Moisture and Salt in Butter.—The same high degree of skill in butter-manufacture continues to be exercised and average moisture contents of 15·7 per cent. to 15·8 per cent. are common.

The salt content of butters ranges from approximately 1·3 per cent. to 1·5 per cent. Where there is an increase above 1·5 per cent., a tendency to bitterness has been noted. With the exception of those cases where spotted colour was evident, salting has generally been satisfactory.

Quality and Grading of Cream.—The general quality of cream received at creameries was sounder than last year and could be further improved if more attention were given to cooling immediately after separation. The importance of this is being continually stressed by field officers, and in many instances where trouble has been experienced with quality the adoption of cooling has resulted in a higher grade.

A correct standard of grading is generally recognized as being in the interests of butter quality, and at most creameries the standard set by Dairy Instructors is being observed. There are, however, exceptions in those areas where there is competition for supply.

In those districts some companies are reluctant to adhere to the standard set and resort to lenient grading. In such cases frequent checks on the standard of grading are made by officers of the Division to ensure that it is uniform between dairy companies.

Dairy-factory Staffing.—The staff position at the majority of creameries can now be considered serious. As very few young assistants are entering the industry, an increasing number of unskilled workers have to be engaged. The trend is anything but satisfactory and a solution of the problem has yet to be discovered.

Cheese Instruction

Starters.—With the exception of Canterbury and Otago, where most factories use mixed-strain starters, practically all cheese-factories throughout the Dominion are using single-strain cultures mainly run on the rotational system.

Though a good deal of success has been achieved in the running of these starters because of the improved apparatus and more careful technique, there is still much to be learnt about the keeping of these cultures active, as none of the systems yet evolved can be claimed to be perfect.

During the season there has been some trouble in every district with dead vats and thin starters. This is to be regretted, as the resultant cheese can be described only as very poor and in most cases fit only for processing. The first few seasons when single-strain starters were used there was no doubt they did assist in the manufacture of a closer cheese in a shorter time, but the feeling is now growing among managers that these starters are not as vigorous as they were and that it is more difficult to make as close a cheese as previously.

Starter failures have been more common in Southland this season, and managers now find that where it was possible to keep one single-strain culture going indefinitely they have to run eight starters on the rotational system to try to avoid trouble.

Penicillin.—A number of managers think that the extensive use of penicillin by suppliers may be a factor in accentuating the problem of dead vats and thin starters. To obtain information on this, Cheese Instructors were circularized during December, and in Taranaki and Southland some evidence was disclosed which substantiated the contention that penicillin was responsible in a few cases for the acid slowing up in the vats. In Waikato, Manawatu, Wairarapa, Canterbury, and Otago no direct evidence could be produced that the use of penicillin had been the cause of either dead vats or failing starters. However, unless milk from cows under treatment is kept out of the cans for forty-eight hours there is a definite danger that the starter and acid development in the vats will be affected by the use of this drug.