

WATER CONTENT IN EXPORT BUTTER.

AN EXTENDED TESTING-SYSTEM FOR NEW ZEALAND.

W. M. SINGLETON, Director of the Dairy Division, Wellington.

In the earlier days of the dairy industry the manufacture of a butter of a satisfactory body and texture virtually precluded the incorporation of any unreasonably large percentages of water, inasmuch as the water could not be so incorporated as to cause the mass to be homogeneous. Water pockets resulted, and this free water at times leaked through the boxes, and thus the general appearance of the packages as well as the quality of the butter were more or less unsatisfactory. The advent of the combined churn and butter-worker has, however, made possible the manufacture of a butter which will retain a larger proportion of water than the cow has incorporated into the milk and the separator has retained in the cream. With this method of manufacture comparatively high percentages of water may be retained in a butter without spoiling the body and texture.

Britain, the greatest butter-importing country in the world, years ago fixed its maximum legal limit of water in creamery butter at 16 per cent. Practically all countries producing butter in considerable quantities have found it expedient to adopt the same legal maximum. In some of these countries a legal minimum for butterfat content has been arranged. Usually this is indicated at 80 per cent., as in Canada, the United States, and New Zealand. The Australian Commonwealth, however, has adopted an 82-per-cent. minimum for fat content, and this variation from the more generally recognized standard has caused some trouble to New Zealand dairy companies and exporting firms doing business with Australia during recent months.

The combined churn and butter-worker has to be handled with care and judgment if the operator is to succeed in turning out a butter which will not be too low in water content nor yet above the legal limit. It may be accepted that no dairy-company directorate desires to manufacture a butter which comes within either of these classes, and certainly not the latter. To safeguard the suppliers of the company against unnecessary loss in overrun, and the company against the possibility of being mulcted in fines or loss in the overseas market, it is necessary that the buttermaker should do a considerable amount of testing of the butter for water during and subsequent to the process of working.

The importer of butter into Great Britain, if found with such butter containing an excess of water, is liable to a maximum fine of (a) £20 for the first offence, £50 for a second, and £100 for a third offence, and (b) a sum equal to the value of the goods. In addition, some dairy companies have learned to their sorrow that the loss entailed in handling excess-water butter in Britain is very heavy. The business of the importer may be very much prejudiced if some of his clients who are retailers are found with butter of this nature, and the retailer's business, if he be prosecuted, may be very seriously damaged.