

The placing of the sink below the vats, by which the whole mass of whey and curds may run out of the vat through a shute at one end, is another labour-saving appliance. There are machines for cooling the milk in the vats at night and preventing the cream from rising, operated by clock work, and by waste water from the vats. The application of wind power, for raising water to supply factories, has been found to work successfully.

Then there are the two processes for extracting butter from whey, which are claimed to make good marketable butter, adding largely to the receipts of the factory.

The paper cheese box is another new invention which promises to be successful. The curd mill, though long in use in England, is now just beginning to be introduced in America, and with the best results. Its use is not only a saving of labor, but it improves the texture of cheese, rendering it more compact or less porous.

In the Cheddar process the curds are put in hoop and pressed for ten minutes, then taken out, ground in the curd mill, and salted. This I think is an improvement upon our process, and should at once be adopted. By it you get a more uniform distribution of the salt, and know precisely what is being done, because the curd is drier and the salt is not carried off in the whey, as in our process. It is claimed, too, that by salting before pressure, and while the curd is not sufficiently cool, the salt has the effect of forming a shining, tough pellicle about the particles of curd, not only enclosing whey or moisture, but on account of which the union is less perfect, and the cheese in consequence less compact.

Again, the Cheddar dairymen, as soon as they can begin to distinguish an acid condition of the whey, immediately commence drawing it from the vat, and allow the acid to further develop itself in the curd spread out or heaped up in the vat and sink. This I think is another important improvement, which should be adopted at the factories. It is very difficult to regulate the final condition of the curd under all circumstances in the whey. The acid is often pushed forward upon the curd too rapidly, especially in hot and sultry weather. Then, if there be taints in the milk, the longer the curd is steeped in the whey, the more distinct and marked will they be in the cheese; but if you get rid of it early, there is more hope of preserving clean flavor, since every moment the whey stands under the influence of heat and decomposition the stronger becomes its odor and taint, as every practical cheese-maker has observed. It is to be doubted whether an uniform fine flavor can be maintained under all the variable conditions of milk unless this principle is recognized. At any rate, under this process there is less difficulty in obtaining desirable results.

There is another suggestion in regard to rennet and annatto, which is not understood even by our oldest and best cheese-makers.

At many of the factories great complaints are made that the rennets are weak, and extraordinary large quantities are often used at heavy expense. It is true there is great difference in the strength of rennets, and the quantity of milk they will coagulate, but the trouble is often aggravated by not properly understanding the nature of the materials employed. The annatto commonly used is cut by potash, a powerful alkali. Rennet is an acid, or