

In the manufacture of American cheese (I will so designate the method usually practiced, to distinguish it from the grinding process, which I will term *Cheddar*,) it is of the utmost importance to determine the precise time at which to separate the whey from the curd, and it is also an operation requiring the greatest amount of skill and experience, as well as the exercise of the nicest sense of taste and smell. But in the manufacture of Cheddar cheese it is not of the same vital importance, as the whey can be separated from the curd from half an hour to an hour and a half before acidity is developed so as to be perceptible; and, on the other hand, the whey can be left on the curd till the acid is distinctly developed, without materially affecting the quality of the product. As the acid or souring generally makes its appearance about noon, in summer, the Cheddar system gives factory hands more time for dinner, and consequently they can masticate their food, instead of having to bolt it, as has to be done in many cases. When the whey is drawn off, and the vat tipped down on one end, the curd is then heaped on each side of the vat, leaving a space in the middle to allow the remainder of the whey to pass off. I may here state that when the "shute," or flood-gate, is not used, there ought to be, in the Cheddar system, a faucet in the vat, to allow the whey to pass off as it drains from the curd. After the curd has lain in a heap on the bottom of the vat for fifteen to twenty minutes, and the original particles of curd have become amalgamated into a solid mass, it is then cut into convenient pieces with a knife, and turned over, and so left until the curd has become sour enough for grinding and salting, which is determined by the taste of the whey that drains from the curd. This whey should now have a sharp, sour milk taste, which can be understood by any intelligent cheese-maker, after a few days' experience. The curd is then torn by hand into strips of two or three pounds weight, and allowed to cool for a short time, in order to allow the butter in it to become solid enough so as not to escape during the operation of grinding. The curd is then ground into pieces, averaging about the size of hickory nuts. Five hundred pounds of curd can be ground by hand, with Macadam's curd-mill, in from five to fifteen minutes, according to the toughness of the curd and the muscle of the operator. The salt is then immediately added and mixed thoroughly, at the rate of from $1\frac{1}{2}$ to $2\frac{1}{4}$ lbs. per 1,000 lbs. of milk, according to circumstances. The curd is then ready to be put into the hoops for pressing.

2. Mode of procedure when the milk we have to handle is (from whatever cause), sour, or partially so; and such cases are liable to happen in any factory, however well regulated. You are all aware that when milk is partially sour, it will coagulate in the same time as sweet milk with the addition of considerably less rennet. But to such milk I usually add more rennet, instead of less, so as to have the coagulation occur very quickly. As soon as the rennet has completed its office, I commence cutting and working the curd much more rapidly than usual. In such cases I use very little heat in scalding—seldom heating over 86° or 90° , according to the severity of the case.