

Concrete for Walls.

H. B., Wellington County, asks for more information about the use of cement for building stable walls. Perhaps the best evidence of the value of cement as a material for stable walls, is its immensely increased use throughout the country. It is seldom now in many districts that any other material for stable walls is used, stone, brick, wood, etc., all being neglected, and cement concrete everywhere used. Concrete has two outstanding features that recommend its use: It is cheaper than stone, and as durable as any material yet available. The foundation of a concrete wall should be laid as for stone, the depth depending upon the nature of the soil, but should be below the frost line and dry. For the average-sized barn the wall is generally made one foot thick at the bottom, and drawn in to eight inches at the top, but for an unusually heavy frame it should be some thicker. The amount of cement required will depend upon the brand used. A good rule to follow in estimating the number of barrels of cement and yards of gravel needed for a wall is to find the number of cubic feet to be built; then 128 cubic feet of gravel is required for each 100 cubic feet of wall, and one barrel of Portland cement in the proportion of one to ten for each thirty-five cubic feet of wall, or a barrel of rock cement, one to five, for each twenty cubic feet; that is, six barrels of rock cement or three of Portland for each cord of gravel or each one hundred cubic feet of wall. Field stone may be used to make the gravel go farther, but they should not be within two inches of the outside of the wall. The best gravel to use is that containing from twenty to thirty per cent. of sand. If sand and broken stones are used, this can be gauged quite accurately. The building of the walls is quite a simple matter. Strong plank is used for moulding, curbing or shoring, as it is sometimes called. These are set on edge on both sides of the projected wall, and held in place by stout stakes, which are held together at the top by wooden braces. The cement and gravel is mixed first dry, then while still being mixed water is added, until it is the consistency of thick mortar. This is then dumped into the curbing, and well rammed down with a heavy iron rammer. The ramming is the important part of concrete building. It is this packing that makes the cement and gravel bond; without it the mortar will simply dry out and crumble. If the mixture is shovelled in by one man, while another continually tamps with a good heavy tamper, the wall should be properly built. When tamped about enough the moisture rises to the surface of the concrete. About fourteen to eighteen inches are filled in at a time, the work being dry enough in about twenty-four hours to raise the shoring another space. After a little experience a man becomes more proficient in the use of cement in all kinds of weather, hence it is best to employ one to boss the job who has had some experience in building concrete walls.

Plowing and Plowing Matches.

"Maritime" writes as follows: "Cannot some of your readers who are posted give, through the 'Farmer's Advocate,' an idea of the advantages to be derived from plowing matches, stating the best time of year for holding them, and giving an outline of how they should be conducted, especially the points to be observed in making the awards. A great deal must depend upon the judging. In my locality, plowing seems to be done with less thought and in a more slipshod manner than formerly. Whether this is an outgrowth of the theory of surface tillage or from the 'gang plow' or 'skimming' method of fighting weeds after harvest I need not debate. Surely, no one will contend that slovenly plowing is the accompaniment of good and profitable farming. I look for light on this important question through your columns."

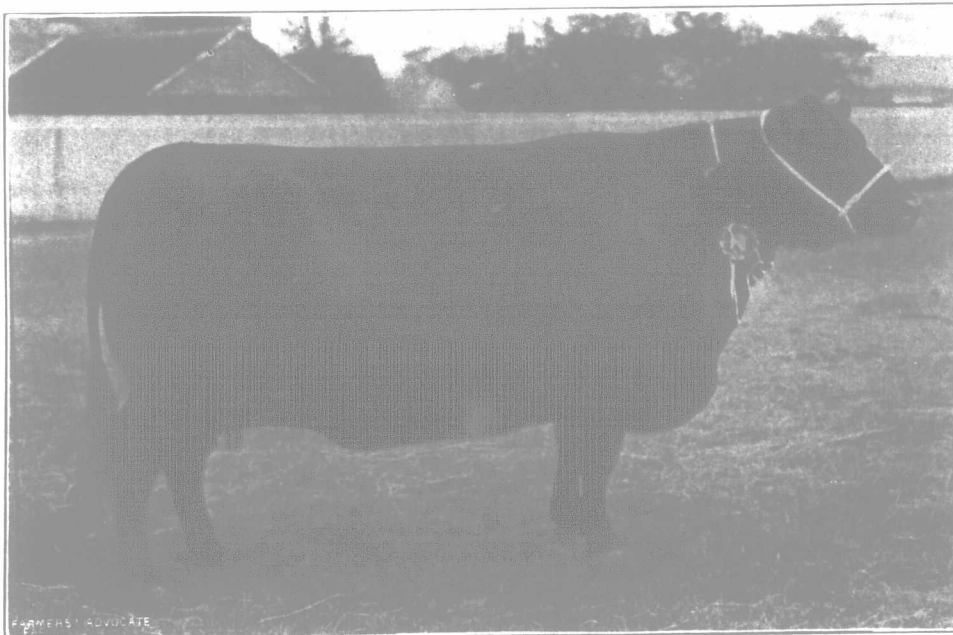
Help Yourself and Others.

Two weeks ago we published our very liberal premium offers to those who secure new subscribers to the "Farmer's Advocate and Home Magazine," and already a large number have sent us new subscription lists and have received their premiums. Our friends consider it a pleasure to induce their neighbors to become readers of the "Farmer's Advocate," and are more than pleased with the premiums secured for such services. The esteem in which the "Farmer's Advocate" is held by all classes is evidenced by the number and variety of testimonials continually being received at this office. From now until December we are prepared to liberally compensate everyone who sends us one or more new subscribers. By utilizing a few spare moments now the inducement of a special exhibition number and the magnificent Christmas special will make it easy to secure new names.

STOCK.

Breed Export Cattle.

The complaint of a scarcity of suitable stockers to graze or feed into exporters is steadily becoming more acute in Canada, and will continue so until farmers more generally act upon the knowledge they have that only by the use of robust, thick-fleshed sires can the improvement needed be secured. There are plenty of good bulls in the country that can be bought at a reasonable price if people will but look for them and make a fair offer for them. A bull of this class will bring for beef at the end of a two or three years' term of service, nearly, if not quite, his original cost price; while the improved quality of his progeny will render them worth ten dollars a head more for feeders than ill-bred cattle which have cost quite as much to raise. It is only by improving the character of our cattle by the use of good bulls, and by more liberal feeding from calfhood, that we may hope to hold our own or successfully compete in the British markets with the class of cattle shipped from the United States, which have taken most of our best bulls, and South America, which is absorbing many of the best sires of the Old Country, and will soon be in a position to put a better class of cattle on the market than we are in a position to ship. Winter calf-raising can be profitably prosecuted in the good stabling now so general in this country, and a fall calf well done for through the winter will find for itself in the spring and following summer, and if given a good chance may be made ready for export at two to two and a half years old at a moderate cost of production and a fair profit.



Effulgent of Donesfield.

Aberdeen-Angus cow. First and champion, Royal Show, England, 1904. Exhibited by Mr. R. W. Hudson, Marlow.

Care of the Flock.

Presuming that the lambs have by this time been weaned from their dams, they should be given the run of the freshest pastures on the farm. The aftermath of clover generally makes a good foraging field for them, and if plenty of pure water and salt and shade is available they will make satisfactory headway for the time being. If a field or plot of rape has been sown convenient to the pasture, it will, when sufficiently advanced, prove a helpful supplement to the clover, and will put on good flesh rapidly. The ewe flock should be culled at this season, and any too old to be kept longer, or those having unsound udders or being otherwise undesirable to retain as breeders, but to be fattened for the butcher, may be kept with the ewe lambs, which should be soon separated from the rams, which will do much better if kept by themselves, and if intended to be sold as breeders this fall will be the better for a daily feed of oats and bran to make them strong and fitted to stand shipping and the service that will be required of them later in the season. A great improvement may be made in the appearance of the lambs, and, indeed, in all the flock, by squaring the tails with the shears, and care should be taken to see that all burrs are cut before ripening and removed from the fields and lanes where the sheep run. A small cow bell strapped to the neck of one member of each division of the flock has a wholesome influence in scaring dogs away and of calling attention in case the flock is attacked. Two bells in each lot will be even better. The cost is comparatively little in proportion to the saving they may effect and sense of security they give the owner.

A Pig Trap.

On a big farm in Kane County, Illinois, there is in almost daily use a very valuable hog trap, a device for saving much worry and hard work in handling these obstinate animals. Driven through gates into smaller and smaller quarters, Mr. Pig finally stands in a stall so narrow he cannot turn around, and a gate slides down behind him. He pokes his nose through an opening between two upright bars of hard wood, rounded to fit his neck, when one of the bars closes upon him tightly and is fastened above, and he can do nothing but stand still while rings are punched through his snout.

With different holes, pins, keys, etc., these bars may be quickly adjusted for a hog of any size, or fastened above when the pig has stuck his head through, and one bar may be slipped out entirely by simply jerking it upward to let a large hog through after ringing him, and the next minute the trap is ready for the next pig.

The same trap or stall is changed to a hog-loader, by dropping into it a slanting floor, up which the animal walks into the wagon.

The Chilled Meat Trade.

Ald. Dunn, of Toronto, an authority on the cattle trade, who has recently returned from England, suggests that the Canadian Government erect at Liverpool, Southampton, London and Glasgow, cold storage establishments for the reception of cargoes of chilled meats from Canada.

"I have on former occasions predicted," said the Alderman, "a great future for our cattle trade, both in dressed meat and live cattle. On each of my visits to England within the last ten years I have found a great increase in the consumption of chilled meats, imported from the United States, South America and other countries. This fact is, no doubt, having a great effect upon our live cattle."

"The prejudice of eight or ten years ago against chilled meat has almost entirely died away, and chilled meat is quoted in England to-day for ten to twelve cents per pound, or within a fraction of the quotation for the live animal. When the difference in the cost of transportation of the living and the dead is taken into consideration, it may easily be seen that with proper facilities the chilled meat business is much the safer, but it will require a strong company organized in this country to start a concern of sufficient magnitude to compete with the American, who is well established in the British market."

"The Government," he said, "could not aid in the development of the dead-meat industry better than by erecting cold-storage depots at several British centers. The cost of cold storage in London, Liverpool, Southampton and Glasgow was so very expensive that it practically debarred people from going into the dead-meat business, when they had to depend on private corporations for storage facilities. He was told that all the big dead-meat exporters of the United States had their own cold-storage facilities."

On the question of trade generally, Ald. Dunn observed that trade conditions were anything but satisfactory, and on the boat by which he came home were a large number of business men from London and other cities, who were coming to Canada or the States with a view to improving their business prospects.

Have You Earned a Premium?

Dear Sir,—Enclosed please find \$1.50 for a year's subscription to your magazine, for Jonta H. Rittenhouse, Box 45, Vineland, Ont., a new subscriber. I choose for premium the mariner's compass and the brass-band harmonica.

Yours truly,

Vineland, Ont., Aug. 5, 1904. A. S. CULP.

Please find enclosed the sum of \$3.00. Take \$1.50 for my paper, and \$1.50 for a new subscriber, Thos. A. Brown, Carp P. O., Ont. I wish the brass-band harmonica and the microscope offered in your last issue. WM. BAIRD.

Diamond, Ont., Aug. 5, 1904.