A Cement and Wood Silo

We intend building a silo in the corner of our barn. The space set apart for the silo is 18 x 15 feet, outside measurements. It is our intention at present to build a silo 14 x 16 feet with the part from the basement floor to the barn floor (nine feet) of cement and the upper part (19 feet) of wood. Is there anything better than a square silo? Please give directions for the construction of both concrete and wood work.—S. G. S., Glengarry Co., Ont.

A square or oblong silo will be satisfactory but we prefer to have the round form. In order to have no corn spoil in the silo it is necessary to have an even settlement which will exclude all air from the ensilage. This can be obtained better in a round silo than a square one. We have known square silos to have some spoil in the corners but not a large amount. If I were building an oblong silo in your building I would make the corners slightly round.

In starting a silo of this size a footing should first be dug about two feet wide and 10 inches deep. This footing will extend past the main wall of the silo eight inches on each side, thus giving it even bearing. Then start the main wall eight inches thick. It can gradually be reduced in thickness toward the top; six inches being sufficient at the top of the silo.

The proportion of cement and gravel depends somewhat upon the kind of gravel. With good clean sharp gravel a proportion of one to eight will make a first-class job. If it is desired to use large stone the main part of concrete should be mixed quite wet and the stones can then be pressed into the soft concrete. The stones should be kept a couple of inches apart and also should be kept away from the face of the wall.

CONCRETE PREFERABLE

We would not recommend putting a lumber top on this structure, especially as it is built inside of the barns. We know of one large dairy farm where this kind of a silo was built and the moisture from the ensilage rotted the timbers in the barn adjoining in five years. If lumber is used we would recommend cedar. This should be sawed to 4 x 6. The ends should have a notch cut out about half of its thickness. There should be a set-off made on the inside of the cement wall to receive the timber. At the top of the silo the timbers could all be bound together with another timber having a channel plowed out of the centre of it. It would also need two or three iron rods running across the centre at the top to stop its spreading.

The material used and the cost of this silo would be:

20 yds. gravel at 50c	$10.00
19 barrels cement, at $1.50..	28.50
Labor on concrete walls....	25.00
200 ft. lumber, $25 a 1,000..	30.00
Iron Rods.....	3.00
Nails	1.00
Labor	12.00

Total approximate cost, silo $109.50

We would however advise building a round silo outside the building, say 16 feet in diameter and 35 feet high with an opening up one side. This silo would be much superior to the one contemplated and would not be occupying as valuable room as the other would inside the building.—H. Pocock, Mgr. London Concrete Machinery Co., London, Ont.

Trouble with Turnips

My turnips are developing very poor roots this season. Instead of one large symetrical root, there are numerous small roots, the size of the finger. The tops also are poor and yellow. What is the cause of this?—J. M., Peel Co., Ont.

Your turnips are affected by a fungus disease commonly known as finger and toes or club root (Plasmodiophthora Brassica). This disease lives in the ground over winter and affects the turnip crop or any Cruciferous plant the following year. In order to get rid of this disease any Cruciferous plants, such as turnips, cabbages, or rape, should not be grown on this land for six or seven years as the disease will live in the ground for that length of time.

Turnips so affected should not be fed to stock. If, however, they are absolutely needed for feed, the manure should be kept separate and drawn back on the land on which the crop has been harvested. An application of lime will aid in ridding the land of this disease. If lime is applied, another crop of turnips might safely be grown in five years, otherwise it would be safer to allow the land to stand for about seven years.

A Bumper Corn Crop

Corn, both for ensilage and husking will be an exceptional crop this year. Reports received from Farm and Dairy correspondents in all of the principal corn growing sections of Ontario would indicate that the crop will be a bumper one. In only two or three cases is the crop reported as being below the average. The cold, unfavorable spring did not give corn a good start. There are numerous complaints of poor seed this year and corn had to be sown twice in many sections. The favorable weather during the balance of the season however has brought the crop along very rapidly.

The percentage of farmers who have silos varies from none at all to 75 per cent. In all places however where the silo has been tried, the numbers are increasing and all silo owners are well pleased with this method of handling the corn. It is noticeable that where silos are had in greatest numbers the farmers are most prosperous and there we find the best dairy herds. In many places the concrete silo is replacing the stave structure. The reports of a few of our correspondents follow:

Owing to poor seed, corn is not as good as in previous years.—G. A. Watson, Glengarry Co., Ont.

Corn is extra good; better than ever before.—G. W. Fortier, Carleton Co., Ont.

Our corn crop will be a little better than the average. Silos are appreciated and the number is increasing. I know of nobody giving it up after a fair trial.—E. McMahon, Carleton Co., Ont.

Corn crop is about average. Silos are increasing in numbers slowly and are giving good results.—W. M. Fisher, Lanark Co., Ont.

Ensilage corn is an extra crop. Every farmer should have a silo.—J. S. Gallagher, Frontenac Co., Ont.

Corn crop is the best for years.—John Morrow, Northumberland Co., Ont.

Corn crop is above the average.—John Perry, Hastings Co., Ont.

Corn crop is very good. We consider corn one of the best paying crops.—J. H. Gould, Ontario Co., Ont.

Prospects for corn were never better. Silos are growing in favor.—Wm. Keith, York Co., Ont.

Corn crop not so good as in previous year.—Jas. Keith, Victoria Co., Ont.

Corn crop will be average although not as good as last year. Mine planted twice. All the large dairymen have silos and are well satisfied.—J. Moriarty, Leeds Co., Ont.

The corn crop this year is excellent. Very few silos are used on account of the cost of building and extra labor in filling.—W. J. L., Leeds Co., Ont.

The increase. I never heard so much talk about building silos before as there is this fall. No less than four of my own neighbors are preparing to build right away.—W. H. Montgomery, Leeds Co., Ont.

The corn crop this year will be 80 per cent. of last year with the acreage 10 per cent. more. Silos are on the increase.—Arthur Smith, Kent Co., Ont.

Corn crop is average. About half the farmers use silos and are well pleased with this method of feeding. The number of silos is increasing.—H. W. Zilliax, Wellington Co., Ont.

Corn crop better this year than last. Not many have silos but the number is increasing.—P. McGill, Wellington Co., Ont.

A good crop of corn is expected. A number of cement silos went up this year.—John Farquharson, Bruce Co., Ont.

We will have an average crop of corn. Fifty per cent. of the farmers use silos and the number is increasing.—W. Lockhard, Simcoe Co., Ont.

Corn never looked better than it does this year.—Robt. Philip, Durham Co., Ont.

The crop of ensilage corn will be the best ever grown here.—John McKee, Oxford Co., Ont.

The corn crop this year is away above the average.—H. C. O'Neil, Brant Co., Ont.

Corn crop is better than in previous years. Silos are looked on with much favor.—G. E. Greenslade, Huron Co., Ont.

The corn crop is better than in 1909. There are few silos but the number is increasing.—M. H. Rutherford, Norfolk Co., Ont.

Corn is a splendid stand and heavily eared. We will have the biggest returns for years.—A. Benholen, Kent Co., Ont.

Corn crop is not as far advanced as usual but with warm weather we will have an average crop.—M. A. Drew, Kent Co., Ont.

Corn is a good crop and quite up to the average.—Arthur Smith, Kent Co., Ont.

Corn crop about the average. Silos are on the increase.—D. S. Robertson, Lambton Co., Ont.

Corn is about the same as last year. More silos are going up every year.—G. W. Neely, Meddlesex Co., Ont.

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