

CHEESE INDUSTRY.

The number of cheese-factories in the Dominion now totals 390. Of this number 260 are located in the North Island and 130 in the South Island.

Arrangements have already been made for the building of several additional factories in time for the opening of next season. In addition to this extension it has been found necessary to enlarge a number of the existing factories in order that the owners may be in a position to cope with a larger quantity of milk in the almost immediate future.

For some time past dairy companies, as a general rule, have decided to provide buildings of brick or concrete where new premises have been required, and during the year some splendid factories of this nature have been completed, practically all of which have been designed after consultation with one or more of the Division's Instructors.

When the separation of whey was first commended for the recovery of butter-fat lost in the process of cheesemaking it was the common practice to install large whey-tanks lined with tinned steel to hold the whey prior to its being skimmed, but as these tanks have to be placed below the floor-level of the factory it was found that many of them leaked and became insanitary, and subsequently had to be condemned. To get over this difficulty recourse was had to the building of suitable concrete tanks and lining them with white glazed tiles closely cemented together. Where properly constructed these tanks have proved very satisfactory for the purpose. Quite a number of these receptacles were installed during the year; also tiled drains for conveying the whey to the tanks.

Frequent inspection of the majority of the cheese-factories during the season disclosed the fact that only a small number were not filling the requirements as regards approved sanitation, and in these cases the owners were called upon to make the needed alterations without delay.

In contrast to the decrease in the quantity of butter manufactured for the year, it is pleasing to be able to record a further development in the production of cheese. The total quantity of this produce received for shipment amounted to 1,144,190 cwt., being an increase of 9·8 per cent. over that for the same period of the preceding season.

Quality of Cheese.

Since the introduction of the system of pasteurization, as applied to the manufacture of cheese, became more general amongst the factories there has been a noticeable improvement in the quality of the finished product. This has been more apparent when the produce has been held in store for a long period, necessitated by the continued shortage of shipping-space brought about as the result of war conditions. Many of the factories formerly making cheese of indifferent quality have been successful in raising the standard of the produce to an unexpected degree, maintaining a much more uniform quality from day to day than ever before. It is estimated that 29,000 tons of cheese have been made from pasteurized milk for the year; and, while all factories have not been successful in doing good work by means of this process, it can be said that where every attention has been paid to the details of the method as laid down by the Instructors of the Division good marketable cheese of the highest grade has been made.

The season now closed was exceptionally favourable for the production of cheese of good quality up to the end of December, but from then onwards there was a marked falling-off in this respect, owing to the effect of the warmer weather on the condition of the milk as received at the factories, more particularly at those situated in the North Island. Many of the consignments of cheese which subsequently came forward for grading were of lower quality, showing irregularity in flavour as well as in body and texture. In some instances the cheese were poorly made, being open and loose in body. Others were showing over-acidity, while some were faulty in the opposite direction. The produce from factories here and there gave the impression that the makers were doing their utmost to obtain the highest possible yield from a given quantity of milk, irrespective of the effect upon the quality of the cheese. Such a procedure is, of course, very harmful not only to the factory concerned, but to the New Zealand cheese industry as a whole, because no buyer is satisfied with the purchase of cheese of this class.

The experience of the year has again emphasized the need for further improvement in the cheese from many of the factories. At some of these the milk received has not been carefully handled on the farms, thereby giving rise to flavours of an objectionable nature in the produce. More care, or a wider knowledge of the process of manufacture, is also required on the part of a number of the men in charge of this class of work.

Packing and Finish of Cheese.

While, generally speaking, the packing of cheese for the oversea market has been all that could be desired, it is to be regretted that there has been a considerable laxity in this respect on the part of a section of those engaged in the industry. On several occasions factory-managers have not carried out the terms of sale to the Imperial Government, by persistently packing the cheese before it had been on the shelves for the fourteen days specified in the contract of sale. It was found that the only remedy for this omission was to refuse to accept such consignments on behalf of the Imperial Government.

Another practice frequently noticed was the overfilling of the cheese-hoops, thus making the cheese too large for the crate used, and leaving no room for air-circulation or even the insertion of the necessary scale-boards. In such cases the ordinary battens used were of insufficient length, resulting in the weakening of the crate. Here, again, it was found necessary to refuse acceptance of these consignments until the packing was properly attended to.

Roughness in the finish of many cheese was not uncommon, due to carelessness in bandaging and dressing the cheese prior to removal from the hoops. This neglect carried the penalty of a loss in points under the heading of "Finish."