

DAIRY DEPARTMENT



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We have just received a request from a prospective tank buyer for a quotation and in his letter he states he expects to build or buy soon, "which ever appears best and cheapest."

Mothers sometimes make suits of clothes for their boys under the impression that it is cheapest. It may cost a little less, not figuring their time as worth anything, but what about the service and the chagrin of the boy?

It is much the same with tanks. You can build a thing that might be called a tank, but the service it gives is the test of its value.

Why buy a tank made improperly when you can get the best to be had at little if any greater cost?

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MILKING MACHINES.

A great deal of discussion has been in progress concerning milking machines. They have been introduced into several localities in the Pacific Northwest, and are generally received with favor, although there has been some criticism as to their final effect on the cows operated on.

The milking machine is being tested by various experiment stations for the purpose of determining its practicality on the farm. The Montana station has been making a special test, and has recently issued a preliminary report covering the following points:

That the milking machine is not practical on a small dairy farm with ten or twelve dairy cows, unless the farmer considers that the labor saved offsets the cost of a small equipment, but for dairies of twenty-five to fifty or a hundred cows the milking machine is a very great saver of time and labor.

It is generally conceded, but not universally, that the milking machine will milk cows as thoroughly as the average milker and that the great gain is in the amount of time saved and the fewer number of men required for large dairies.

The cows take kindly to the milking machine and would just as soon be milked by the machine as by hand.

The cost of installing a milking machine for a dairy of from twenty-five to fifty cows will be from \$400 to \$500.

With young cows and heifers there seems to be no tendency on the part of the milking machine to dry up the cow, but some think that older cows go dry a little sooner than would be the case with hand milking. As to the cleanliness of the milk, some claim that milk is much freer from germs, while others disagree. The station thinks that the cleanliness of the milk depends largely upon the cleanliness of the operator. The milking machines are hard to clean unless a man is scrupulously clean himself. The scrupulously clean man has no trouble in keeping the machine clean. There is nothing about the machine that will cause it to get seriously out of order.

A majority use gasoline engines for power. The two-horse-power size is sufficient to run a machine for fifty cows, and the cost is one-fourth to one-half a cent per cow per milking. Vicious kickers sometimes kick off the tubes, but what is the use of the vicious kicker in the dairy anyhow?

There are two styles of milking machines, one which goes by suction and the other presses the milk out of the teat. The station believes that the suction machine gives better satisfaction, but declines to say it is absolutely the best. In fact, it regards both types, to some extent, as in the experimental stage.

In January, 1907, the Oregon Experiment Station installed a milking machine in the college barn. The experiment then planned, was to milk half of the herd of fourteen cows with the machine and the other half by hand, and then to compare the results. The machine was used on the first seven cows during the year 1907, and during this year is being employed in milking the other seven, and the first seven are again being milked by hand.

The records show that eight of the cows made advances in their milk and butter yields during the time they were with the machine; while three gave slightly less and one showed a very much lower record with the milking machine.

The Lewiston, Idaho, creamery is now manufacturing from 45,000 to 50,000 lbs. of butter a month. Over 2,

000 cows supply the plant with cream. In 1907 the plant turned out 200,000 lbs. of butter, this being practically double the output of 1906. This year the output will exceed 35,000 lbs.

DAIRYING IN WASHINGTON.

By Dairy Commissioner L. Davies in Creamery Journal.

To one who has never visited the Pacific Northwest and who is, therefore, unacquainted with the climatic conditions prevailing in Washington and some of the neighboring states, the excellent advantages offered to the dairymen are not well understood.

The state of Washington is divided from North to South, a little West of the center, by the Cascade Mountain Range. In physical characteristics, as well as in natural verdure, there is a marked difference between the Eastern and Western portions, yet both sides offer exceptional opportunities to one seeking a typical dairy country.

The West side is directly in the course of the warm Japan current, and cold and severe winters are there unknown. During the winter months rain is quite prevalent but, with proper cover, cattle do well, as they are not subjected to sudden extremes of weather. Near the large cities dairying is carried on most extensively, but as this land becomes more valuable for gardening and other purposes the dairymen is forced further from the populous centers into the logged-off lands, of which there are hundreds of thousands of acres awaiting development, and which make excellent dairy producing sections.

On the East side of the mountains the weather gets some colder in winter, but only for short periods, and then not to extremes. The irrigated lands supply an abundance of feeds which, together with the grazing obtainable on the rocky portions (scab land) of the plains and in the mountain valleys, also make this section of the state the natural home of the dairying. The natural advantages are not lost sight of but, as the demand for dairy products increases, the new settlers from the older Eastern States and from the dairying countries of Europe take up this land and ever increasing proportions of them turn their attention to dairy pursuits.

During the biennial period from October, 1904, to October, 1906, there were something over 8,000,000 pounds of creamery butter manufactured in Washington in addition to large quantities of condensed milk and cheese and the regular demand for fresh milk. From 1906 to 1908 the development of the state has been marvelous; the population has increased rapidly, thus making the demand for dairy products greatly exceed the supply. The cities as well as the rural districts have grown, and the consequence is an immense demand for whole milk. Added to this is the fact that there are six milk condensaries in the state working full time and turning out immense quantities of the finished product, which finds its way into all the markets of the world, a guarantee in itself of the excellent quality of the output.

In spite of these two growing demands for the whole milk, the quantity of creamery butter manufactured is steadily increasing. Complete statistics are not yet at hand, but the present indications are that the amount manufactured during the biennial period ending October 31, 1908, will be largely in excess of 10,000,000 pounds. The output of milk from the condensaries is also growing very rapidly; the only shrinkage shown in finished products is in the quantity of cheese manufactured, the milk from

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