

scarcely so long-lived. While in the case of the unprotected tub silo, a small amount of ensilage may be frozen to the sides, especially on that side exposed to the prevailing winter wind, this may be mixed as it falls with the rest of the ensilage, and may be used without injury to the stock.

Probably the general method of building may be explained most clearly by going into the details of construction of a silo of a particular size.

CONSTRUCTION OF STAVE SILO.

The Foundation.

For a stave silo 20 ft. in diameter a circular trench 18 inches to 2 ft. wide and with an outer diameter of 22 ft. is dug about 2 feet deep or below the frost line.

The surface soil over the whole included area and for 2 ft. outside is removed to a depth of 10 or 12 inches at the same time.

The trench is then filled to the level of the interior with stone well pounded down, the surface stone being broken quite small and thin cement (1 part of cement to 4 of sand thoroughly mixed poured over, well worked in and left for a few days. This is followed by a coat of good cement (1 part cement to 3 sand), care being taken when finished to have the surface level and smooth.

Pure cement sprinkled on dry shortly after last coat and worked in with a trowel will make a superior finish.

Ample drainage should be provided (See fig 5) whether the silo be built inside the barn or outside. This is essential to the preservation of both the silo and the ensilage. If any fear of rats be entertained, they may be guarded against by spreading a thin coat of grouting over the area inside the trench.

The above is to be preferred to cementing the entire interior because more economical and equally serviceable.

A stone wall might take the place of the above described foundation, but it would be necessary to line the inside with cement wherever the ensilage might be expected to touch it.

The top of the wall would also require a coat of cement in such case.

The circular line to mark the position of the staves might be drawn by means of some hard pointed article attached to a bit of string half the length of the diameter of the proposed silo. A spike driven in the centre might serve as a pivot.

The Staves.

Any of our common soft woods may be used for staves. Hemlock, pine and spruce seem to be equally serviceable.

The staves may be from 1½ to 3 inches thick, by from 5 to 9 inches wide. The smaller the silo the less must be the width of the stave. The best is probably 6 x 2 inches, dressed on the inside and sized square on the edge. By using the staves with a tongue and shallow groove, they may be expected to be more easily kept in place. A cross section of a stave so dressed and having a slight bevel is given in figure 1.