

*Packages.*—A well-seasoned white-pine butter-box is still regarded as the best container for butter arriving in this country from any source. Our best fibre cartons and Saranac package may be described as reasonably good substitutes for the white-pine box. The Saranac package constructed with wooden ends and fibre surround is preferred by packers and blenders to the fibre carton on account of its more robust stability, which makes it more useful for repacking with pat butter.

### DAIRY FACTORY MANAGERS' REGISTRATION BOARD

For some years the number of new applications for registration has remained fairly constant at between 40 and 50 a year. The number dealt with by the Board during the year under review totalled 44, certificates being granted in 34 cases. There are at present 731 holders of certificates on the register, 246 being creamery managers' certificates, 410 cheese-factory managers' certificates, 3 with first-class cheese and second-class butter, 3 with first-class butter and second-class cheese, while 69 hold first-class certificates for both butter and cheese.

Reference is made elsewhere in this report to the fact that during the later war years much of the labour available in dairy factories has been unsatisfactory. There has also been an increasing movement of good personnel away from the factories. With the object of assisting returned servicemen desiring to take up dairy-factory work, and also to ascertain how the work can be made sufficiently attractive to encourage men of the right type to enter dairy factories as a career, the position is being very fully considered by a committee comprised of representatives of the Dairy Board and of the Dairy Factory Managers' Registration Board. Investigations so far made appear to indicate that the main causes of dissatisfaction may be linked with lack of suitable housing, the fact that for many assistants the work is only seasonal, the lack of good prospects, the lack of superannuation, and the lack of financial assistance to pursue studies and obtain the diploma qualifications essential to advancement under present-day conditions.

The committee is well advanced with its work and expects shortly to make recommendations to the appropriate authorities.

### DAIRY LABORATORY, WALLACEVILLE

*Chemical.*—During the past year the number of chemical samples dealt with increased by about 200 to nearly 900. The majority of these were samples of butter which were analysed for copper and iron content, as minute traces of these metals may stimulate the development of undesirable oxidized flavours, especially if the butter is stored too long or under adverse conditions. To supplement these analyses and to enable Dairy Instructors to track down the source in the factories of undesirable metallic contamination, similar analyses have been done on cream samples (including the respective buttermilks yielded on churning). The number of these particular samples is rather fewer than were done the previous season, but more replicate analyses have been done on them to improve the reliability of the methods used. The results of this work have shown that a great deal of creamery butter is made without undue metallic contamination, but whey butter is often defective in this respect. In many cases whey cream contains more copper and especially iron than it should. Although the whey butter forms a very small proportion of the total manufactured, it is now required to supplement the meagre butter rations available in Britain, and increased efforts are desirable to improve its quality by reducing metallic contamination to a minimum.

The number of chemical examinations of water samples from dairy factories is even lower than the small number dealt with during the previous year, but there have been an increased number of inquiries for analysis and advice about farm water-supplies, possibly due to drought conditions prevailing in certain districts. Many water-supplies are used in factories and farms without regard to their chemical defects, which sooner or later give rise to various troubles which involve expensive replacement of equipment. By more or less simple treatment based on chemical analysis, defective water-supplies could be often improved. Unfortunately, with the present staff it is quite impossible to deal adequately with this important matter.