

A major change in routine was the preparation of monthly Government official herd test returns by testing officers and their checking and issue in the Department's offices at Palmerston North and Hamilton. It is too early to say whether the change has increased efficiency, but the arrangement has enabled the monthly official herd test returns to be brought up to date. The relief to Head Office clerical staff has in turn enabled C.O.R. returns to be brought almost up to date.

A start has been made on a lifetime production merit service for cows. This has long been needed and the introduction of the service has been commended by breeders. It should assist to maintain and possibly increase membership. Requests for a sire survey service continue to be received, and this service should be introduced as soon as there is sufficient staff.

NEW BUTTERMILKING PROCESSES

The trial with the Alfa continuous buttermilking unit which was begun in the Waharoa branch of the New Zealand Co-operative Dairy Co., Ltd., in October, 1947, was continued until February of this year.

The Buttermilking Processes Committee, which is representative of dairy organizations, was in control of the investigations throughout the trial, and the Technical Subcommittee continued direct supervision of the investigation on behalf of the Buttermilking Processes Committee. Nearly all the cream used in the trial was vacuum-pasteurized, and because of the dilution which occurs with this method it was seldom found possible during the winter and spring to manufacture butter of legal composition because of moisture-control difficulties. It was also found that where the moisture content of heavy cream was reduced below 16 per cent. by the concentrator there was a drift in the moisture content of the cream which at times amounted to a variation of more than 1 per cent. moisture in the butter. In an endeavour to overcome the difficulties of moisture control, various adjustments to the concentrator were made, one of which was to reduce the throughput of cream treated to the minimum, but even this did not have the desired effect. Three shipments, each of 20 tons, of Alfa butter have been sent to London, and reports received from officers of the Dairy Division there and others associated with the trade indicate that because of the difference in body character from standard butter and a tendency to become oily in warm weather it does not compare favourably with butter manufactured by the orthodox churning process. The body of the butter, on examination in Britain, was in a shattered condition and it separated in layers as the parchment paper in which it was wrapped was being removed for inspection. Butter in that condition is unsatisfactory for patting and, besides the detraction from its general appearance, handling difficulties are increased.

The quality of fresh Alfa butter is considered less attractive than that of churned butter, and the keeping-quality appears inferior to that of standard butter.

The yield of Alfa butter, because of the lower percentage fat loss and higher curd content, is somewhat higher than that of churned butter, but this does not apply when washing of churned butter in granular form is omitted.

In manufacturing-costs the process appears to have little saving to offer in power, refrigeration, or labour. At 31st March all phases of the Alfa trial were completed and the plant was dismantled and stored. The Buttermilking Processes Committee will later consider whether further tests will be conducted or the whole trial concluded.

The Senn machine, which was expected from Switzerland last spring, has not yet arrived, and delivery has been deferred until tests now being made have proved its efficiency.

MILK POWDER AND PROCESSED MILK

As indicated in this report last year, a number of butter-manufacturing companies were displaying an interest in buttermilk powder and skim powder made by the roller process.