

## In the Dairy

### A Large New Zealand Cheese

New Zealand has lately shipped a cheese to London weighing one ton. In spite of the long transportation it arrived in good shape and, when cut after being on show for eleven weeks, showed an excellent quality.

### Butter Preservatives

In regard to the use of preservatives for distant butter shipment there is this to be said: Their prevalence in British imports—not only from distant points but from comparatively nearby countries—must have arisen from a trade demand which fully justifies it. Some years ago the use of preservatives in butter was violently agitated in Great Britain; many of the goods were, apparently, overloaded, and many precautions were made by the authorities. At that time British importers from Canada and this country were demanding guarantees of freedom from preservatives and there was also a law in this state prohibiting their use. In view of this we argued against any use of preservatives in our butter product, not because of any conviction that such use was deleterious, but simply to meet the trade demands then existing. But the agitation in England resulted in an acceptance of the necessity for the moderate use of preservatives in butter brought from distant places, and court

11,830 up to 16,288 lbs., and the average cow's yield varies from 4.167 lbs. up to 5.799 lbs., using from 25.3 lbs. up to 26.3 lbs. of milk to 1 lb. butter.

The prices at which the butter sold at the various creameries varied from 23.79c. up to 25.41c. per Danish pound (all pounds given are Danish and are about 10 per cent. heavier than ours). The net return per 100 lbs. of milk with skim and buttermilk returned free, varied from 59.33c. up to 68.50c.

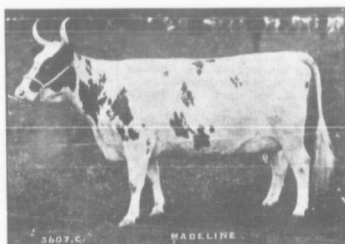
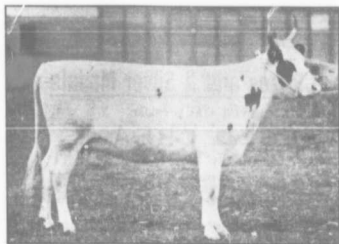
The average expense per 1,000 lbs. of milk for salaries varied from 16.32c. to 21.44c., with an average of 19.25c.; for fuel, from 11.04c. to 13.36c., with an average of 11.32c.; for maintenance of building, from 1.33c. to 2.93c., with an average of 1.6c.; for maintenance and renewal of machinery and apparatus, from 5.33c. to 12.6c., with an average of 8c. The total expenses without hauling varied from 54.4c. to 66.87c., with an average of 62.1c. per 1,000 pounds of milk.

The hauling averaged in large creameries, with over six million pounds of milk, 40.27c. per 1,000 lbs.; in the medium sized, with two to four million pounds, 42.21c., and in the small, with less than two million pounds, 44.43c.

As regards the lighting system, 71 creameries had electric lights, 15 acetylene and 424 kerosene, etc., and finally as regards payment by test, 409 or 78.3 per cent do so, while 97

### The Cream Gathering Creamery

The cream gathering system undoubtedly possesses many real merits and these are of such a nature as to readily and forcibly appeal to both the patron and the proprietor of the creamery. I shall state them in as few words as possible. It can be successfully adopted in sparsely populated districts, where no other form of co-operative dairying is practicable and thus we thought at one time to constitute its limit. The introduction of the hand separator has, however, widened its application and it is now invading what was supposed to be the exclusive field of the other forms of co-operative dairying, and has come to be regarded, in this province at least, as the "yellow peril" of the separator creameries and some of our cheese factories. Again, skim-milk from a hand separator is in an ideal condition for the feeding of young stock, and this the farmer rightly prizes very highly. The cost per pound of butter for hauling the cream is not nearly so great as where the milk is delivered to the creamery. A cream-gathering creamery can be made to serve a much larger territory than either a separator creamery or a cheese factory, and for this and other reasons the cost of manufacturing is very considerably reduced. These features all commend themselves so strongly to the farmer that we believe that the cream-gathering creamery system has gained strong



Two typical Scotch Ayrshires, owned by A. Mitchell, Barchoskie.

practice there has for some time past recognized .5 per cent. of boric acid preservative as harmless and permissible. As a result the British import trade has generally advised the use of preservative to that extent and it has become the practice in nearly all supplying countries where the use of preservative is not prohibited by local laws.

Under these circumstances the use of preservative in butter intended for export to Great Britain can fairly be left to the instructions of the importers, and no reasonable objection can be made to it. Certainly its presence in our exported butter is no evidence whatever of inferiority.—N. Y. Produce Review.

### What the Danish Creameries Do

We are indebted to the N. Y. Produce Review and American Creamery for the following statistics of creamery work in Denmark:

There are 17 local creamery associations with from 9 to 63 creameries, 523 in all. The creameries in the various associations average from 133 up to 329 patrons and from 726 up to 1,222 cows. They are insured for an average of from \$5,490 up to \$8,016. The daily milk receipt averages in the various districts from

or 18.5 per cent. do not, and 17 or 3.3 per cent. did not answer.

### English Butter Control

The following table shows the result of a number of English Government analysis of samples of butter brought into Great Britain from various countries showing the proportion of these samples that contained boric acid and coloring matter:

	Samples Taken.	Found Preservatives in	Found Artificial Color in
Holland .....	680	413	350
Denmark .....	271	1	124
Australia .....	232	230	74
France .....	227	224	91
Sweden .....	212	4	60
Russia .....	152	0	61
Norway .....	79	0	9
Canada .....	77	26	18
United States .....	60	54	43
Belgium .....	57	57	54
South America .....	31	29	1
New Zealand .....	14	12	0
Germany .....	5	5	5
Iceland .....	4	2	4
Total .....	2,110	1,661	900

and lasting hold upon the affections of those to whom our dairy industry really belongs.

The system undoubtedly has its defects, as it now operates, as well as its merits, and the latter effect a saving and enhance the patron's profits at the manufacturing end they are swallowed up at the other through the making of an inferior article which cannot command the highest price. What may be regarded as the defect of the system is that it robs the butter-maker of the control over the ripening and flavor of the cream and the keeping qualities of the butter which he has for years struggled to gain in our separator creameries through careful examination of each patron's milk, the pasteurization of the milk or cream and the use of a culture or "starter" to ripen the cream. Again, in many creameries, where the cream is brought in in loads with several patrons' cream mixed together in a tank or can and the cream sampled into oil-test tubes by the cream collector, the butter-maker has little or no opportunity to examine the individual patron's cream or to give him advice as to the care of it.

Unless these difficulties can be overcome, the system can, at best,