proving of increasing value and importance in connection with the activities of the instructional staff pertaining to the production of reliable quality milk products. The regular routine work undertaken includes the bacteriological examination of samples of milk, cream, butter, cheese, starters, and waters, and also other materials used in the manufacture of butter and cheese. Attention has also been given to matters referred to the laboratory by instructors, including various types of discoloration found in cheese; peanut flavour in butter, slow acid milk, the steam sterilization of milking-machines and rubberware, and visits have been made to a number of dairy factories for the purpose of making bacteriological examinations of the plants. Visits have also been made to dairy-farms in connection with the working of milking-machines and the supply of milk and cream to factories. Special investigational work has been carried out with respect to types of yeasts in salted and unsalted butter. The facilities installed last year for making small experimental lots of butter and cheese have proved a useful acquisition to the equipment.

INSPECTION OF NEW ZEALAND DAIRY-PRODUCE IN BRITAIN.

This work, as in the past, has been carried out by Messrs. W. Wright and A. C. Ross, who have had an exceptionally busy year. The principal duties of these officers is to examine the produce on arrival in Britain and furnish the Division with detailed reports on the quality and condition at time of examination. These reports, which are of great value in checking the grading at this end, are in turn forwarded to the dairy companies concerned for the information of the various directorates. Mr. Ross is returning to the Dominion before the commencement of the coming season, and arrangements are being made to send another officer of the Division in his place.