

called, is 30 inches long, 23 in. wide and about 26 inches deep on the inside, and lined with zinc. This box holds four tanks, or sufficient for 12 cows. The tanks have an opening at the bottom, by which, as soon as all the cream has risen, the milk is drawn off, a rubber tube with a stop cock at the end, being used, which, on the principle of the syphon, drains off all the milk which lies above the level of the outer end of it. This reverses the usual *skimming operation*, the milk being now removed from the cream instead of the usual tedious process of lifting the cream from the milk distributed over a multitude of pans. By a strip of glass inserted, say eight or ten inches perpendicularly in the side of the upper part of the tanks in making them, the depth of cream can be seen, and the balance (the milk) in the tank can be measured off into another tank of equal size when the cream can be poured out and placed in a similar tank in the cooler, where it should be kept free from contact with the outside air till the proper time before churning. But of this we shall speak again.

The first operation is to place the milk in the tanks as soon as possible after milking, (the sooner it is cooled the better), bearing in mind our instructions on the subject of milking in our issue of the 10th inst., then place the tanks in the "cooler," cover them over with ordinary milk pans or other such vessels, but inverted, as shown in the cut; then place some weight on top, or such as the small beam of wood slid under little cleats fastened into the sides of the cooler, or any other contrivance that will prevent the inverted pan covers being lifted by the water which is next poured into the box or cooler so that it completely covers the top of the tanks two or three inches deep. Those who try to push an inverted vessel perpendicularly into water will understand the necessity for firmly fastening the covers, the air under them preventing the water rising within the cover and flowing into the milk. The water of a very cool spring will do, but it should, if possible, be kept down to a temperature of 40 to 50 degrees Fahrenheit,—a place for the thermometer, to regulate this being cut into the cooler, as shown in the cut, so that its back touches the zinc lining. Thermometers which cost from 40 to 60 cents will do, and, if taken ordinary care of, will last for years. If the water be not under 50 degrees, ice should be used, and in any case it should be kept at as even a temperature as possible. Submerged in water at about 40 degrees all the cream rises in 4½ hours; at 50 degrees or thereabouts, in 12 hours. If the water have a tempera-

ture of 50 to 60 degrees the cream will take from 16 to 20 hours to rise, without other disadvantage, except that twice the can and cooler capacity is needed than with a temperature under 50°. The milk when drawn off from the cream is quite sweet and fresh, much better than that generally supplied by the city milkman.

And now to show the great economy of this plan. Ordinary milk pans cost about \$1.75 per dozen. The tanks used in the submersion or cooler system cost \$2 each, but one of them holding 40 lbs. of milk is sufficient for three cows, except perhaps in the midst of the season when a fifth tank may be required for a proportion of 12 cows. There is great economy of space, the milk of 12 cows not covering more space than an ordinary cooking stove, and, as all foul air or effluvia is excluded, the purity of atmosphere so important in raising cream is thoroughly secured. The system pursued in Denmark and Holstein, and we believe in some parts of Normandy also, is partial immersion in very cool spring or iced water. In the present we go a step farther; we totally immerse, excluding all contact with the surrounding atmosphere. The tanks need not be cleaned but once a week. Every farmer's wife knows what a labor it is to keep milk-pans in good order. In describing this system some of our contemporaries in the western sections of Ontario, especially in Huron and Bruce counties, make use of the term "air-tight tank," which is apt to mislead. The tank is not air-tight until it is covered and submerged in the cooler. Of course before removing the tanks for re-filling, the water in the cooler must be lowered, which can be easily regulated by a stop-cock or plug.

The gentleman whose personal appearance we have attempted to sketch in the illustration holding a butter-worker in his hand is Mr. William Garvey, jun., of Morrisburg, Ontario, alias the "Butter King," well known to the butter men of Canada by his persistent and laudable efforts towards improvement in the manufacture of this great home product for which our country is so well adapted, and which should be secondary in importance only to our wheat and lumber for exportation. "His Majesty" is a strong advocate of the cooler or deep-setting system which we have attempted to describe, and, among other gifts, his customers can testify as to the accuracy of his judgment in what constitutes a good article of butter.

(To be continued.)

— A new insurance company is to be formed with headquarters at Ottawa.

UNITED STATES FINANCES.

The session of Congress is drawing to a close. Several important questions which have occupied a large share of attention seem likely to be shelved. The most important of these is the tariff amendment, which was in the hands of Mr. Wood, and which at one time seemed likely to become law. It is not surprising that it should have been found impossible to obtain the concurrence to a tariff of a majority of a body with such a variety of conflicting interests, and without the inducement of adhesion to a ministry whose continuance in power depended on the success of the scheme. It is when financial questions come under consideration that the defects of the Republican system are brought most clearly before us. The resumption of specie payments is not likely to be interfered with, and especially as it seems to be understood that the President would veto any bill the object of which should be to postpone the period of resumption. It seems probable that there will be a general consent to the circulation of greenbacks, and we shall be much surprised if they do not become a permanent portion of the National currency. When once redeemable in coin, even if that coin be silver, they will be a much more convenient mode of discharging liabilities of all kinds, than any description of coin. They will constitute the reserves of the National Banks, and, if no change should take place in the relative value of gold and silver, the former metal will be at a premium. It seems doubtful whether the fishery appropriation will be made, but, if not, the President will, it is said, call an extra session of Congress. There are likely to be warm contests regarding steamship and railway subsidies, but, so far as we can gather from the public journals, the session is not likely to be protracted beyond the month of June or early in July.

FIRE INSURANCE.

We observe that the National Board of Fire Underwriters in New York, have sounded a note of alarm in a circular addressed to the insurance companies of the country. The New York *Bulletin* is of opinion that the present is "a critical moment both for the underwriters and the public whom they assume to insure." The cutting of rates, which seems to prevail in every branch of business not only in the United States, but in Canada, is evidently producing considerable alarm in the public mind, which is manifested by decreasing business. It is surprising to find the extent of the reduction in the premiums