

a mixture of wax and paraffin to exclude air and prevent mould penetration. The samples from all vats in the consignment are then graded. The flavour of the cheese is ascertained chiefly by smell, though tasting is sometimes resorted to. A portion of each sample is rubbed up with the thumb and forefinger to warm it and bring out the characteristic flavour of each cheese.

As New Zealand has acquired a reputation for a mild-flavoured cheese, exception is taken to strong objectionable flavours. Some defects in both butter and cheese are caused by tainted cream or milk. The quality of dairy produce depends to a great extent on the quality of the cream or milk from which it is made.

The body of the cheese is judged by the manner in which it breaks down—a judgment which must be based on expert knowledge and skill. The body of a good cheese should be smooth and meaty, with no tendency toward weakness or over-firmness. Closeness in texture is very desirable in a cheddar cheese, and the colour should be uniformly straight and not bleached. Strict attention is paid to the finish of the cheese and the crates in which it is packed; careless branding and packing and blemishes on the rinds are penalised. It is most important that the cheese has a sound rind free from cracks, or mould will enter and cause considerable loss to the purchaser, as well as resulting in a claim for compensation.

After the grader has dealt with the consignment he enters in his grade book the total score of the consignment. Four per cent. of the consignment is check weighed and all crates are branded by the cool stores staff with the grade stamp.

To maintain grading on a uniform basis throughout the Dominion regular visits are paid to each grading store by a Superintendent of Grading.

Chemical Analysis

As well as being graded, all butter and cheese is subject to chemical analysis. This important feature of the work is undertaken by dairy produce testers under the direct supervision of the dairy produce graders. Butter is analysed for moisture, salt, fat, curd, and ash content, and cheese for moisture and fat. In addition, full advantage is taken of the facilities at the Dairy Laboratory of the Dairy Division at Wallaceville, to which samples of produce are sent regularly from all grading stores for bacteriological examination. The results of these analyses are passed on to dairy companies and have proved of great assistance in overcoming defects in quality.

After completion of the grading and analysis, copies of the grade notes giving all particulars of the consignment are sent to the Marketing Department and managers and secretaries of dairy companies.

Thus, as originally intended, the grading system continues to be of

educational value. Manufacturers are advised of defects in their produce which enables them to inquire into their methods of manufacture. Government Dairy Instructors are advised of the grades of factories in their areas, and in the event of a serious decline in quality in any brand the instructor can visit the factory and assist the manager to locate the cause and remedy the defect. Dairy factory managers are encouraged to visit the grading stores, where, in company with the grader, they can examine not only their own produce but that from other factories.

Inspection in Britain

The inspection of dairy produce was begun in Great Britain in 1912. Officers of the Dairy Division with headquarters in London inspect and report on the condition of the produce on discharge at ports in Great Britain and are in close contact with the trade, both wholesale and retail. Periodically they visit the Continent to report on developments in marketing or manufacture. Thus New Zealand is kept well informed, and that alone has proved of immense value to the industry.

Dairy produce grading has proved of immeasurable value to the industry, and full credit must be given to the foresight of those who pioneered it. Since its inception there has been a constant effort toward improvement and uniformity in quality, and as a result New Zealand has risen to an eminent position in the dairy-exporting world. To a large extent that has been achieved by the co-operation of all concerned, the ability and keenness of managers and staffs of dairy factories, and in no small measure by the efficiency of the dairy produce grading system.

All photographs by Government Film Studios, Miramar.



Unloading butter from coastal steamer at grading port.