

take part in profitable dairying in Canada. Again, if Shorthorn breeders would be consistent in the praise of their favorites there must be a separate registration, for they cannot make them ideal beef animals and good dairy cattle at the same time, while with a separate register they can aim for both ideals.

Why should the Dominion Shorthorn Breeders' Association not be the first to adopt this principle? It would no doubt be the means of bringing to Canada some grand dairy stock, and in the course of a few years farmers would be enabled to get what they cannot now get, viz., a first-rate Shorthorn dairy bull.

"CLAUGHBANE."

A Word for the Jersey.

To the Editor FARMER'S ADVOCATE:

Will you allow me space in your valuable paper to answer a few questions which have been asked me from a number of your readers in Manitoba, the Northwest, and even from Dakota?

1st. "Did your investment turn out paying one?" My first investment was two pure Jersey heifers and a bull. I purchased from Mrs. E. M. Jones, Brockville, a yearling heifer and a bull calf. The other heifer, nearly a pure St. Lambert, I bought in this country. I have only tested the butter yield of Roter's Lassie (half-sister to Mrs. Jones' 1st prize bull). When she was hardly two years old she made me 1 lb. 13 oz. of butter a day, and I am satisfied she kept it up till within six months of dropping her second calf, when I endeavored to dry her. Two years ago I tested her for nearly five months, and she made from Dec. 6th to May 2nd, 250 lbs. butter, and I am sure she added 250 lbs. more in the next five months she was milking.

In reference to Prize of the West, I have never tested her butter yield. I had all my cows tested by Babcock tester last summer, and she tested 6.8 per cent. butter-fat and gave over 30 lbs. of milk. Roter's Lassie tested the same. Bell of Rosedale, daughter of Prize of the West, a two-year-old heifer, tested 6.5 per cent. This was on grass alone and they were milking all winter. A grade Jersey tested 5 per cent., and gave 2½ pails milk daily on grass alone. I consider it the best paying investment I ever made. I have two heifer calves that money could not buy. In three years the bull had paid the original cost in service fees.

2nd. "Are the Jerseys constitutionally hardy?" Yes. I have never tried wintering my cattle on the sunny side of a wire fence or living at a straw stack, but one winter I drove them 1½ miles to water, and since I have had to drive them 2 of a mile. I keep my cattle in stables that very seldom freeze, and then only near the door, but give plenty of fresh air. They are healthy, and in good spirits; run and kick up their heels like colts. They stand the winter better, I think, than Shorthorns.

3rd. "How do you find the grade steers pan out in beef?" Comparing them with well-bred, well-fed Shorthorn steers, they will not weigh as much. I have a two-year-old steer that is as large as any steer same age in this settlement. I killed a yearling steer that dressed 440 lbs. of the finest of beef, and a pure Jersey heifer that weighed 450 lbs.; she was three years old.

4th. "Does the steer give more beef for the same amount of feed than another animal would?" I do not know. The steer I killed was taken from the grass. The heifer was taken from the grass and fed till Christmas. I gave her at first one wheat sheaf a day, and the last three weeks I gave her two a day and all the hay she would eat. She was the fattest animal I ever killed, and I have helped kill a good many. A Jersey steer will weigh more than a Shorthorn according to measurement. I have known it to be tested. I have been told by beef breeders that the Jersey is a hard keeper. This is true in reference to the milking cows, but is not true in reference to the others. I find they are very easy to keep, and will keep fat on far less than either Shorthorns or scrubs.

Eastern Assiniboia.

J. B. POWELL.

Scrub Bulls at Large.

A subscriber who has been subjected to vexation and loss through the spoiling of a valuable registered heifer by a scrub bull breaking over the fence asks us for an opinion as to his right to compensation and as to the man who knowingly allows a bull to run at large. We understand there is a provincial statute under which municipal councils may pass a by-law prohibiting live stock, and especially male animals, from running at large on the public highways, under penalty of being impounded. If under such by-law damage is sustained by the trespass of animals unlawfully abroad, the party injured may recover in an action at law, but it would be difficult, if not impossible, to impress a judge or jury with a full sense of the loss sustained by the owner of a pure-bred cow in such a case, since it means not only the loss of a calf which should have been entitled to registry if the cow had been bred to a registered sire, but it means the loss of all the progeny of such calf, which would, in all probability, have lived the average life of such animals and would have produced the average number of offspring. The law of compensation in this view of the case is cumulative, and is consequently difficult of determination, and there is very little probability that in an action at law the plaintiff would get much more than nominal damages. Besides this, it is quite within the range of possibility that the cow may be permanently

disqualified for breeding true to the type of her class, for there are numerous instances on record where the first impregnation having been effected by an inferior sire the future offspring of the same mother have been marked with the peculiarities and characteristics of the sire interested in the first impregnation, so that she may never be safely counted on to produce a typical animal of her own breed. In view of the uncertainty of the outcome in law and the undesirable nature of that tribunal, we submit that a provincial statute should be placed on record dealing out severe penalties in all cases where such animals are allowed to roam outside the limits of their owner's domain, and in the meanwhile all municipal councils should use the power vested in them to prohibit.

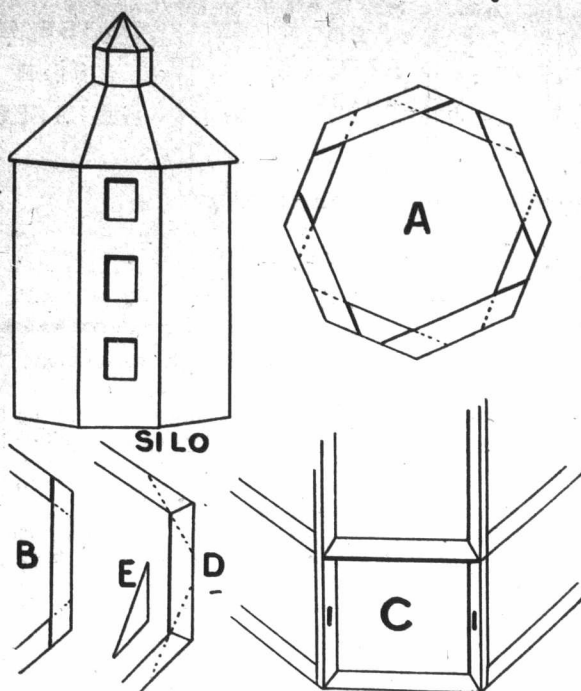
But apart from this view of the case we have our own opinion, and a very strong one, of the man who knowingly and deliberately allows a bull or other male animal to run at large without regard to the rights or interests of his neighbors. It may be, and no doubt frequently is, done through mere carelessness or from want of thought, but even in this case it is wholly inexcusable, and if it is done through selfish indifference, as we fear it too often is, we have only to say that we regard it as a very mean spirit and one which no one should entertain who wishes to be considered a good neighbor. When such cases occur it is well to give friendly notice to the owner to restrain the animal, and if this does not have the desired effect the complainant should have no hesitation in impounding the animal at least, and may use his own judgment as to claiming damages if he has sustained any loss. We might go further and state that we think these remarks apply for the most part in the case of bulls breaking through fences between adjoining farms. Bulls, whether scrub or pure-bred, should not be allowed to run in the fields if they have contracted the habit of going over or through fences, and the owner should be held responsible for any damage resulting from such trespass. But a little thoughtful consideration for the rights of our neighbors and the practice of the golden rule of doing unto others as we would they should do unto us will save a great deal of vexation and unfriendly feeling, and is the proper rule to be observed by all.

FARM.

The Octagonal Silo.

BY J. MOUNTAIN, PERTH CO., ONT.

There will be many silos built this season, and no doubt many are enquiring what form of structure is the most serviceable, durable, and cheap. It is to give assistance to such that I send you these



descriptions and diagrams of the octagonal as the form which, in a somewhat extended experience both in building and filling, seems to me to fill the bill best. The farmers in this vicinity were early in adopting the silo system, and as a consequence we have structures of many forms—perhaps two-thirds of the farmers having silos of one form or another. Those who are building outside permanent frostproof silos this year are, as a rule, adopting this form. It may be built of wood entirely, wood with cement or stone base, or cement entirely.

The claims made for this form of silo are that it is to all intents and purposes equal to a round one, can be built of wood much cheaper and more durable and a great deal easier to build than round, excepting the stave form, however, which for an outside silo is not first-class on account of frost, which sometimes makes it very inconvenient feeding, if it does not injure the fodder. The octagonal can be built of cement, which it is next to impossible to use in a round one. Its advantages over a square one are that it takes at least one-sixth less material in construction for the same capacity. Its power to resist the outward pressure is much greater, having only short girts and greater strength at the corners, and, as a consequence, lighter studding can be used. The silage settles

much more evenly, there being no sharp corners.

To build a wood silo material to be used for siding may be either pine or hemlock, two thicknesses for inside, joints well broken, with tar paper between, first or outside ply of inside lumber especially being better if dressed to an even thickness; one ply of lumber on outside, better if battened. Studding, sound hemlock, pine, elm, etc., 2x10, overlapped at corners and well spiked. These studdings are placed horizontally and may be placed at proper distance apart to suit the lumber (studs, B). Then there must be uprights at each corner (C, No. 1), they may be either plank or round poles cut into lengths, and must be well toe-nailed at bottom, and each row of studs spiked to the top. Three feet apart will be quite close enough for studs. Each ring of studs should be plumbed by line or level. In beginning to build draw a circle with stake and line on the ground or on barn floor the size intended to erect (A), then draw at right angles the diameter, dividing the circle into eight equal parts; then draw from extreme points of lines, through A, and you have the working model.

A silo 30 feet deep and 15 feet across, inside measure, will hold 100 tons of ensilage.

An experienced builder of cement will be able to arrange his material equally as well as in a square one, the only difference being that his molding planks will be shorter and twice as many of them. If cement is used for this form or any other form, either for foundation only or for whole silo, it is advisable to dig out the size of silo four or five feet below the surface; cement from the bottom and cement the bottom also. It makes the most valuable part of the silo for summer feeding if made water-tight, the silage being kept cool during warm weather. It might be banked three or four feet with earth for the same purpose.

Ohio Experiments with Corn.

Bulletin 78 of the Ohio Experiment Station contains a summary of six years' experiments in the culture of corn. The tests do not encourage the making of abrupt changes in the variety of corn grown in a given locality. Some of the most valuable sorts, such as Leaming and Hess' White, have been fixed by careful selection through a considerable period of time in single localities, and thus far there has been no evidence that such sorts may not continue to improve under the same method of treatment; but when removed to a different soil and climate these same sorts are often disappointing. Even when the differences in latitude are small, if the character of the soil be radically different there is likely to be considerable variation in the behavior of the crop.

The highest per cent. of sound corn has been reached from an average stand of one stalk every eighteen inches, but the total yield has not been so large as from closer planting. The most profitable yield has come from giving a foot in linear length of row to each plant, the rows being three and a-half feet apart.

Shall we plant the butt and tip grains of corn? This question has been studied for nine years. The average yield for the nine years' test is 53.9 bushels per acre from the butts, 50.3 bushels from the middles and 53.7 bushels from the tips, a difference of only half a bushel, and that difference one which shifts from year to year. The average of the first eight years was slightly in favor of the tips. These experiments fail to indicate that there is any sufficient reason for rejecting any portion of the ear for seed, so far as average productiveness is concerned. As the ends of the ear dry out more quickly than the middle it may be that under some conditions the middle grains may be injured when the butts and tips escape; but the use of modern machinery for planting makes it necessary that the grains of the seed corn should be uniform in size, hence the rejection of the butts and tips, in thoroughly cured seed, is justified as leading to a more uniform stand.

Deep and shallow cultivation of corn.—The Ohio Experiment Station began studying the comparative effect of deep and shallow culture of corn in 1888. At that time the implements available for shallow culture were imperfect, and for two years the results were negative or slightly in favor of deep culture. During recent years general attention has been drawn to this subject, especially by the results attained at the Illinois Experiment Station, and manufacturers have produced implements better adapted to shallow culture. With some of these implements the work has been continued in Ohio since 1891, with results uniformly in favor of the shallower culture, the average yield from cultivating one inch and a half deep with the spring-tooth cultivator being six bushels greater than from cultivating four inches with the double shovel.

The same problem has also been taken up at thirteen other stations, besides the two named, with results generally favoring shallow culture. Counting each season's experiments at each station as a single test, forty-five such tests had been reported up to the close of 1895. Of these, twenty-seven showed larger yields from shallow culture, seven were inconclusive and eleven showed larger yields from deep culture. Of these latter, however, cultivating only three inches deep was in some cases called "deep culture."

Judging from these tests there seems to be little doubt that the average yield of corn in Ohio may be very considerably increased by the use of shallow-working cultivators.

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