

the market; contrariwise, if the judging is postponed until they are in good order, those kept to ripen in a high temperature would be found to be already too far advanced; but in our case, it invariably turned out that whenever the cheeses were kept for a long time, the result was that the cheeses were kept for a long time, the result was that the cheeses ripened in a low temperature were of excellent quality, while those ripened in a high temperature were manifestly inferior, both as regards texture and aroma. These cheeses ripened in a low temperature were quite as good as those ripened in the normal temperature, although the time required to complete their ripening was of course longer. Thanks to the courtesy of Prof. N. J. Noyes, of the Ohio dairy-school, we were unable to obtain a perfectly unbiassed estimate of the trade-value of the different cheeses. Prof. Noyes fixed the value of the cheeses ripened in the cold-storage at 7 3-4 cents, while those ripened in a high temperature were rancid, and not worth more than 3 to 4 cents a pound, the cheese ripened in the normal temperature being worth a trifle as much as those ripened in a low temperature. At the time of the valuation, the best cheddar was quoted at 7 1-2 to 8 cents. Prof. Noyes remarked, that the difference in value was due entirely to the effect of the mode of ripening, the flavour and texture being injured by the high temperature, while the cheeses ripened in the cold-storage were quite as good as those ripened in the ordinary or normal temperature.

Practical conclusions.

1. "Influence of temperature on the period of ripening."—A-High temperature materially accelerates the changes that ripening produces in the cheese. At a temperature of 85 degree to 90 degree F., the softening of the casein, mesyred by the soluble proteids formed, travels 2 or 3 times as far in the first few days of the ripening as in cheese kept at a low temperature (50 degree to 55 degree F.), but, finally, cheese kept at a low temperature ripens more completely than cheese kept in a higher temperature.

2. "Influence of the temperature on the quality of the product."—Cheese ripened in a high temperature (about 70 degree) is inferior

to cheese kept in a lower temperature; even at or about 50 degree, no ill effects are found. Cheese ripened in a high temperature were found to have suffered, not only in texture, but also in aroma; they have a piquant or sharp flavor, very perceptible, which is often met with in cheese coming from a bad ripening-room, where the temperature is, most of the time, within the hazardous or detrimental zone.

Cheese ripened at 55 degree F., and below, is invariably of good quality, although mild in flavor; it is entirely free from any bitterness (this contradicts the usual opinion), and compares very favourably with cheese kept at 60 degree to 65 degree F.

The relative humidity of the air in ripening-rooms kept at a low temperature is generally greater than in ordinary ripening-rooms; whence it follows that cheese put into a cold ripening-room never has a rind so solid as is desirable. Such cheese also moulds much more. Still, a good rind can be had by keeping the cheese for a few of the earlier days in a warmer, drier room.

3. "Relation of temperature to the loss of weight."—The average loss of weight in Cheddars is about 50 p. c. It is due chiefly to the partial drying of the cheese. At a high temperature, this drying goes on rapidly, and is accompanied by a considerable loss of fat, which escapes from the cheese on account of its liquid state. In a low temperature, there is no escape of fat, and the dryig is greatly diminished.

4. "Relation of the temperature to the period during which cheese lasts fit for market" (Quality of keeping).—Cheese ripened in a high temperature attains maturity rapidly, but only lasts in its best condition for a time relatively short. Its "commercial period," therefore, is short. Cheese, ripened in a low temperature attains maturity more slowly, but as its quality is generally much better, and as its "commercial period" lasts much longer, the lengthened time occupied in its ripening is fully repaid by the extra value of the product.

