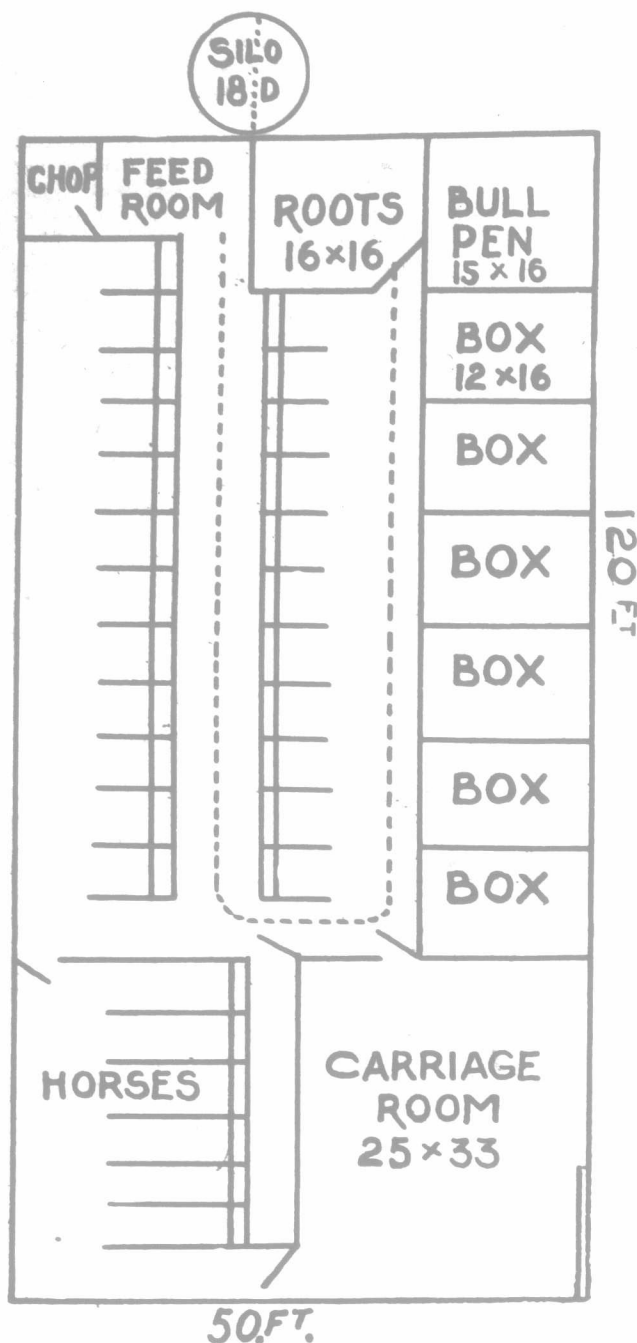


FARM.



A Quebec Barn.

We have been much interested in the barn plans that have appeared in the "Advocate" of late, and are sending you a plan of a barn that is giving the best of satisfaction. I believe that at least seventy-five per cent. of the large new barns that have been put up in this county within the last five years have been built after this style, with a receptacle directly under the stock for manure. These stables are cleaned through traps directly behind the gutters. These traps are 8 to 10 inches wide, and 6 to 8 feet in length, and extend from one end of the stable to the other. The ease and rapidity with which these stables are cleaned is surprising. A large street-hoe or steel scraper is the tool used for cleaning out, and both solid and liquid manure is scraped down through these traps together, in about one-fourth the time usually required for cleaning stables. The manure in these basement cellars never freezes, and can be drawn to the field when weather and roads are most favorable, or can remain in the cellar until spring and then be drawn and spread directly on the land.

We cleaned our stables two winters by driving a horse and sled through the stables, but it was not at all satisfactory. In this Province (Quebec), with our heavy snows, spreading manure on the land in winter is out of the question, and therefore must be put in large piles, but we found it very difficult to keep a road open from the barn to the pile, and the snow would also drift up four to six feet deep around the base of the pile. It also necessitated putting a man and team out every day, rain or shine, snow or blow, Sundays and all. In the accompanying plan you will note that the cattle are directly over the manure, and it would appear as though any gases that might rise from the manure would find their way through small crevices up into the stable above, but this does not seem to be the case. The large ventilating shafts extend down through the stable floor, and all gases that rise are drawn up these shafts and are discharged in the cupola above. I have visited a score or more of these stables, and where they were well ventilated I invariably found them dry, warm, light, sunny, and to all appearance very healthy quarters for stock.

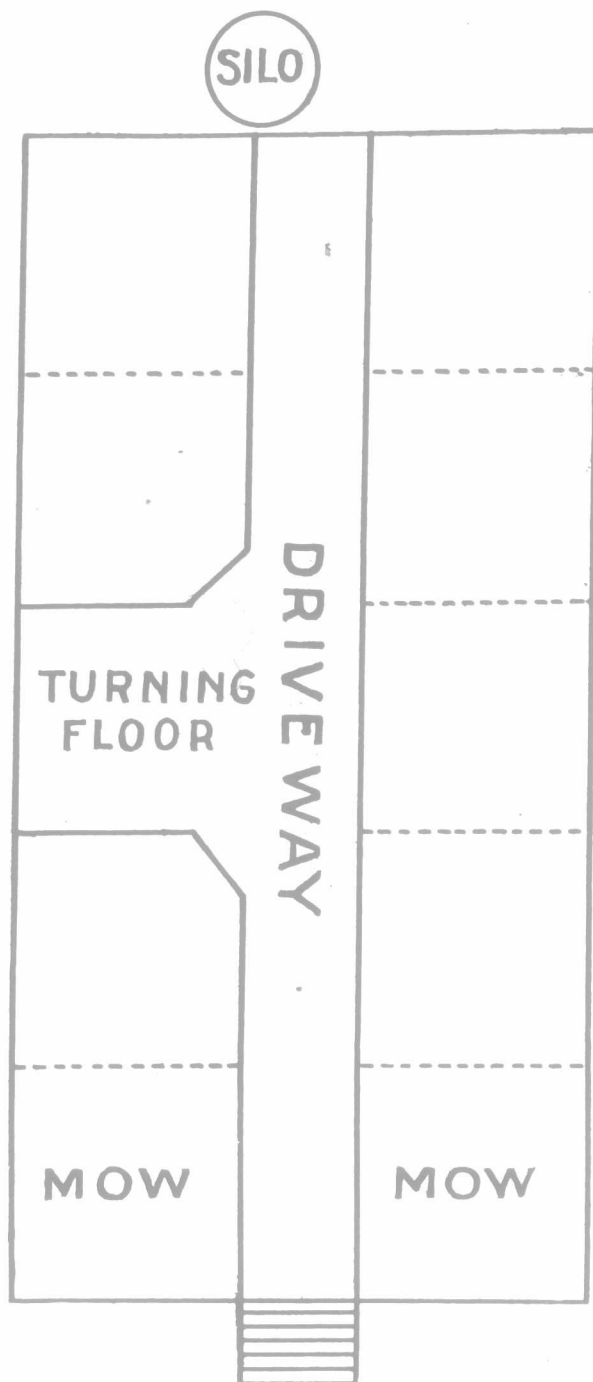
A barn of this length should be built with

seven bents instead of five, as indicated in enclosed plan, and one is usually floored over. The team after unloading, backs into this floored bent, and turns and drives out and down the long approach. This floored bent is sometimes used to store Swede turnips for early feeding, or can be filled with straw or hay.

The bottom of the silo should be built up four to six feet above the ground, otherwise it would be hard to throw the last of the silage up into the feed room. The silo may be filled from the ground with a blower, or from the upper floor with a short elevator. The root cellar may be filled with dump-carts from the upper floor. There is also a large space between the stable and this floor, which may be used for storing machinery, tools, etc., and also cut feed. This space is usually 12 ft. wide, 12 to 15 ft. high, and the entire length of the barn. This barn is sure to recommend itself to any farmer wanting easy cleaning stables, light and sunny, with dry walls at all times.

Stanstead Co., P.Q.

C. C. HANSON.



QUEBEC DAIRY BARN

Problems of the Soil.

The principles underlying the great questions of the soil, are such that they may be understood and applied in a great measure by anyone. It does not cost any more to treat our soil on correct principles than on incorrect. It does not mean that where the land is farmed on correct principles everything is done on an elaborate or expensive plan. It simply means that everything is done in the best possible manner to assist plant growth.

On new rich land the problem of soil fertility will often resolve itself into the simple question of getting in as much crop as possible, for the land already contains all the elements of fertility, and the amount of crop will depend most largely upon the number of acres sown.

The question of soil fertility divides itself into three parts: The control of plant food in the soil, the control of soil moisture, and the destruction of noxious weeds. The ability of our soils to produce useful crops will depend on these three things. If we can keep our soils well supplied

with plant food, in a proper condition of moisture, and free from noxious weeds, we will have fertile and profitable soils, and the nearer we can come to a proper condition in these three things, the more productive will our land be. The means we have at our disposal to accomplish these ends are many, including cultivation, draining, manuring, rotation of crops, and many others. It is the belief of the writer, based on a somewhat extensive acquaintance with his brother farmers, that these things are not so well understood as they should be, and it is his attention, after careful study of these problems, to endeavor, in a series of articles, to place these problems of the soil before his readers in as systematic a way as possible, so that they shall have a clear conception both of the needs of their soils and the means of meeting these needs. It will not be attempted to lay down definite rules, for no rule will apply in all cases, but rather to explain the great general principles, so that each farmer may form his own rules to meet his own particular needs. D.

Seed-grain Mixtures.

I would like to give H. F., of Hastings Co., our experience in growing mixed grain.

Per Acre.

- No. 1—1½ bushels Mandscheuri barley.  
1 bushel of Daubeny oats.
- No. 2—1 bushel Mandscheuri barley.  
1 bushel Daubeny oats.  
½ bushel White Hulless barley.
- No. 3—1 bushel Ligowo oats.  
1 bushel Duckbill 2-rowed barley.  
½ bushel Colorado Fife spring wheat.
- No. 4—1 bushel Ligowo, Siberian or Banner oats.  
1 bushel Duckbill or Sidney two-rowed barley.  
½ bushel Goose spring wheat.
- No. 5—50 pounds Ligowo oats.  
50 pounds emmer or spelt.
- No. 6—(For hog feed)—1 bushel Mandscheuri barley.  
½ bushel White Hulless barley.  
1 bushel spelt.

The first of these mixtures is our choice, as the Daubeny oat is very early, and a heavy yielding variety of oats. One farmer in this locality last spring sowed 40 bushels of Daubeny oats on 21 acres, and sold eighteen hundred bushels of good marketable oats.

W. J. EVANS.

Perth Co.



BASEMENT FOR MANURE

