

# Modern Freezing Works With Huge Storage Capacity

STORING butter, cheese and a little milk powder until shipping is available to carry it overseas may not seem a big job, but it is. It is one of the biggest jobs in Taranaki and if you think that sounds a little imaginative just have another look at the size of the Taranaki Producers' Freezing Works Co. Ltd.'s huge plant next time you are on the way to the New Plymouth port. When a new addition comes into use shortly the company will have a total storage space of close on a million cubic feet.

The company, as it is to-day, started operating in 1901 when it was the only co-operative company of its kind in the Dominion. In that year it handled 176,210 boxes of butter and 9530 crates of cheese. During the last year, ending on June 30, 490,700 boxes of butter and 411,280 crates of cheese were handled.

A freezing works actually started operating in New Plymouth in 1895 under the control of the private Taranaki Freezing Works Co. Ltd. and it was in 1901 that it was purchased by the present company. In 1904 the original building was destroyed by fire and five months later a new and larger works took its place.

At the same time as the present company purchased the original building it showed its foresight by purchasing the surrounding five acres of land. To-day the site is one of the most pleasant in New Plymouth with an enviable view of the harbour, and in the development of the works the company has never had to worry about crowding.

Forty Taranaki dairy companies ship their products through the works. Most of the butter, cheese and milk powder arrives by road. Trucks are unloaded on one side of the works and railway wagons on the other.

### RIGID TESTING

New Plymouth is a registered grading port and each truck and wagon is met by a Department of Agriculture grader. A box of butter from each churning and a cheese from each vat turned out is taken to the grading rooms for rigid tests that ensure exports of a uniform quality.

In the grading room the butter is graded by taste and smell and then samples go to the laboratory for moisture and salt tests. The cheese is graded on flavour, body, closeness and texture. Butter is graded into three classes and cheese into four and 4 per cent. of the total products handled are checked for weight.

The graders' department consists of a chief grader, three assistant graders, six dairy produce testers and a clerical staff of two. Naturally, they are busiest in the flush of the season, which started last month and will continue until April or May, but, says the chief grader, Mr. M. Syron, there is plenty to do all the year round.

The freezing works employ a permanent staff of seven engineers and between 20 and 25 storemen, while in the flush of the season or at shipping-out time as many as 50 are employed. Storing and loading on to railway wagons for transport to shipside is assisted by two mechanical loaders on each side of the works and two tractors.

The cool temperatures in the three-storey storage buildings are maintained at the correct levels by an ammonium refrigeration system controlled by three electrical coolers. The refrigeration machine room is, perhaps, the most interesting in the works.

### 1904 MACHINE ROOM

In the first place it is the only part of the re-built works of 1904 that is left to-day. Secondly a compression machine that was steam driven in 1895 to cool the works, is still in use to-day. It survived the fire of 1904 and is now electrically driven to compress the ammonia. Another compression machine has been in use since 1927 and the third is a modern one.

A second machine also in use in 1895 is now in a side room. To-day it is used

only to compress air, but, like the one in use for refrigeration, it is in better order to-day than when installed, according to the engineers. And to support this they point out that since being converted to electricity the machine in constant use does 50 per cent. more work than when installed.

Like the Patua freezing works and others in the Dominion the New Plymouth works is controlled by the controlling dairy companies. Each year the companies' delegates elect their directors. Advice of shipping due and the allotment of cargo is received from the New Zealand Dairy Producers Marketing Commission.

### HANDLING FIGURES

These figures of the boxes of butter and crates of cheese handled since the company commenced in 1901 indicate the growth of the works along with dairying in the province:

	Boxes of Butter	Crates of Cheese
1901	176,210	9,530
1911	173,276	52,796
1921	210,133	146,237
1931	302,995	253,895
1941	158,717	435,996
1952-53	490,700	411,280

(The decrease in the amount of butter handled and the corresponding increase in cheese in 1941 was the result of the war, which was responsible for some companies reverting to the production of cheese for a time.)

As shipping space available need not coincide with the large seasonal influx of produce the works have busy shipping-out periods all the year round. The huge storage chambers keep butter and cheese in perfect condition and eliminate any need for costly storage space in dairy factories.

Appropriately, too, the works are situated handy to the port and wisely they were started with ample land for development. A large new three-storey building to be brought into use shortly will considerably increase handling capacity and will provide for the future expansion of dairy output in the district. Erected on an historic site, where in February, 1832, the large Olaka or Nga-Moiti pa was besieged by the Waitangi Maoris and escaped being captured by the heroic help of Dickey Barnett, John Love and their whalers, the works have in 52 years grown to become one of the biggest and best-known in New Zealand. Altogether in this period the works have handled over a million tons of butter and cheese.

**RIGHT: TWO DEPARTMENT OF AGRICULTURE GRADERS ARE SEEN TESTING BUTTER IN THE LABORATORY AT THE TARANAKI PRODUCERS' FREEZING COMPANY'S WORKS FOR CORRECT SALT AND MOISTURE CONTENT. BELOW: CREATES OF CHEESE, WHICH HAVE JUST ARRIVED DIRECT FROM A TARANAKI DAIRY FACTORY BY TRUCK, ARE BEING MOVED SWIFTLY INTO ONE OF THE LARGE COOL-STORAGE ROOMS TO AWAIT SHIPPING OVERSEAS.**

—Photos by Douglas Elliott.

