## CREAMERY BUTTER.

The system of separating milk on the farms has shown a further extension during the year, and there are now few butter-factories in New Zealand which are not receiving supplies of home-separated cream. As the delivery of this cream is accepted every second day by the majority of the dairy companies—and in some cases delivery extends to a longer period—the quality of the butter made therefrom does not come up to the higher standard of butter made at a factory where whole-milk is received daily. At the same time there has been some improvement during the year in the butter made from cream which has been separated on the farms. Some of this improvement is no doubt due to the method of grading cream which has been adopted by a number of the dairy companies, and more especially where a lower price is paid for the cream which does not come up to the highest grade. This has the effect of inducing the dairy-farmer to take great care in the handling of his cream, and an extension of the system of grading is required in order that the improvement in the quality of the butter made may continue.

In the case of those dairy companies that have adhered to the method of skimming the milk at their own factories or skimming-stations what may be termed a fancy butter has been made during the year, and this product has been, and will continue to be, in greater demand than that made under the system of home separation. It would be well, however, for the producers of butter in New Zealand to seriously consider the question of improving their cream-supplies by a stricter method of supervision on the farms—greater cleanliness in regard to the utensils used

and the cooling of the cream, together with a more frequent delivery to the factory.

## WHEY BUTTER.

The skimming of whey for the recovery of the butter-fat contained in this liquid has now become general among the cheese-factories. Therefore the quantity of whey butter made shows an increase on the figures of last year. Altogether, 25,796 boxes of whey butter came forward for grading, as compared with 16,825 boxes in the preceding year.

With the exception of the produce from a few of the factories the quality of the whey butter has been of low grade, and much of it very inferior. This inferiority is due mainly to the lack of care and interest taken on the part of those who are responsible for the manufacture. It is difficult to understand why directors of dairy companies do not insist upon their employees devoting closer attention to this branch of the work, because a well-made whey butter is of higher value and more readily disposed of than that which is poorly made or defective in flavour. At those factories where the managers take a keen interest in turning out a good article the quality of the whey butter leaves little or nothing to be desired; in fact, some of it is equal to that of the creamery standard.

The regulation providing for the proper branding of whey butter has been closely observed during the season, and in no case has the Division found it necessary to take proceedings against

dairy companies for any irregularity in this connection.

## MOISTURE IN BUTTER.

In order to guard against the sale and export of butter containing a percentage of moisture above the legal standard of 16 per cent., samples were taken from a large number of the consignments arriving at the various grading-stores. A preliminary test of these samples was then made by the Graders, and in all butter where an excess of moisture was detected additional samples were sent under seal by registered post or delivered by hand to the Department's Chemist for analysis. Almost invariably the preliminary test by the Grader was confirmed. The manufacturer of such butter was given the opportunity of receiving a sample for an independent analysis if desired. The penalty for the offence was prosecution followed by a fine, or the butter was treated to reduce the water content, under the supervision of the Grader at the owner's expense. As a result of this action on the part of the Government buttermakers are now extremely careful in regulating the amount of moisture in butter. Consequently prosecutions for this offence are seldom found necessary. The average moisture-content of all the samples taken during the year was 14.62 per cent.

## QUALITY OF CHEESE.

Owing to the partial dislocation of the dairy industry on account of the war, dairy companies, factory-proprietors, and factory-managers have had to contend with many disadvantages in carrying on the manufacture of cheese during the year. Amongst those disadvantages may be mentioned a large quantity of faulty milk to handle, the employment of a larger number of inexperienced men in the factories than usual, a shortage in the supply of rennet, accumulation

of cheese stocks in the factories, and a shortage of timber for the making of cheese-crates.

Under these circumstances it was feared that the quality of the cheese generally would at least be below the usual standard; but, fortunately for the industry, this fear has not been realized. Strange to say, exactly the opposite has occurred. In the reports received from the Dairy-produce Graders mention is made of a considerable improvement in the season's cheese as

compared with that of last year.

The Instructors of the Division also report that cheese of better quality has been produced in the different districts this year, and these opinions are confirmed after an examination of a considerable quantity of the cheese by the Assistant Director of the Division and the writer. There is therefore conclusive proof that special efforts have been made by many of the cheesemakers to overcome the disadvantages referred to above, and that these efforts have been in a measure successful. The greater part of the average improvement has been due to the system of pasteurization; but as regards individual factory outputs it has to be admitted that much cheese of indifferent quality has been made. In many such cases the flavour of the cheese was