H-29 36

Spotted and streaky colour was evident at times in some brands, but to a much lesser extent than in the previous year. It is considered that this improvement is the result of more careful attention to manufacturing detail, including control of temperatures.

Cream Grading.—A tendency to grade cream to a lenient standard is still evident, and is especially noticeable in areas where competition for supply exists; the checking of grading at these factories requires continued and close attention. Following complaints of easy grading, firm action was necessary at one factory. Since then an improvement has been evident.

Cream quality generally has shown an improvement, partly because of a favourable season with less evidence of feed flavours and partly because of more efficient farm-dairy instruction.

Dairy-factory Staffing.—This has not been without its problems, especially where married quarters have not been provided. For the retention of a good staff, the provision of suitable married quarters is now more than ever necessary. Dairy companies have realized this and are making every endeavour to provide suitable housing, which, with present shortages, is not easy. However, the staff position is improving.

Detergents.—The shortage of suitable detergents has caused a good deal of inconvenience on dairy farms and in factories. Caustic soda is used extensively in cleaning operations, and though some success has been achieved with the use of proprietary mixtures as substitutes the general opinion is that there is nothing to equal caustic soda for certain operations, such as cleaning milking-machines and portions of factory equipment.

## CHEESE INSTRUCTION

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

No serious starter failures were experienced during the season under review. That, it is believed, can be attributed not only to better facilities for keeping single strains active, but principally to the rotational use of these starters plus careful technique on the part of the operator.

While most factories in south Taranaki are using the Jones starter apparatus and with some success, equally good results are being obtained in other districts where different starter outfits are in use.

There appears to be no doubt that single-strain starters assist managers to make a closer cheese in a shorter time than can be done with commercial starters, but it is questionable whether the right characteristics of the Cheddar flavour are imparted to cheese by the use of these cultures.

Manufacturing Methods.—In general, methods of manufacture at the majority of factories are on sound lines, but many managers do not appear to realize that one of the main essentials in making good Cheddar cheese is that the curd must be well cooked and firmed up in the last of the whey. That applies more particularly to most of the factories in the South Island, where dry stirring is still relied on to get the right degree of firmness.

The importance of the efficient control of such details as pasteurizing, setting, cooking, and hooping temperatures, and cutting, drying, and cheddaring the curd, has been constantly stressed. Pasteurizing temperatures at most factories in the North Island vary from 150 degrees to 160 degrees. The higher temperature is used at most factories in the Waikato, while in Taranaki 150 degrees to 155 degrees appears to be the popular temperature for pasteurizing. In Southland the temperature has been lowered this season at most factories, and it is understood that they are now pasteurizing