During the summer of 1944 the assistance of the Dairy Chemist was asked for in connection with experiments on the preservation of butter-milk curd for pig-feeding. After preliminary of servations a series of trials was begun at the pig-farm operated by the Public Works Department in conjunction with the Japanese prisoner camp at Featherston. These trials have been controlled by an extensive series of chemical analyses which have yielded some very useful information. No difficulty has been experienced in preserving buttermilk curd for several months, even when the conditions of storage have been varied somewhat. The method is essentially a cheesemaking process, although it differs appreciably from what is used in a cheese-factory. These trials will shortly be concluded, and as soon as possible a report will be prepared to provide the necessary information to farmers who may wish to store curd made from either buttermilk or skim-milk.

Bacteriological.—The total number of bacteriological samples shows a slight increase, and the great majority of these (3,400) were butter samples examined to provide the Instructors with an indication of the hygienic conditions in the factories.

Only very few water samples from dairy factories have been examined, but it is hoped when time permits to devote much more attention to a much-needed survey of this matter.

Unfortunately, only a very few starters from cheese-factories have been examined for bacterial contamination. In place of this work it was necessary to undertake the chemical analysis already mentioned in connection with curd-preserving trials.

In connection with town-milk supplies, the Central Milk Council requested the Dairy Chemist to be appointed to an advisory committee on town-milk quality, and this led to his services being asked for to make a survey of the laboratory facilities available in the four principal towns for systematic routine testing of town-milk supplies. To do this a considerable amount of time was taken up in visiting the four principal centres and in preparing a report.

MARKET MILK

Following the decision that the Dairy Division should assume control of market-milk treatment, plans are being formulated to set up a Market Milk Section of the Division. The objective is to provide for the market-milk trade, where milk for liquid consumption is treated, a service similar to that already in force in relation to the butter and cheese industry. This will necessitate a small increase in personnel at the commencement and a wider scope of duties for the existing butter and cheese instructional staff.

CERTIFICATE-OF-RECORD AND GOVERNMENT OFFICIAL HERD-TESTING

The testing service to breeders of pedigree dairy cattle has continued to receive increased support. In fact, the number of applications received has grown so rapidly that, because of the shortage of locomotion and suitable staff, it has been difficult to avoid declining acceptance of a number of entries. The staff position, however, shows signs of easing, and in recent months several additional Testing Officers have been appointed. Much credit is due to Farm Dairy Instructors, who, in their own time and often at some inconvenience, have during the war carried out the testing for a large number of breeders. A number of Farm Dairy Instructors are still doing testing-work, but as sufficient testing staff becomes available the work is gradually being taken out of their hands, though they will still be required to assist by carrying out the testing for breeders situated in isolated localities. There are at present four women Testing Officers on the staff and they are doing very satisfactory work.

First-class certificates of record issued during the calendar year 1945 numbered 798, as compared with 674 in 1944. In addition, 151 second-class certificates were issued. Of the cows which received first-class certificates, 484 were in the yearly division and the remaining 314 in the 305-day division, average production being 526-58 lb. and 440-60 lb.