

One professional officer and four technical assistants and technicians were appointed during the year, and one technical assistant resigned. Two of the appointees are Estonians who came to New Zealand with the first party of displaced persons. They have settled down very well and are performing extremely useful work.

ANALYTICAL TESTS.

pH Testing.—During the year 5,063 tests were made, compared with 5,992 of the previous year, a decrease of 929. The testing was done at nine grading-stores, and the number of tests for each was as follows : Auckland, 2,694, Wellington, 659, Patea, 310, New Plymouth, 820, Wanganui, 187, Lyttelton, 292, Gisborne, 67, Napier, 16, Bluff, 18. The purpose of these tests is to reveal any tendency toward over-neutralization which would impart a flat or alkaline flavour to butter.

Bacteriological and Chemical.—The number of samples from the various grading-stores submitted to chemical and bacteriological examination was as follows : Auckland, 2,677, Gisborne, 200, Lyttelton, 468, Patea, 308, New Plymouth, 820, Wellington, 825, Wanganui, 160, Napier, 16, making a total of 5,474, compared with 6,145 for the previous year. As in the past, all samples from ports other than Auckland were forwarded to the Division's Dairy Laboratory at Wallaceville for examination.

Moisture.—Some 127,882 churnings of butter were tested for moisture, and of these only 0.22 per cent. was found to exceed the legal limit of 16 per cent. Churnings tested during the previous year totalled 120,999, of which 0.24 per cent. was found to be too moist. The average moisture content of New Zealand butter graded for export during the past season is estimated to have been 15.668 per cent. This is a most satisfactory achievement and reflects credit on buttermakers for the skill exercised in the operation of manufacturing equipment.

Salt.—Samples of butter tested for salt totalled 125,608, of which only 0.06 per cent. failed to comply with the regulations. For the previous year 119,879 samples were tested, 0.06 per cent. being found to infringe the regulations.

FARM DAIRY INSTRUCTION

Visits of inspection and instruction to supplying dairies made by Farm Dairy Instructors during the year totalled 122,028, an average of 1,584 visits per officer.

The classification of milking-sheds was 13.8 per cent. good, 54.9 per cent. fair, and 31.2 per cent. bad. The percentage of milking-machines classified as good was 18.9, with 54.2 as fair, and 26.9 as bad. It is obvious from these figures that there is ample scope for improvement in the sanitary conditions at many dairies. New milking-sheds erected during the year totalled 1,232, and the number substantially reconditioned was 929, compared with 1,141 and 838 respectively for the previous year.

The amount of cement available for milking-shed improvements has again been inadequate and after requirements of new sheds have been met there has been very little left for repairs and renovations to existing sheds, which, if completed, would help in improving and maintaining the standards of sanitation at supplying dairies.

The issue of priority certificates for structural and repair work regarded as urgent by departmental officers is being continued, as this is considered to be the most effective means of ensuring that cement allocated to the dairy industry is utilized to the best advantage.

Galvanized piping for the conveyance of water to new milking-sheds is also in short supply ; consequently the quality of milk and cream has suffered in those dairies where the supply of water has been inadequate for efficient cooling and cleaning purposes.

Caustic soda, which is used extensively for the cleaning of milking-machines and dairy utensils, is now more plentiful and is rapidly displacing detergents that were used as substitutes during the time that it was in short supply.