

experiments with ice water to verify this matter of temperature. I recently saw at the New York State Fair a new apparatus for setting milk, where this principle could be carried out, and with great economy as to the supply of water. It consists of four tin cans, each 20 inches deep and 20 inches in diameter. Each can is placed in a wooden tub, with space between the can and tub, on the sides and bottom, for the reception of water. In the centre of each can there is arranged a double scroll of tin, movable, and hung upon wires. This scroll is made by bending the tin over wire, so as to make space for water, one-quarter of an inch thick and three and a half inches wide—the two scrolls, when joined together, making a flat, circular piece of hollow tin, seven inches wide. From the upper end of the scroll a pipe is erected, surmounted by a funnel, for the reception of water. At the lower end of the scroll there is another pipe, coming up and going over the tin can, for the discharge of the water into the space between the can and tub. Now, in the operation of this apparatus after the milk is strained into the can the scroll is introduced, and sinks in the milk to a point below that which will be occupied by the cream. Water is now turned into the pipe leading to the scroll, and the milk receives a thin sheet of water in the centre of the can, and from thence, falling on the outside, fills the space between the tub and can, and then flows off into a reservoir. When the cream is up, it is dipped off, and does not come in contact with the scroll which is below. Connected with this apparatus is a refrigerator, which receives the waste water; and when it is cooled it can be used over again. After being cooled, the water is pumped into an upper reservoir of the refrigerator, and then conducted to the pipes and made to do its service over again. With a barrel and a half of water, the milk from 20 cows may be cooled daily, and kept at a temperature of 60° Fah., or lower, for a week during the hottest weather of summer, while the consumption of ice to supply the refrigerator will be no more than 20 pounds per day. A syphon is used for drawing off the milk from the cans. Milk should always be carted from the farm to the factory in spring wagons, and under an awning or cover. There can be no doubt but that much milk, under our present system, is injured by being exposed to the sun, while in rainy weather water is introduced in the milk, which not only gives a false weight, but does real injury, especially to milk that is to be kept over during the night.