

[FROM OUR MANITOBA AND WESTERN EDITION.]

SIR,—I have been reading the **ADVOCATE** for some time and have got more valuable information out of it on farming and breeding than any other paper I ever read. I would like you to publish a plan and specifications for a good farmhouse, not too large nor too expensive; say about a \$1,000 house. Also give the best plan of heating with a furnace. I intend building a stone house this summer. Is it best to build the foundation on the sod or dig down to solid ground?  
T. C. MOFFAT.  
Municipality Man.

Specifications called for in such a plan as above here illustrated would be as follows: For girders, 1 piece 6x6 inches by 16 feet, and 1 piece 6x6 inches by 14 feet; joists for two floors, 42 pieces 2x8 inches by 22 feet; ceiling and rafters, 72 pieces 2x4 inches by 18 feet; studding, 250 pieces 2x4 inches by 16 feet; 4,500 feet ship lap; 2,300 feet siding; 10,000 shingles; 1,700 feet flooring; 1,000 feet common boards for frames and cornice; 2,300 feet siding extra if boarded on inside and 6 rolls of brown building paper; 12 rolls tar paper, for floor, roof, and outside wall, and a few cedar or oak posts in cellar to support the girders.

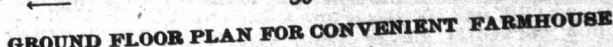
A few further explanations may be helpful. Imbed a piece of 2 x 4 inch on top of stone wall, upon which to rest the floor joists; put joists in place and then fill between joists with masonwork, flush with the top, tight up to floor. Lay shiplap floor, then a 2 x 4 inch, upon which to set the studs.

For the floor, one layer of shiplap, then tar paper and then flooring.

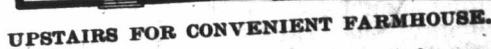
When sand and lime and labor are cheap, the outer walls may be back plastered; otherwise put shiplap on inside of studs, then brown building paper (tar paper used here stains the plaster); then stripped with 1 x 2 inch strips, and lath and plaster. Outside walls, shiplap, tar paper, and siding.

A seven-foot stone wall for such a house would require about 12 cords of stone (128 cubic feet to the cord), but a cord will only lay 100 feet in the wall. One yard of sand and four bushels of lime are necessary for each cord of stone. A mason should lay one cord of stone per day, with everything supplied to his hand. For a chimney it requires 40 bricks per foot to make an 8-inch flue.

Whatever differences of opinion may be held regarding the benefits of deep or shallow plowing, there is general agreement among farmers as to the benefits to be derived from a free use of the harrow, whether deep or shallow. Nearly every crop is helped by a fine tilth making the plant food in the soil more readily available for the use of the young plants, thus giving them a good start in life, which goes a long way in insuring a satisfactory



crop. The harrow may be used to good advantage in advance of the cultivator on clay soils when the surface has become dry and hard in the later days of spring seeding, levelling the land and leaving it in a condition to break up finer, requiring less after-work, and enabling the cultivator to stir the soil to a greater and more uniform depth. If the land is very dry and hard it will be found advantageous to load the harrow with a post or pole, wiring it to the bars of the harrow, which makes it run more steadily and do more effective work. The roller is the companion implement to the harrow, and in many cases should go both before and after it. In all cases where the soil breaks up lumpy or in flakes harrowing will be very much more effectual and time will be saved by the use of the roller before the harrow. On all spring and summer plowing on clay or clay loam soils the roller should go first,



and be followed by the harrow. This is especially advisable on fresh turned sod, if dry enough, and on land being plowed for roots and corn, and it is a serious mistake to delay the rolling and harrowing of such until the whole field is plowed, when it will be found that the land has become dry and hard, and will require twice or three times as much work to get into as fine tilth as if it had been done the same day or the next day after the plowing. The loss of moisture by the action of the sun and wind in the meantime is also often a serious matter, and may mean a heavy loss in the prospective crop. In our experience with clay and clay loam soils we have found the principal value, and that a very high one, of the roller in its use before harrowing and sowing rather than after.

In the case of light land the roller should follow the seeding as soon as circumstances will permit. The soil is thereby compressed, and its drought-resisting powers are more speedily brought into play so that the plant may get a good start. With stiff land, on the other hand, the case is quite different. It is seldom advisable to roll early after

seeding on such soil, which is at all times sickle and demands the most careful supervision to be utilized to best advantage. The essential conditions necessary for the successful germination and growth of seeds in the soil are heat, moisture, and air, but if as the effect of a heavy rain on a finely rolled surface a crust is formed when dried by wind and sunshine, the air is excluded, the seed is in a sealed condition, and germination or growth can make little, if any, progress, unless relief is given by breaking the crust by the use of the harrow or some similar implement, and in the light of experience, to avoid loss of time and growth, we would not hesitate to recommend in such case a vigorous use of the harrow where the seed has not sprouted, or even if the plants were two or three inches above the ground. The only conceivable objection to such heroic treatment that need be entertained is that in case clover seed has been sown with the grain crop it may prove fatal to a proportion of the plants, but it should be borne in mind that the conditions which would prevent the growth of the grain will in all probability prove fatal also to the smaller seed, and that the harrowing is likely to prove the lesser of two evils, if it is not a blessing in disguise.

total also to the farmer, and the result of the seeding is likely to prove the lesser of two evils, if it does not indeed prove a blessing in disguise, which we believe in a majority of cases it will, if judiciously applied. It is not often that a whole field needs such treatment, but frequently there are clay knolls which may be greatly benefited in this way. It is sometimes good policy to defer rolling after spring seeding until the season has somewhat advanced and the crops have made considerable growth, the principal benefit in that case being the smoothing of the surface to facilitate harvesting operations.

**To the Editor FARMER'S ADVOCATE:**

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I believe the day is at hand when the old rail fences, in fact, rail fences of every description, have outlived their economic usefulness. We cannot uphold them on account of their attractiveness, nor yet their economy of space, nor even their durability. A severe storm may pass over and level the best staked fences to the ground during the busiest season. Straight post fences are also a great nuisance in the springtime, being heaved by the frost, or blown sideways while the ground is soft and spongy, and will require almost constant repairing. I really think the best method to pursue to beautify the farm, and as a matter of economy, would be to use the rails for firewood and put up good woven wire fences of any pattern desirable that will serve the intended purpose. The Page is a good fence for the general farmer, but do not say it is any better than several others manufactured somewhat after the same principle; with good, round, peeled, first-growth cedar posts, 60 feet apart, all put in as you suggest with stone or gravel and cement. The holes other than the corner would not need to be over two feet square, which would take less cement or lime mortar to keep it firm and to prevent heaving. Braces are not necessary, as all the posts would be firm. The first foot above and below the surface of the soil, and also the top of the post, should be painted with hot coal tar to prevent decay. Seventy cents per rod would doubtless put up a good wire fence, with the best posts, set in stone or gravel and cement or common lime mortar, that would last at least half a dozen rail fences—would be more attractive—unfavorable to rubbish—greater economy of space, and in the end less expenditure.

Ontario Co., Ont.

G. A. BRODIE.

To the Editor FARMER'S ADVOCATE:

SIR,—After hearing of so many accidents to my neighbors' horses, and having a narrow escape with one of my own, from barbed wire fencing, I was on the outlook for something better, and the best wire fence I have seen is a piece put up for me by the Toronto Picket Wire Fence Company last summer, at a cost of forty cents per rod for the wire of a six wire fence and putting it up, not including the posts nor putting them in. It consists of the best Bessemer steel wire, two strands twisted together, with cross sections put on after the wires are up, in such a way that they cannot slip nor come off, two feet apart, or any distance you please. The posts are twenty to thirty feet apart.

But the fence that is surely to supersede all others shortly is the hedge fence, as instead of getting poorer every year and in time rotting down, it is growing better and stronger the older it gets. I have about 200 rods planted of the honey locust that will be a fence in about four years from the time of planting. There are a number of pieces in Whitby Township that have been finished, and are strong and ornamental.

JAMES A. BURNS.

[NOTE.—When honey locust is planted in suitable soil, given the right attention at the right time, and happens with no misfortune, such as girdling by mice or rabbits, which we notice have done much damage in some parts the past winter, a handsome and ever-improving fence can be obtained from it, but our own observation leads us to conclude that most farmers will, perhaps, through carelessness, fail in one or more of these essentials, thus increasing the somewhat heavy cost and delaying completion of the fence. For a hedge about the homestead we prefer evergreens.—EDITOR.]