FARMER'S ADVOCATE. THE

SILO CONSTRUCTION.

HENRY DEACON, Huron Co., Ont. :- " Please publish in your paper the most approved system for building a silo and oblige. 2. would a silo 10 ft. by 26 ft. hold? How many tons

[There are two general classes of silos being constructed at the present day and it seems to be largely a question of cir-

stantial, modern

FARMER'S ADVO-

two years, but for

the benefit of our

numerous new sub-

scribers the subject

will be taken up at

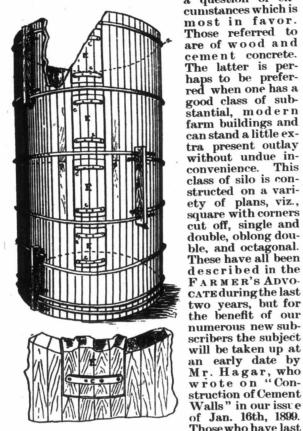
an early date by

Mr. Hagar, who wrote on "Con-

struction of Cement

Walls" in our issue

of Jan. 16th, 1899.



Those who have last year's volume of the FARMER'S ADVOCATE and wish information on silo construction should turn up pages 235, 259, 260 and 309.

Of wooden silos the octagonal and round forms are most in favor. Of these we personally favor the round stave form, after two seasons' experience with While we cannot speak from experience that sort. regarding the merits of the octagonal sort, we are Gree to express satisfaction with the stave style. Ours is 15 feet across and 30 feet high. It has no roof and is as plumb and efficacious as when first erected. During the past summer we covered the top with boards to keep out the sun and wind, which we believe was instrumental in preventing the silo from getting out of shape, as some others have done without roofs or coverings of any sort. Our silo has a stone foundation extending a few inches above the ground to provide a solid base for the 2-inch pine planks and to prevent the ends of the planks from rotting by coming in contact with the ground. The planks used were of two lengths, 14 and 16 feet, cut to the same width-8 inches-and alternated above and below, so as to give strength at the joint. The planks were dressed on the inside and painted at the edges. It is not necessary to bevel the edges of the planks, as the square corners will join more tightly together. When the foundation is ready to receive the planks bend the first hoop, putting the nuts on the extreme ends of the rods or hoops, and lay it 2 inches from the bottom by contemporary blocks. Bend the 5th hoop and raise it 12 feet from the bottom by means of stays and plumb over the lower hoop. Raise the first plank and set it on the foundation, inside the hoops plumb the edge; drive a four-inch wire nail through under each hoop, and bend round the rod ; this will keep the plank in place. Set up the planks all around until the circle is complete. Tighten the hoops already on ; put on the three between them and two or more above, according to the height, when the silo will be ready for use. The hops should be of five-eighths inch round iron, the threaded ends being three-quarter inch. The blocks through which the rods pass may be hardwood (end pressure) or cast iron. The hoops should be in halves, that the tightening may be more perfectly effected. The accompanying illustration represents a round stave silo, showing a style of block which some pre-fer. It also shows the construction of the doors. Instead of the wooden or iron blocks already referred to, we know of a number of farmers who are well satisfied with hardwood 4x4 inch scantling extending from the ground to the top of the planks. These are bored and the rods pass through them. These scantlings may stand outside of the planks or stand in between them, coming flush with the inside. This is preferable to the outside position, in which case the planks against which the scantlings lean are liable to be pressed inward. It is impossible to cover all the points of round silo construction in one article, and we will be glad to hear from those of our readers who are enjoying the benefit of a good silo and have a few words of advice to offer regarding silo construction. A round silo 10x26 feet will hold about 42 tons of ensilage.)

thresher, a crusher, cutting box, turnip pulper, and cream separator. The thresher and cutter take about seven horse-power, although six can run them.

[We incline to the opinion that for all the purposes named a good tread power would probably be the most satisfactory. For many of the purposes indicated, a windmill power answers admirably, yet for the cream separator, which requires a steady power and one available regularly twice a day, the windmill could not, for obvious reasons, be depended on. It might be well to make enquiry of the manufacturers of gasoline engines as to their cost and capability for the purposes specified.]

SERVICE FEE FOR BULL.

SUBSCRIBER, Sincoe Co .:- "I have a valuable registered Shorthorn bull, 2 years old, which was exhibited five times at the leading shows in this county and won four first and one second prize. wish to know what would be a fair service fee for such an animal to insure a calf ; that is, no calf no Would \$1.50 be too much? If my bills specify that parties returning the same cow three times in proper season will not be charged if not in calf, can collect the service fee from parties who only return their cows once and then take them to another bull without, my consent? People in this section have had a great deal of trouble to get their cows with calf last year. Some of my neighbors have only one or two cows with calf even after taking them to four different bulls. They appear to come in season irregularly, sometimes in two weeks and at other times in four or five weeks. Is it in the season, or what do you suppose is the cause?

[The service fee named seems to us a very reasonable one for a bull of this class when the terms are to insure. A usual fee for first-class bulls is \$2 for grade cows and \$5 for registered cows, and this by the season. We would prefer to make the fee \$1 for the season, payable whether there is a calf or not. People would then be more likely to return their cows till they were in calf, and the owner of the bull is entitled to some remuneration for his time in attending to visitors, time being equal to money to a man who has business to attend to. If bills are issued and the terms specified, as indicated, we are of opinion that you could collect the fee by process of law, but it is better to avoid such a course if possible, as it is unpleasant to have such trouble with a neighbor. It is better that both parties be reasonable and seek to agree on a fair compromise. It is impossible to determine the reason why cows are so difficult to get in calf in some seasons. We are inclined to believe the season is generally responsible where there have not been abortions, but if abortion is prevalent among the cows it becomes a very serious matter and is very difficult to cope with. The fact of cows coming in season irregularly would seem to indicatet that trouble.]

FINISHING CONCRETE FLOOR.

A SUBSCRIBER, Lennox Co., Ont :-- "The article in Jan. 16th ADVOCATE by F. B. Hagar on how to make and mix cement concrete and gravel is good, but I require some more information. Would Mr. Hagar, or someone else, say what proportion of gravel to cement is best for cow stable floors; how fine should the gravel be, and how thick a coat is necessary to make a good floor, and is one coat sufficient, or does it require a second or finishing coat?"

[NOTE. – Elsewhere in this issue we give Mr. Hagar's letter in reply to the above. We might FOUNDED 1866

COLLECTION OF SERVICE FEES.

SUBSCRIBER, Elgin Co.:-"I bred a mare to thoroughbred horse last July and she is not in foal. Can the owners collect fee (the terms were fifteen dollars to insure foal)? Please answer through the columns of your valuable paper and oblige.

[If the terms of the bills advertising the services of the horse required the regular return of mare for trial, and that requirement was complied with, we do not think the fee can be collected if the mare is not in foal; but if you failed to comply with the terms, the probability is that the owner of the horse can collect.]

CONCRETE SILO BUILDING.

J. D. ALBRIGHT, Lincoln Co., Ont :- "Would be greatly obliged if you would in your next issue give the particulars of cost of constructing a concrete silo of about 40 tons capacity; also what dimensions are best, and what is the best plan for laying the walls, and providing for doors, roofing, and filling when built?" [A silo 10 x 10 x 20 feet high will hold 40 tons;

that is, fifty cubic feet will hold one ton of silage; the walls would have to be 14 inches thick at the bottom and 10 at the top. A concrete silo of the above dimensions in the vicinity of London, Ont., would cost for cement, gravel and labor about \$105. Some object to the concrete silo on account of its cost, others to the wooden ones on account of the short time they last. But I find that why the concrete silo has not been more in vogue was because some of them were built too costly, the walls were too heavy, and twice as much cement and material were used as was necessary. I have seen some that were built three feet thick at the bottom and 14 inches at the top and 20 feet high, but if they were properly built and anchored they could have been constructed at one-half the cost. I will endeavor to give a description of how to build a concrete silo and the probable cost of such. I find the double silo as a general rule gives the best satisfaction, because there is not so much surface exposed, and one can be used for summer feeding. I therefore take a double silo, $12 \times 17 \times 24$ feet high, 14 inches thick at bottom and 10 inches at top, with a partition wall of eight inches thick, which will give two silos 12 x 8 feet 2 in. square. Such a would take about 68 barrels of cement and forty days' labor to build it for one man, and fifty yards of gravel and sixteen yards of stone.

To built such a silo, first put in the footings at least two feet wide and one foot deep; then nail two planks together lengthways, and stand them on end for the outside corners, and another on inside diagonally across the angle, so as to cut off the sharpe angle, as it will allow the silage to properly settle when filling. Wire these planks together at the bottom, and tack a strip from each of them at top to keep them from spreading, and nail $2 \ge 4s$ from corner to corner at top to keep them to their places. Then stand upright, to build by the same as I described for walls in my letter of January 16th. But for high walls I prefer bolts, as they are not in the way when building. The silo should be about two inches narrower at top than at bottom, the batter to be on outside. By taking is no subthe batter to be on outside. By taking six or eight strands of common fence wire and twisting into a cable and laying it in the concrete wall every three feet high so as to circle the silo, and keep it near the outside of the wall, this will keep the silo from spreading. The doors should be put in one above the other, or zigzag, not in one continous opening, as that weakens the silo; by taking a 2×4 and standing it on end at door-jambs next the inside of silo it will leave a notch in concrete for door NORVAL B. HAGAR. to fit in.

96

FARM POWER.

W. M., Grey Co., Ont. "Can you give me some advice as to what kind of farm power would be the most suitable to me? I want it to run a small

add that one of our staff who has had one of these floors in use for seven or eight years found no trouble arising from giving the floor a good, smooth finish. In fact, he prefers it, being easier cleaned, and has an idea that it will wear better.]

RIPENING CREAM - SEPARATORS

JAS. WOODBURN, Carleton Co., Ont.:-""Enclosed you will find one dollar for the FARMER'S ADVO-CATE for this year's subscription, wishing you every success, as I consider it one of the most useful papers in Canada. It encourages separating, but does not tell how to ripen or prepare the cream for churning. Give us some information on that point, also where we can purchase a good separator at a reasonable price? Hand separators should be sold for \$25. They are too dear for the small farmer.

[Pointers on cream ripening can be gathered from the FARMER'S ADVOCATE in Jan. 2nd issue, page 15; Feb. 1st, page 69. We know of no firms giving better value in separators than those advertising in our columns.]

CORN SHELLER WANTED,

L. G. S., Ontario Co., Ont.: -" What is the best kind of corn sheller to use by hand or horse power?

[Here is a chance for manufacturers or dealers in corn shellers to do business by advertising in the FARMER'S ADVOCATE.]

CALF FEEDING.

G. W. M., P. E. Island: "Kindly advise me as to the best method of raising Shorthorn steer calves. 1 will have several next month, and wish to raise them in the best possible manner. How much milk can be safely fed (skimmed milk)? I have the following feeds besides milk : Flaxseed, oats, turnips, and clover hay. Please formulate a ration of these for a calf. Any information on the subject will be greatly appreciated?

We would refer our correspondent to several letters elsewhere in this issue, giving the experi-ence of successful stock-raisers.]

FARM GOSSIP.

Lincoln County, Ont.

Lincoln County, Ont.

3