

cent., for July 1640 pounds testing 3 per cent. In August we did not feed her the pea chop but fed her bran and green corn and her yield dropped down to 1440 pounds, testing 2.3 per cent. We then commenced feeding her oat chop with the bran and in September her yield was 1180 pounds testing 3.5 per cent. In October she gave 1150 pounds testing 3.4 per cent.

From these results, it would seem that the percentage of fat in the milk is influenced by what the cow is fed on. The feed might not make any difference on a cow that was continually fed on a balanced ration.

A Study in Construction of Silos

The silo has come to be acknowledged as indispensable on any well appointed dairy farm. Such talk as was common in years gone by about the disadvantages of silage is seldom heard to-day. We have found from ripe experience that cattle are fond of ensilage, that their teeth do not drop out when fed upon this succulent fodder and that it is one of the cheapest and most valuable of fodders that can be used, at least on the dairy farm. Any prejudices that still exist against ensilage are largely the result of inexperience, hearsay, or failure to make a proper use of it. The purpose of this article is to set forth a few points concerning different types of silos, not to open a discussion on the merits or demerits of silos.

The illustrations of the different types of silos appearing on this page were taken by an editorial representative of Farm and Dairy, while in Western Ontario last fall. Silos have long been in use in the locality where these photos were secured. The first ones erected were of the old fashioned kind, built square and placed inside the barn. To build that kind was a very expensive matter as they required a large amount of lumber. Being expensive they were put up by the most progressive dairymen only. With the introduction of the tub or stave type, farmers of more moderate means began to install silos. There, to-day on practically every farm where cows are kept, is the silo.

THE STAVE SILO.

The silo illustrated in figure No. 1 represents a stave silo. It was built eight years ago, on the farm owned by Mr. Wellington Sager in Wentworth Co. It is 14 x 28 feet, there being 24 feet of staves set on a four foot stone wall. Un-



1—A Representative Stave Silo

This silo and the others appearing on this page are described in the adjoining article.

fortunately, we were unable to secure the exact figures giving the cost of this silo. Its approximate cost was about \$75, without the roof. The roof cost an additional \$25. Mr. Sager speaking of

silos said: "The silo on the farm is a good way of wintering stock and is much cheaper than having to feed so much hay and grain."

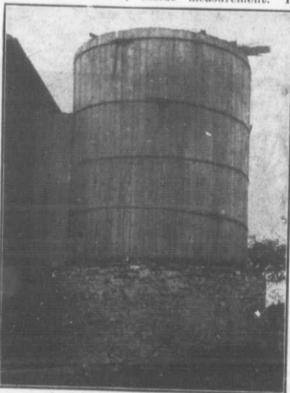
STONE AND STAVES.

Illustration No. 2 shows what might be termed a combination silo. It is built in an embankment at the rear of the barn on a farm in Brant Co. now worked by Mr. C. I. Bray. It consists of 12 feet of stone work, eight feet of which is under ground. The tub at the top is built of chestnut lumber, the staves being 16 feet in length. This silo was erected in 1901. The lumber cost \$16 per M. at the sawmill. Other items of expense were:

Excavation, three men and team, two days	\$ 8.00
Labor getting out stone from creek	10.00
Mason work, laying stone and plastering	24.00
Lumber at mill	24.00
Hauling and dressing lumber	\$ 7.00
Hoops \$10, cement \$4, lime \$4, sand \$3	21.00
Erecting staves	3.00

Total\$97.00

No roof was put on silo except a few old boards to keep out the snow. We were informed that the rain seemed to do the silage no harm and except for the appearance of the silo, the matter of a roof was a needless expense. The silo is 14 feet in diameter, inside measurement. The



2—A Combination Stone and Stave Silo

This silo was built more for utility than for appearance. It has given the best of satisfaction. Read the description of it in the adjoining article.

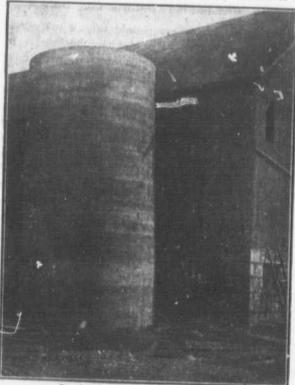
stone wall is built two feet thick, there being plenty of stone available, many of which were large and otherwise in the way. The particular advantage of this type of silo is that any silage left in it till late in the season, or for summer feeding, is in the stone part where it keeps perfectly and does no injury to the wood part of the construction.

THE CEMENT SILO.

A cement silo is illustrated in cut No. 3. This style, although more costly than either of the other two is becoming popular with many. This silo, on the farm owned by Mr. Walter Patten Brant Co., Ont., is 12x30 ft. inside measurement. The wall is one foot in thickness at the bottom and tapers to a thickness of seven inches at the top. The cost of erecting it was \$135.25. The items of expense were:

Cement, 30 blis. costing \$1.80 at factory	\$ 54.00
35 yards gravel at 15 cents	5.25
Wire for binding walls	3.00
Cost of erection about	50.00
Lumber for doors, top, chute, 400 ft. at \$30 a M.	12.00
Carpenter work	11.00
Total	\$135.25

These figures do not include the board of the men or the cost of hauling the cement or gravel. There are six doors in the silo for the convenience of getting out the silage. Mr. Patten assured us that the condition of the silage as used this past winter was the very best. Asked if he



3—A Silo that is Popular with Many

This silo is more costly than the others, but is more durable. The description of it appears in the adjoining article. Would he build a cement in preference to a wooden silo were he to rebuild, he replied, "I have had no experience with wooden silos, therefore I cannot say, I think, however, I would build cement."

The best type of silo for one to erect is in a large measure a matter of choice. Many who have the cheap stave silos claim that they give the best of satisfaction. Those with the more expensive cement silos assure us that they are the only kind to build as when once up they are everlasting; they are also fire proof, and hence are a safe investment. There are advantages and disadvantages with all types; the chief concern is to have a silo.

Many cement silos have failed to give satisfaction owing to failure to provide drainage. The silo should never be constructed without some means of drainage, for, should some immature corn be placed therein, the seepage will ferment and spoil the lower layers of ensilage. A prominent dairyman in Dundas Co., Ont., in giving his experience with silos told us that his cement silo did not give satisfaction as long as it had a tight bottom in it. After providing drainage, it gave better results. Before leaving the subject he assured us that after having three different types of silos he had come to the conclusion that the cheapest was the best and he would advise anyone at least of moderate means to erect the stave silo.

Corn and Alfalfa in Dairying

J. Stonehouse, Ontario Co., Ont.

The keynote of profitable dairying is: Keep only profitable cows and grow the right kind of feed to produce milk cheaply. Corn is the first thing to consider; grow more corn and ensilo it, farmers don't grow enough of corn as a rule. Corn won't make much milk of itself, but it is the best and cheapest base we can have. Corn silage is the most succulent and satisfying winter feed obtainable and if that can be supplemented with alfalfa hay and a little grain and fed to cows that are worth keeping, butter can be made at a profit even at 20c. a lb.

Get into growing alfalfa if you have the right kind of soil, but don't neglect the common clover; they both have their place. The silo is coming to be more properly appreciated and now