

place. While very few of them looked very good, the sower was, although they were not. They got from 1 1/2 to 2 bushels of roots. The above considered last year was the above eties grown and Yellow C. W. S.

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ears. Have es, yielding the small-bushels per the second are dark-of harvest- attached large lever, 3 feet) is eight is on the ground this, and,uff off in weather, up with a sitting from five same will barn, and. When ma- in the field und that flects the p of hay, me weeds, of my al price,

on a large d it more ear from the work clover. of help, cuttings en taking pasture oo close. as much avariably and some- it is at read- Every- grow his failure in own seed. t. Have surprised alfa. It e list of MAN.

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xpensive he man building igh in at roof, and a e back kshop. i in one e forge. ng the e tools, another and drill

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attached, and drawers for punches, chisels, bolts, burrs, etc.

Any of these conveniences are easily made, and cost little. Our forge is simply a wooden box about three feet square and eight inches deep, filled with clay, with a hole above the tire iron for a fire-pot. This hole is lined with cement. We have a cooling tank about 2 1/2 feet long, 8 inches wide and 1 foot deep, made of planks, standing near the forge. Then a set of stocks and dies, two hammers, one large and one small, a pair of bolt tongs and a pair of flat tongs, a hardy, wrenches, chisels, punches, etc., complete the blacksmith outfit.

The carpenter's tools consist of four saws (hand saw, rip saw, panel saw and keyhole saw), two planes (jack plane and smoothing plane), hammer, square, level, three chisels (3/4-inch, 1-inch, and 2-inch), brace with six bits, hand axe, drawing-knife, screwdriver, horse rasp, etc. The rasp is quite necessary in putting handles in hammers and pitchforks, and fitting singletrees, etc.

Such a blacksmith outfit would cost about \$55 new, and the carpenter's tools about \$25. It is very hard to say how much a workshop saves. We sharpen from seventy to one hundred plowshares every year, and the repair work, if we had to hire it done, would probably cost about \$50; but the time saved in going to town to have our plow work and repairing done, and the convenience of being able to do it when it should be done, amounts to a great deal more than the cost of having it done. Oftentimes a man can sharpen a plowshare at noon, while his horses are eating, and there are showery days when he can do a little plow work or a little repairing on his drill or harvester; or, if he is working in the field and breaks something, he might be able to fix it in a few minutes at home, but it would spoil his day to go to town and have it done. An illustration will bring out that point. I sent a man to the field to disk, but it was not long before he came back with a broken brace. I went to the shop and fixed the brace, and in an hour he was in the field again. I could name a great many such instances.

I would by all means advise a newcomer to have a workshop if he lives more than four or five miles from town. If he cannot afford to start with a full outfit of tools, start with a few, but buy good ones, and add more as he feels able.

Manitoba. READER.

Chatty Letter from a New Subscriber.

Have just received "The Farmer's Advocate" for the first time, and, being a farmer who is farming for profit, the article that impressed me most was "A Good New Year's Resolution."

In the first place, permit me to say that I don't see how a farmer could manage his business without a system of bookkeeping, any more than the merchant or the prospector. I may say that I have a record of all business transactions for the past ten years, also the number of bushels of grain threshed, the number of acres sown each year, and an idea of the average; also all milk accounts, the number of cows kept each year, and the average per cow; also when sows are due to farrow. Never lose a litter through neglect. I find it pays well to be particular about seed grain here. Sow only the best, be sure every kernel will grow; then, with a proper seed-bed, you are pretty sure of a good crop. I might say that this year I have been doing a little out of the ordinary; that is, the past season I commenced to cut hay on June 20th. I cleared off a piece of hay, and plowed the ground and sowed it to buckwheat. The season was dry at first, but I had one hundred bushels for my trouble, which I found paid well for the labor, and the ground will be in fine shape for the spring crop. In these days of high-priced and unskilled labor I find it pays well to have all the up-to-date machinery. Have warm, well-lighted, well-ventilated stables. Have a system of management. Know just where and when to start and get there; be "Johnny on the spot," and you will find that farming isn't such a "slow Abel" job, after all. I find that where farm operations are managed as I have described, the farmer can take a day off at nearly any season of the year.

I might also say that I find tile drainage, where needed, is one of the most paying propositions on the farm, having reclaimed five acres of valuable land the past season at a cost, including labor and tile, of \$65. Of course, that don't include the plowing or seed grain. It is a big bonus for the farmer to keep any but the best cows. Make quality the first consideration, then, with liberal feeding and good care, things work out pretty well.

D. J. ARMSTRONG.
Co., Ont.

A Barn Worth Study.

Beauty, convenience, utility, simplicity, durability, and sanitation, are all carefully embodied in the well-planned barn of James Mackinnon, Brome Co., Que. Mr. Mackinnon bought a stony hundred acres, without attractive buildings, facing beautiful Brome Lake, and at once set out to

make an attractive home. That cultivation might be economic and agreeable, the rocks are being lifted off the fields, and a magnificent stone fence has already been built with them across the farm.

But the new barn is the most interesting feature of the steading as yet. It is not extra large, but it has been planned with due regard to all the factors that are talked of oftener than practiced. Three thousand four hundred dollars finished it, with two coats of paint, and piped water in from a spring a third of a mile away. It is placed on a hillside, which gives an easy approach, even for the higher barn floor. The foundation is stone, the frame spruce timber, and the roof stained shingles.

The basement floor is of concrete, and is all ceiled. It accommodates 25 cows and 4 horses; has 4 box stalls, a water tank, a cooling-room, and a root cellar. A lean-to, which has a concrete floor, serves as a manure shed. Adjoining it is the wing that provides for hogs and poultry. At one end is a two-story carriage shed, which serves for wagons, etc., beneath, and implements above. The threshing floor is placed six feet above the regular barn flooring, which thus provides for the granary immediately beneath, so that at threshing the grain is spouted directly into the bins, and from there spouts carry it to the stables below, thus avoiding any handling.

The accompanying picture gives a very fair idea of the barn, while the diagrams show the exact plans.

The King system of ventilation was installed at building, and is giving thorough satisfaction.

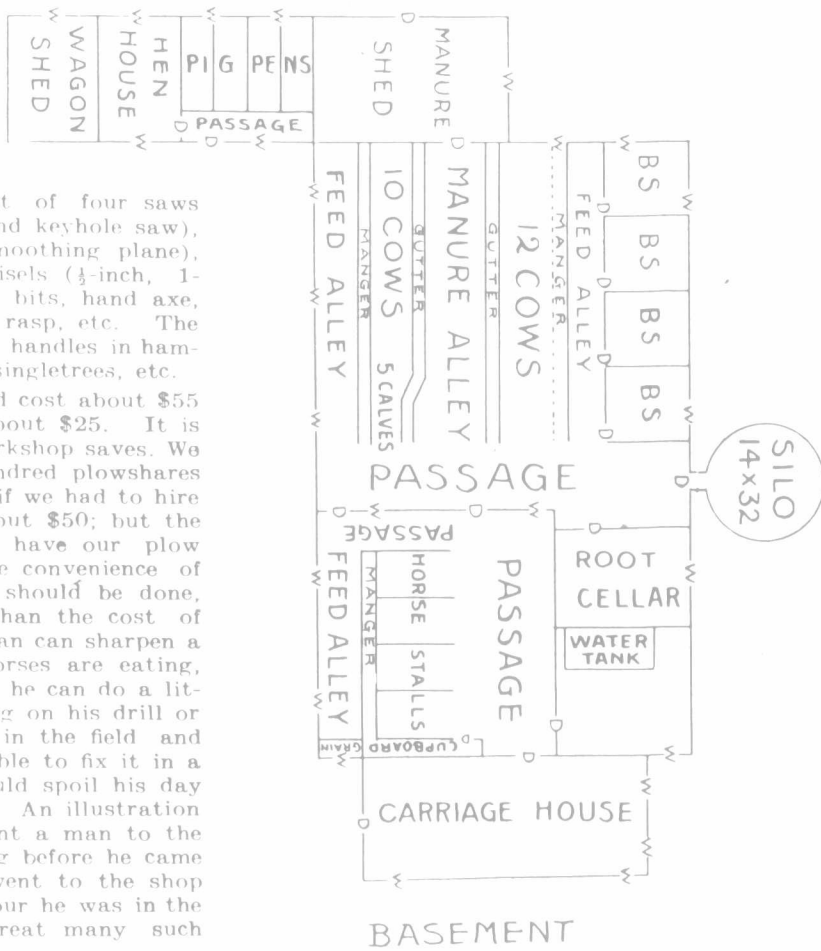
Poisoning Sparrows on the Manure Heap.

Editor "The Farmer's Advocate":

Would it not be an opportune time to insist again upon the readers of your splendid weekly making a united effort to stamp out of existence that cursed pest, the dirty sparrow? The mad dog isn't in it with them. Through "The Farmer's Advocate" I learned how to sweep them up, but there was more to learn, for the sparrow is quite as cute as the proverbial fox, and the game was how to get rascal sparrow to take his medicine. Several plans I tried, but none worked so well as that of carrying one or two tablespoonfuls of poisoned grain in the pocket when cleaning the stables. Pack down the manure, scatter about a tablespoonful on the manure, and by the time you have the stables cleaned out, you can expect to find a few sparrows sick unto death. With this encouragement, there is no doubt you will keep right on with the glorious work, resulting in satisfaction, and the pleasure of having a clean barn and barnyard. The expense is only 15 to 25 cents for the strychnine and wheat.

How to proceed: Buy 20c. worth of strychnine in the powder, put a few tablespoonfuls of hot water on powder; then, with a four-inch spike pulverize until dissolved. Put this in a half pint of water (hot, of course), have two quart cans filled with wheat to within two inches of full, pour the poisoned water on the wheat, let the cans stand in a warm place for 24 hours, then drain the water off and dry the wheat in oven or elsewhere, and it is then ready to be served on the European plan, for the sparrows only pay for what they get. Be careful to keep the poisoned wheat from children and pets, and keep the poultry shut up during the siege.

Middlesex Co., Ont. D. FRASER.



Basement Plan of Mr. Mackinnon's Barn.



Upper-floor Plan of Mr. Mackinnon's Barn.



Barn on Farm of James Mackinnon, Brome Co., Que.