

Oats, average for ten years' plot, green manure, 54 bushels 19 pounds per acre; straw, 3,462 pounds.  
 Barley, average for ten years' plot, rotted manure, 94 bushels 34 pounds per acre; straw, 8,054 pounds.  
 Barley, average for ten years' plot, green manure, 35 bushels 21 pounds per acre; straw, 3,280 pounds.  
 Corn, average for ten years' plot, ten tons per acre, rotted manure, 16 tons 2.99 pounds per acre.  
 Corn, average for ten years' plot, ten tons per acre, green manure, 17 tons 10.86 pounds per acre.  
 Carrots, average for eight years' plot, rotted manure, 19 tons 7.58 pounds per acre.  
 Carrots, average for eight years' plot, green manure, 20 tons 9.80 pounds per acre.  
 Mangels, average for ten years' plot, rotted manure, 24 tons 5.40 pounds per acre.  
 Mangels, average for ten years' plot, green manure, 21 tons 9.10 pounds per acre.  
 Turnips, average for ten years' plot, rotted manure, 17 tons 6.60 pounds per acre.  
 Turnips, average for ten years' plot, green manure, 15 tons 14.88 pounds per acre.

Note the same weight of manure is used on each plot. Therefore, by rotting the manure the farmer is losing very heavily by: first, extra expense, drawing and turning the manure to heat; second, loss in weight of vegetable matter; third, the yield per acre with most crops is greater where green manure has been applied. Many farmers in giving their experience state that they have learned from results obtained in this way: They have had a large pile of well-rotted manure, but not quite enough to do a whole field. The balance of their field was covered with green manure, and they probably got a better crop the first year from the rotted manure, having put on double the quantity of rotted manure, by weight, but, had they observed closely, they would likely have observed the green manure plot ahead in the third and fourth years' crop.

Regarding propagating rust, I would say when rusted straw is returned to the land, and a regular system of rotation is followed, say three or four years, by this method, grain does not follow grain, so that by the time grain is sown again the rust will have disappeared.

Fermenting the manure does not always destroy the weed seeds, but destroys about half of the manure.

Manure should be applied to hoed crops only. For corn, the manure should be spread and plowed under, shallow, just long enough before planting to give time to work the soil sufficiently for the seed. By not plowing too early the grass or clover will get a strong growth in the spring, and, while decaying, force the corn. Turnip land may also be treated in the same way.

For carrots, mangels and sugar beets or potatoes, apply manure in the autumn. Have your land worked up deep before applying the manure, then plow it under shallow, or rib the land up until the following spring. If your straw for bedding has all been cut short, and your land previously plowed, the manure may be cultivated in and afterwards ribbed.

Commercial fertilizers, undoubtedly, are useful to many soils, but I would advise all farmers before purchasing to apply all barnyard manure possible, and also to sow clover with every grain crop sown, excepting peas.

Central Experimental Farm.

Foreman.

### Sugar-beet Growing.

Successful sugar-beet meetings have been held at Lucan, Exeter, Brucefield, Lonsborough, Blyth, etc., attended by enthusiastic farmers, and addressed by competent speakers in the interest of the Berlin sugar factory. No less than three hundred attended the Exeter meeting, one-half of whom signified their intention to grow sugar beets this year. A large number of acres were contracted at each meeting for Berlin. Other sugar-beet meetings, held as far east as Whitby, and as far north as Thornton and Lefroy, were equally successful. Daily, local canvassers at the above points are gathering in contracts for the Berlin factory.

Mr. D. French, Manager of the Industrial Home, Clinton, who grew two acres in 1903, and has seven acres prepared for 1904, says: "If I stay here, I will soon pay for the Industrial Farm out of sugar beets."

While practically every farmer within driving distance of Berlin will grow sugar beets for the Berlin factory, its growers extend in all directions from Berlin to a distance of fully one hundred miles.

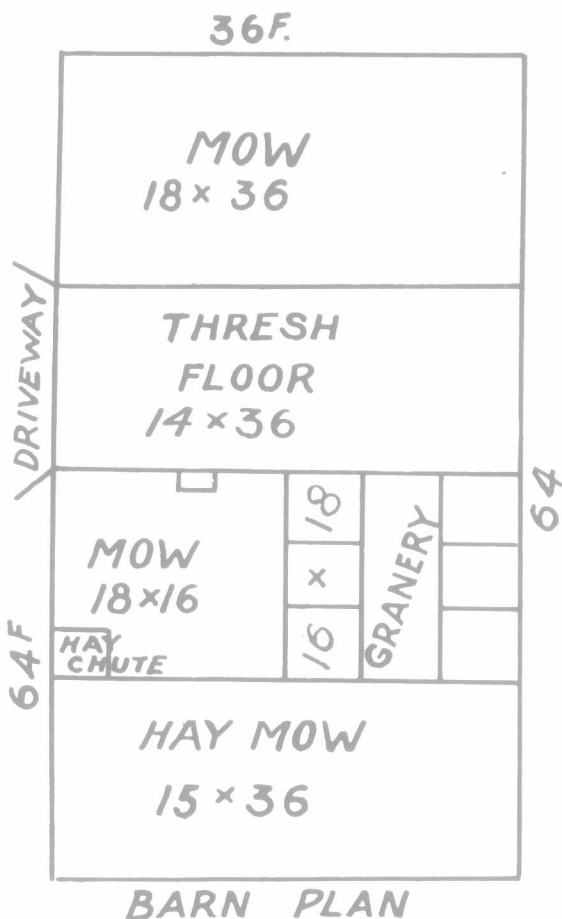
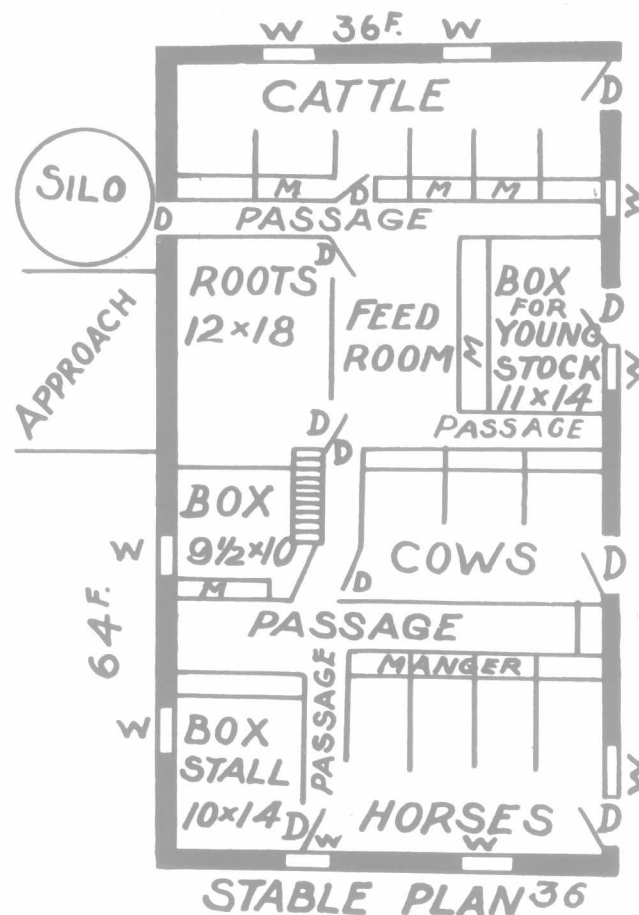
The entire supply of pulp has been teamed or shipped away as a stock food. Mr. John A. Thompson, Thornton, writes: "I am much pleased with the carload of pulp." It is the best succulent stock food available, and can be shipped one hundred miles in car lots at less cost than the cost of the production of turnips.

John Duff, near Myrtle, Ontario County, planted two acres in beets, following barley, and with a spring application of twenty-five tons of manure to the acre. His beets averaged 15.8 per cent. of sugar, and the returns were \$205.32, less \$46.70 for freight and \$4.50 for seed. There was a space of twenty-seven inches between the rows, and the beets were about eight inches apart. Mr. Duff thinks the season was particularly favorable for good results from wide planting, but might not have had as good returns in an average season with plants so far apart. He cultivated ten times. He does not think there is any crop which would give such returns as he obtained from sugar beets.

### Huron County Barn.

To the Editor "Farmer's Advocate":

Having noticed in the "Farmer's Advocate" of January 21st, an inquiry for a stable plan, 36 x 64 ft., I submit to you the above plan, which would, perhaps, meet with the approval of your subscriber. It is, of course, capable of many changes, which could be made to suit different tastes. The root-house might be placed under the approach to the barn floor, and a short row of cattle stalls put in to face the other row at the end, and the cow stalls be turned around,



with the mangers against the passage in front of the horses. The two doors from the cow stalls into the box stall are meant to close the two passages from the horse stable into the feed-room, when they are opened to let cattle in or out. The box stall for the horse stable is made shorter, to allow more room for hay to be put down from the hay mow above. Also, more windows could be put in. There would be four doors with fanlights over each, besides three windows in the front of the stable.

C. A. Huron Co., Ont.

### The Status of Agriculture.

In a recent address, Hon. C. S. Hyman, M. P., quoted figures to show that in Canada 2,578,000 persons were engaged in agricultural pursuits, 805,000 were in domestic and similar service, 644,000 were engaged in trade and transportation work, 169,000 were engaged in the professions, and 1,020,000 were engaged in manufacturing, mechanics, etc.

### Vox Populi.

Messrs. F. Bonnycastle & Son, Northumberland Co., Ont.—We are very pleased with the "Advocate" as a weekly.

G. E. Schmidt, Waterloo Co., Ont.—Please find enclosed order for renewal of "Farmer's Advocate" for 1904. It has no equal.

Mr. Charles Parker, P.E.I., says.—I am glad you have changed to a weekly, and consider your magazine the best farm paper printed. Wishing you success.

Samuel Lyons, "Byng Lodge Stock Farm," Haldimand Co., Ont.—We just think the "Farmer's Advocate" is THE WHOLE THING since it comes weekly. I will try and get you some more new subscribers.

Mr. Chas. A. Frazer, Que.—It is with great interest that I read your valuable paper. I hope you may have a very successful year, and that the farmers will appreciate the benefit of a good agricultural paper.

Mr. R. Mooney, Simcoe Co., Ont.—Please accept my thanks for the knife I received from you. It is an A1 knife, and your "Farmer's Advocate" is the best paper that is going amongst the farming community to-day. I am highly pleased with it. Wishing you every success.

Mr. J. Clarence, Kellough Lanark Co.—I received my knife on the 16th instant, and I am very well pleased with it, and I find it exactly as advertised. The two new subscribers which I got are both well pleased with your paper, and consider it the best farm paper printed. I intend to work for some more new subscribers and try for another premium.

### BEST IN THE WORLD.

Messrs. Shannon Bros., Cloverdale, B. C.—We are glad to see you issuing a weekly paper. You have now the best farmers' journal issued in the world.

### TOO GOOD TO STOP.

Mr. Wellington Shier, Ontario Co., says.—I think I have been taking the "Farmer's Advocate" since the year 1870 without a recess. I thought I would take a rest. If the paper was going to be printed weekly it would not have news enough to be any good. As I have got too weeklies now, I am so well pleased I will renew, with one new subscriber.

### THE FARMERS' WEEKLY.

R. E. Rand, King's Co., Nova Scotia.—I have been a subscriber for several years, as you know. During that time I have been urged to give it up, and take some other paper, but it suits me all right. I think the new departure, making it a weekly, will add to its value for us as farmers. The time has come for us to enjoy our weekly paper as well as other professions.

### Produce Transportation.

The London and South-western Railway Co. is distributing for the information of agriculturists a pamphlet giving particulars of its rates for the conveyance of farm and dairy produce, etc., by both passenger and goods trains. An important feature is the low scales of rates framed on a mileage basis and applicable by passenger train, which have been compiled with the object of bringing the producer and consumer into closer touch, and affording facilities for the rapid transit of all kinds of dairy produce, fruit, and other perishable traffic, thus enabling the producer to secure a wider market for his produce, and the consumer to have it delivered direct with promptitude and at a reasonable and inclusive charge. A hamper weighing 24 lbs., and containing cream, eggs, poultry, meat, fruit, vegetables, etc., is carried a distance of 100 miles for 9d. and delivered free, representing a little over 1d. per lb., whilst for the rail conveyance of one cwt. of fruit and vegetables for a similar distance the charge is 2s. 2d., or less than 1d. per lb., the rates for large consignments of all kinds of produce being fixed on a still lower basis. It is pointed out that senders desiring advice as to the method of aggregating their consignments will be able to obtain every assistance from the company's officers. To obtain the benefit of the lower rates the requisite weight may be made up of different kinds of traffic. Thus, if a consignment of three tons consists of one ton of fresh meat, one ton of butter, and one ton of apples, each description is charged one-third of the special three-ton rate, and not at the rate for one-ton lots.—[Meat Trade Journal.]