

Bill of Material for Another Plank-frame Barn.

Please publish a bill of material similar to that published in issue of February 18th for plank-frame barn 35 x 68 ft., 18-foot posts, hip-roof. Would sills 4 x 8 be as good as 3 x 10, being easier got?

R. J. McG.

Renfrew Co., Ont.

R. J. McG. wishes to know if he can form his sills of 4 x 8-in. material. In regard to this, I would advise him to build these sills of 2 x 8 in., two thicknesses, in preference to splicing 4 x 8, as it would make a better sill and be easier and quicker to frame, but 3 x 8-10 in. is plenty heavy.

I would also caution him to spike his nailers and braces very carefully; in fact, be careful to see that every joint is most securely spiked, and all main ones bolted, as it is upon the care used in assembling and putting together the various parts that the strength of a plank-frame depends. Every timber used has some special function to perform, and, in order that it may meet this requirement, it must be securely fastened in place, and meet the stress in the particular manner in which it comes.

From the above cautions, I do not wish the reader to think that the plank-frame is difficult to construct, for such is not the case, only that I wish builders to understand that directions and plans must be followed to get the best results. And when such has been done, a better frame cannot be built by anybody in any way.

Barn 35 x 68, by 18 feet high—Six bents; one 12-foot span at center for drive-floor; remainder, 14-foot spans.

Two End Bents.—Four sills, 2x8x35 ft.; 12 nailers, 2x6x18 ft.; 4 beams, 2x8x35 ft.; 20 posts, 2x8x18 ft.; 10 posts, fillers, 2x4x18 ft.; 8 braces, 2x6x20 ft.; 8 purline posts, 2x8x26 ft.; 8 braces, 2x4x10 ft.; 4 gable ties, 2x6x20 ft.; 6 stiffeners, 3x6x18 ft.

Two Interior Bents.—Four sills, 2x8x35 ft.; 4 sills, 2x8x2 ft.; 8 posts, 2x8x18 ft.; 8 purline posts, 2x8x26 ft.; 4 roof supports, 2x8x24 ft.; 4 sub-supports, 2x6x16 ft.; 4 collar ties, 2x12x5 ft.; 8 stays, 2x4x4 ft.; 4 ties, 2x8x8 ft.; 4 ties, 2x6x6 ft.; 4 braces, 2x6x9 ft.

Two Floor Bents.—Four sills, 2x8x35 ft.; 4 sills, 2x8x2 ft.; 8 posts, 2x8x18 ft.; 8 purline posts, 2x8x26 ft.; 4 roof supports, 2x8x24 ft.; 4 sub-supports, 2x6x16 ft.; 4 collar ties, 2x12x5 ft.; 8 stays, 2x4x4 ft.; 4 ties, 2x8x8 ft.; 4 ties, 2x6x6 ft.; 4 ties, 2x6x4 ft.; 4 braces, 2x6x9 ft.

Side Timbers.—Eight sills, 4x8x18 ft.; 24 nailers, 2x6x14 ft.; 4 nailers, 2x6x13 ft.; 16 plates, 2x8x14 ft.; 4 plates, 2x8x13 ft.; 16 purline plates, 2x8x14 ft.; 4 purline plates, 2x8x13 ft.; 8 couplings, 2x8x8 ft.; 4 couplings, 2x8x4 ft.; 4 braces, 2x4x12 ft.; 16 braces, 2x4x6 ft.; 8 uprights, 2x6x18 ft.; 16 braces, 2x6x20 ft.

Gable nailers will require about 14 pieces 2x6x16 ft. long.

ALF. A. GILMORE.

Huntingdon Co., Que.

[Note.—Having published this and one or two other specimen bills of materials for plank frames, we shall have to decline to publish further ones, owing to the space required. With the illustrations and information already printed, builders and carpenters should now be in a position to do their own figuring.—Editor.]

Pumpkins for Milk.

Editor "The Farmer's Advocate":

Many farmers in the eastern counties are growing pumpkins for fall feed for their cows, and they find them a very profitable crop to grow. Cows are extremely fond of them, and, as a milk-producer, they are unsurpassed by any vegetable grown on the farm. They are heavy croppers, if grown by themselves, and will give a greater weight per acre, if properly cultivated, than either mangels or turnips. They are extremely easy of cultivation, and are better put on soil which has not been spring manured.

The ground should be well worked before planting time, and the seed should be put in just after corn planting. When ready to plant, light furrows should be run 12 feet apart, and then crossed at the same distance, and the seed dropped where the furrows cross, thus making the hills twelve feet apart each way. The hills can be quickly covered with a hoe, but, before covering, it is an excellent plan to take out a load of barnyard scrapings and throw a shovelful into each hill. This is much better than manuring the whole ground, as the young plants get right hold of the abundance of available plant food in the scrapings, and make a rapid growth. Three to four plants are enough for each hill.

The ground can be cultivated with a common two-horse cultivator, and very little hoeing is required. Cultivate as long as possible, and if the cultivator bruises the ends of the vines, it will do them good, as it checks the running of the vines and makes them send out laterals. A quarter of an acre will grow a large amount of valuable fall feed, and they can usually be kept and fed into December.

J. S.

Cheap Stave Silo.

Editor "The Farmer's Advocate":

Many years ago we saw directions in "The Farmer's Advocate" for building a cheap silo, so we built one at once, and it is still giving good satisfaction. We since then built a smaller one, which we use in warm weather, as the silage will not get musty so readily. We got our rods from a skating rink that had collapsed, full length. We got over 1,500 feet of good, unplanned, hemlock plank, cut about 10 inches wide and 20 feet long. The longer the better.

1,500 ft. hemlock plank	\$14.00
Rods, 1½c. per lb. (¾-in. would do)...	3.50
Nuts and washers	.25
Blacksmith, cutting thread, 6 in.	2.25
Nails	.25

Total \$20.25

To bend rods, take a short piece of timber and hollow out about 2 feet, 2 inches deep. Lay rod along this, with one to hold each end, and one to strike with back of axe. Our rods are 20 feet 3 inches long, 12 of them making 6 bands. Then bore two 4 x 4-in. scantlings—flattened poles will do—making holes ¼ inch larger than rods. Make nuts work easily. Plumb and brace scantlings, making a scaffold to nail top end of stave from. Put in the second and fifth rods, and then set staves on end, nailing to rod so as to steady them. Run a saw draft so that doors will be cut on a bevel, but do not cut doors out till all the bands are placed. Cover with rough lumber. One of ours is about 12 ft. across inside; the other is 10 ft. We use boards to increase height just tacked inside. Our two silos hold 80 loads. Some of our neighbors made theirs with 2 x 3 scantling, laid in courses, like a rail fence; octagon shape; nailed at corners, and lined with double-inch, with tarpaper between. We think it is rather better than ours, and does not cost much more. Our silage keeps well enough. A good many of our neighbors are preparing to build next summer.

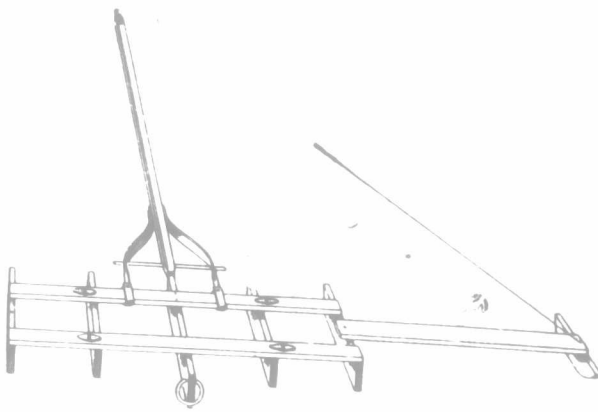
Simcoe Co., Ont.

R. ANDERSON.

Another Corn-marker.

Editor "The Farmer's Advocate":

In your March 18th number I saw illustrations of three kinds of corn-markers, with request to send something better. Below I give sketch of a marker that takes the lead in this section, where



we grow a good lot of corn. The marker marks five rows, with man standing on center, following the mark made by the tracer or guide-board, which drops on pin on either side, and reaches out the width of three rows, and is drawn by rope to hame ring.

WARREN EVANS.

Elgin Co., Ont.

Drag Put Road in Splendid Shape.

Editor "The Farmer's Advocate":

I have used the split-log drag to some extent in the past two years, the first year being in the split-log-drag competition. Last year I used it only on one mile or road, half of it being quite flat and muddy. In the spring, when the road commenced drying, I went on with the drag and gave it a couple of strokes, repeating it in a couple of days. This put the road in good condition. Then, after every heavy rain throughout the summer I followed with the drag.

This spring I adopted the same plan with two miles of road, and it has given splendid results. Our roads are dry, and in good shape. Every passer-by gives the work great praise, and several have already made drags for this season's work. I have been allowed for all time I have put on the road, and many brother farmers say it is well worth it. No action has been taken as yet by the township re systematic dragging of the roads. But I might mention that it was to be brought up at our last council meeting, which report I have not heard. I think each pathmaster should have a split-log drag in his own division, and under his control, to put on the road as he sees fit. Wishing "The Farmer's Advocate" and the split-log drag every success.

Victoria Co., Ont.

W. E. WHETTER.

Oat Smut Discussed at Brant.

Another month has gone around, and we are again considering the ways and means of doing our spring seeding. Every farmer has a method of his own that is better than all others, so we must conclude that all methods are the best for those particular men who advocate them. At the regular meeting of the Brant Township Farmers' Club, the growing of oats, barley and buckwheat was thoroughly discussed, and we give below a summary of the ideas that were brought out during the meeting.

The subject of oats was led by Jno. Foster, and the following is the result of his talk and the general discussion of the members that followed: The oat crop seems to be the most important crop in this locality, because of its general utility for all stock. As with all other grain, it requires rich and well-drained land; not too rich, however, because oats sown on too-rich soil are liable to lodge; while, if the land is poor, the seed will not fill out. The speaker was of the opinion that fall-plowing was best, except in the case of a wet field, when spring-plowing would be better. One member advocated fall and spring plowing as a sure method to escape the Canada thistle. Sow oats on sod plowed in the fall. All oats yield about the same, but some are more subject to smut than others, and, therefore, those not subject to smut should be selected. (Perhaps the editor will tell us which kinds are most subject to smut.) Smut, however, can be prevented by the formaldehyde treatment. Early sowing always yields more than late sowing, but the Guelph Farm has also had cases where too early sowing did not do so well. Late sowing is subject to rust and lightness of seed. The speaker thought about 2 to 2½ bushels per acre was about right, but it was brought out in the discussion that the quantity depended upon the soil. That oats sown on rich, mellow soil would stool out more, and thus required less per acre. If grain is thoroughly cleaned, and nothing but good plump seeds are sown, less seed would also be required. As to the method of seeding, drilling in seems to be mostly used, because all seeds are sure to be covered.

Barley was next taken up by August Pletsch. As fall plowing is a great help towards early spring seeding, the land, whether stubble or sod, should be plowed in the fall, and water-furrows run to take off the surplus water. Turnip land need not be plowed, but just worked up in spring. When land is fall-plowed, cultivate well in spring to a depth of two or three inches. Seed your grass seed with barley, as it seems to do well with this crop. Good clean seed is necessary. One cleaning for barley is all that is necessary, except when it is not well cleaned of awns. Amount of seed per acre depends on condition and nature of soil, from 1½ to 2 bushels per acre. After drilling, roll and harrow once. This makes a good solid base, which barley requires.

Buckwheat was taken up by J. T. Lamb. Mr. Lamb thinks buckwheat is about the most serviceable grain one can grow. It not only is well liked by stock, but is, at the same time, a good fattening food. But these things are not why Mr. Lamb likes buckwheat so much. It is because of its great assistance in cleaning up a field of weeds, to say nothing of the delicious pancakes made from it. It will choke almost every weed if the soil is in good condition and it is given a good start. Cases are known where fields were entirely cleared of wild oats with two successive crops of buckwheat. If the soil is good, Mr. Lamb would, therefore, recommend to put buckwheat in the weediest field on the farm. Plow in fall and harrow in spring to conserve moisture and kill weeds that have sprouted. Cultivate frequently until about second week in June, then plow, and have it ready for seeding about first or second week in July. Sow one peck per acre, if land is moist and good; one-half bushel, if poor. Late seeding is necessary to get good plump seeds. Buckwheat straw, while no good for feed, is just as good for bedding as anything else.

A. E. WAHN.

Bruce Co., Ont.

[Note.—With regard to the request for information regarding varieties of oats that are subject to smut, we can only give the results of tests made at Ontario Agricultural College. It is agreed that plants of rapid, sappy growth, and those that have been weakened from any cause, are more liable to be damaged by smut than healthy plants of normal growth. At the College, Prof. Zavitz noted results with six varieties for four successive years, on plots 10 links by 100 links, pulling and keeping track of the number of smutted heads each year. No preventive treatment was given. Following are the number of diseased heads:

Variety.	1902	1903	1904	1905
Early Ripe	0	0	3	0
Joanette	20	9	10	18
Siberian	32	43	78	20
Banner	116	303	317	22
Black Tartarian	332	608	369	62
Early Champion	634	380	1,244	166

In 1906 all seed was treated with formalin,