

made for each box, to keep the packages perfectly clean for ultimate distribution. The latest return for the product, to the shipper here is 19.88 cents per pound. English dealers are insisting upon every particular of the foregoing details being carried out. In pursuance of recent legislation, boxes are all marked with the name of the maker and the number of factory; and the bagging is marked with the initials of the maker, Government number, and country of production.

LOTON S. HURT,

Consul.

Palmerston, March 24, 1898. (Consular Reports.)

THE BENEFITS OF THE SUB-EARTH DUCT

Ed. Hoard's Dairyman.—Where cheese is cured in the ordinary curing room during the summer months, it has been found necessary, in order that the cheese hold their shape and remain close in texture, to allow the maximum amount of acid to develop, that the curd can stand without causing a "high acid" cheese. It is also necessary to cook the curd sufficiently to cause somewhat of a toughness in the texture of the cheese. All this at the expense of quantity and quality.

Acid dissolves curd, thereby causing a loss of solids. This can be readily observed before the whey is drawn, when the curd begins to spin on the hot iron. If the curd is allowed to settle together, and is then stirred, the whey that comes from amongst the curd is white.

One hundred pounds of cheese contains some thirty pounds of water. Dry, warm air absorbs water rapidly. Thus, cheese held in the ordinary curing room from fifteen to twenty days will shrink about $3\frac{1}{2}$ pounds per 100 pounds.

A curing room ventilated with an efficient sub-earth duct has the following advantages:

1. A temperature of about 65° is maintained.
2. Constant ventilation.
3. A constant degree of the desired per cent of moisture in the air.

Where such a curing room is available the whey may be drawn somewhat sweeter, and a little more moisture may be held in the curd, thereby causing an increase of several pounds of curd per 1,000 pounds of milk.

It has been demonstrated that if cheese is cured in such a room the shrinkage will not exceed one pound per hundred weight in twenty days. Thus a saving of about $2\frac{1}{2}$ pounds is made on the shrinkage of every 100 pounds.

It appears evident that during the summer months, under normal conditions, the sub-earth duct furnishes the means of increasing the yield of cheese altogether, from four to five pounds per 1,000 pounds of milk. In case of trouble with gasses or bad flavors, the benefits derived from such ventilation are even greater.

E. L. ADERHOLD.

Neenah, Wis.

SUB-EARTH DUCT CURING ROOMS.

In connection with Mr. Aderhold's communication, on the Benefits of the Sub-Earth Duct, we publish herewith illustrations showing method of constructing them. These illustrations are very fully self-explanatory, and they show that first of all there must be an excavation, preferably 12 feet deep (although some are less), and 100 or more feet in length and from 5 to 6 feet in width at the bottom. In this excavation are placed, in continuous rows, common six-inch drain tile—six to eight rows on the bottom and five to seven above. It appears to be better to separate these rows somewhat by filling in with the excavated soil, but in one case at least the tiles were laid close together, just as they are stacked up in a yard.

These rows of tiles form the duct proper; and it is now necessary to connect it at one