

be filling it and feeding it out at same time. My pomace is convenient and I fill in two to five days. How often are cattle watered? Once a day. If I did not feed juicy food I should water ice. How much exercise? Only that obtained by walking from barn to water tank and return.

Retail production milk was treated in a thoroughly scientific manner by Director Voorhees of the New Jersey experiment station. The station farm is run on a business basis, likewise the milk route, and Mr. Voorhees by personal effort and supervision of the work has developed the enterprise and made it a practical success.

He found to begin with, that the local milk business was conducted by a rather haphazard manner. The quality, richness and purity varied greatly, although the price charged by each dealer was uniform. He assumed that consumers wanted uniform, pure and rich milk and then set out to obtain these qualities by thorough mixing, cleanliness in barn and dairy rooms and proper feeding. The experiment began in '96 with 23 grade cows. It took sometime to get the men trained to thorough methods, and the first year there were some complaints and the route grew slowly, but since '97 the sales have increased from 37,204 qts to 44,436 qts and are still growing. The milk began to sell itself when the conditions were right. There was no advertising or anything of the kind; the growth was natural. The price was 6 to 8c according to season. This was in competition with much lower priced milk, some as cheap as 3c. The increase in the route meant an increased income of \$1000 per year. The improved milk cost somewhat more to produced. Missionary work should be done to educate the consumer in regard to the value of first-class milk. More attention should be paid to economy of sale, selling as well as producing to best advantage.

Questions: Are preservatives desirable? No; they should be regarded as adulterants because sure to be eventually harmful to consumers. How is milked cooled? By running it over a cool surface in a thin sheet after the usual principle of cooler. Ice? No; cold spring water at about 45 degrees. Can you bring back a cow that begins to shrink in milk yield? No; not completely. Doesn't all that has been said apply to milk for butter? Yes. Are bottles used? Yes; some prefer to buy in bulk from large cans, but like the bottles. The waste by drip, overmeasure, etc, in dipping from cans more than balance the loss

by breaking bottles. We average 11c per day per 140 qts by dipping from cans. The last milk in the can, too, is liable to be poorer in quality and condition by reason of the constant dipping. How do you get uniformity? By arranging cows according to the test of the quality of their milk so that milk in each large can will average about the same. With only a few cows I should advice to mix the milk. The quality of milk from cows of the herd varies from 2.8 to 6.4 per cent, but by arranging the animals we do not vary the product sold over $\frac{1}{2}$ of 1 percent. If milk from each cow were sold strictly according to quality, some of the big milkers would be worth less than some of the small milkers.

How is milked sold? In advance. Men get a package of tickets (used only once) each day in envelope, which they return at night marked with number qts taken out, number sold, amount paid and with money inside. They must account for each ticket like street car conductors. How are so many bottles broken? Many in washing them by hot steam turned on too suddenly; some are broken in handling and some broken or lost by consumer. The bottle system takes twice as many wagons. Were cows tested or examined? Yes, by a veterinarian twice a year. The percent of unhealthy cows was small. Cows are tested by tuberculin before bought. Have you notice ill effects from tuberculin? No. Why does the amount of cream rising in bottle sometimes fall below the indicated per cent by the test. The amount of cream will vary from changes in feeding, such as change from one kind of green forage to another.

Interesting addresses were given by Profs Conn and Jordan, H. W. Collingwood of N. J., and Mrs. Douglass of Ct. Mr. Orrin Bent of Boston made the awards for the butter exhibits. The showing of dairy machinery and supplies was uncommonly large and complete.—*New. Eng. Ag.*

The Poultry-Yard.

POULTRY CALENDAR FOR JANUARY.

Burn a pound of sulphur in each pen, the first day of the month, so you will not forget it. Clean up the droppings every morning.

Kerosine the roosts and nest boxes once a week. Change the litter in the nest boxes every week