

Quantities of Butter and Cheese forwarded to Grading-stores for grading.

Port.	Year 1922-23.		Year 1921-22.	
	Butter.	Cheese.	Butter.	Cheese.
	Cwt.	Cwt.	Cwt.	Cwt.
Auckland.. ..	707,146	168,127	490,646	176,180
Gisborne	19,045	..	11,172	..
New Plymouth	132,303	188,927	90,301	197,008
Patea	58,381	238,166	26,838	254,346
Wanganui	41,815	19,416	22,188	15,540
Wellington	252,429	312,350	157,119	300,447
Lyttelton.. ..	54,079	28,673	42,557	36,001
Timaru	12,301	11,358	1,748	7,759
Dunedin	38,397	43,426	24,812	43,113
Bluff	27,250	190,886	14,972	175,947
Totals	1,343,146	1,201,329	882,353	1,206,341

Value of Exports.—The Customs statistics of the value of exports of dairy-produce indicate a very satisfactory position. It may be accepted that the export of dairy cattle has largely come about through the advertising which the Division's testing of purebred dairy cattle has made possible. Including the value of these exported dairy cattle (£10,140) with that of butter, cheese, dried milk, casein, condensed milk, milk-sugar, and butterfat, the value of New Zealand's exports relating to the dairy has attained the splendid total of £16,217,193 for the year ended 31st March.

Butter.—Butter-quality has been satisfactory throughout the season as regards flavour and make. Some districts report improvement, and at all ports the quality has been well maintained. Reports from the United Kingdom and United States of America have been very satisfactory. The grading of cream and the farm-dairy instruction have been responsible for considerable improvement in the product of a number of factories.

A good deal of difficulty has been occasioned by dairy companies manufacturing butter which occasionally contains a water content above the legal limit of 16 per cent. When it became known that some New Zealand butters were being found to contain a water content above the legal limit in the United Kingdom arrangements were made to do more testing at the grading-ports. This prevented a number of boxes from being exported which might otherwise have caused trouble. Considerable quantities of butter have been returned to the dairy companies for reworking; other butters have been reworked at the owners' expense but under the supervision of our staff; and in three instances legal proceedings have been taken, with resultant fines ranging from £10 to £25.

The engagement of additional assistance for the purpose of checking more samples of butter for moisture has to a limited extent afforded the opportunity to increase the number of samples tested for content of salt and fat. The range in the percentage of salt in our salted butters is too wide, and in many cases too low. For the general trade not less than $1\frac{1}{2}$ or more than 2 per cent. of salt should be incorporated. With the moisture and salt content more even a more uniform fat content is assured.

Cheese.—The comparatively cool season has been in the interests of better quality in cheese as well as butter. Cool nights mean better milk, and this causes fewer difficulties to arise in connection with manufacture of milk into cheese. Cheese from practically all districts has evidenced improvement. There has been some difficulty experienced in connection with the colour in coloured cheese. It was at first considered that the colouring was faulty, and in some instances the trouble disappeared when the colouring-material was changed. In other instances colouring-material which when used at one factory produced inferior-coloured cheese was used without any trouble at an adjoining factory. It would appear that some milks have a reducing effect on colour which does not obtain with other milks. Some bacteriological work has been done at the Wallaceville Laboratory in connection with this trouble.

This season several factories situated in districts where the temperature of insulated curing-rooms runs to over 65° F. during the summer months have installed mechanical refrigerating-machines to reduce and control the temperature. The effect on the flavour, the body, and the condition of the cheese has been beneficial, and an undue loss of weight has been avoided.

The process of pasteurizing milk for cheesemaking continues to extend, and the factories which adopted the process this season have had the satisfaction of turning out cheese far superior in quality to those hitherto made by them from raw milk.

Packages.—Some complaint has been received respecting breakages in butter and cheese packages prior to delivery into the importers' warehouses in London. Some of these packages have been made of timber which was too thin to ensure satisfactory nailing. The regulation stipulating the size for butter-boxes provides for timber $\frac{1}{2}$ in. in thickness; the ends should be at least $\frac{5}{8}$ in. thick. Considerable improvement has been effected in the boxes for a number of factories this season. There is still room for considerable improvement in the packing of cheese, many crates being filled too full, while others show too much unoccupied space. A number of companies use centre boards and battens which are too thin for the purpose. In some districts certain factories are using boxes made of boards $\frac{3}{8}$ in. and in others $\frac{5}{8}$ in. in thickness. A number of the latter were in use before the war, and the trade would probably be highly pleased if they again came into use. A number of cheese-factories have adopted the method of wire-binding the centre of the cheese-crate as well as the ends. This strengthens the case very considerably, and it is to be hoped that the method will sooner or later be general.