

A Good Mixture of Grasses Better than Clover and Timothy.

BY J. E. RICHARDSON, BRANT CO., ONT.

We generally put fall wheat on a crop of clover plowed under, then roots and corn, followed by barley or oats, seeded down to clover and grasses. We also like to plow under a second crop of clover for oats, and sow peas on sod land plowed in the spring. Our varieties are:

Spring wheat—Campbell's White Chaff.
Oats—Newmarket (white), White Giant, and a new black oat which has not yet been put on the market—it is early and an excellent yielder.
Barley—Selected six-rowed.
Peas—Prussian Blue.

After roots and corn, plow in the fall and work land well on top in spring. After fall wheat, gang plow (shallow) as soon as possible, and plow late in fall, and work land well in spring before sowing roots, corn, etc. This is very important, viz., to get the land as clean as possible before putting in a hoe crop. We sow wheat one and a half bushels per acre; oats, two bushels; barley, one and a half bushels; peas, three bushels.

A good mixture of grasses, when once established, are superior to clover and timothy both for hay and pasture. Have had good success with this mixture for hay: Perennial rye grass, timothy, meadow fescue and Alsike. Owing to the difference in weight of most of these grasses, it is necessary to sow them separately—from fifteen to thirty pounds to the acre—according to the condition of the soil and the varieties of grasses used. In selecting a mixture for hay, it is well to get grasses that mature about the same time. Orchard grass is very good mixed with timothy and other grasses, such as meadow fescue, etc., for pasture; but for hay, timothy and orchard grass should never be sown together, as the latter matures much earlier than the former, and when overripe is almost worthless for hay. Sow grass mixtures on clean, rich land, and about one bushel of oats or barley as a protecting crop. Cover the seed with very light harrows.

To maintain the fertility of the land and keep it clean, we plow down clover and other green crops, and a liberal supply of ashes and farmyard manure. We work the land well, and when a few bad weeds appear we don't neglect them. "A stitch in time saves nine." Pull one weed, and it may save pulling a thousand next year. Cultivate continually corn and roots. The shallower the teeth are in the ground the better, as the capillary tubes of the soil are then opened nearer to the surface, and so the moisture is brought to the top. We have not yet treated seed peas for bugs, but it is time to commence; shall certainly do so another year. Smut in oats, wheat, and barley have not troubled me much, as I am continually growing new varieties.

Now is the Time to Operate Your "Klondyke."

BY W. C. HUFF, PRINCE EDWARD CO., ONT.

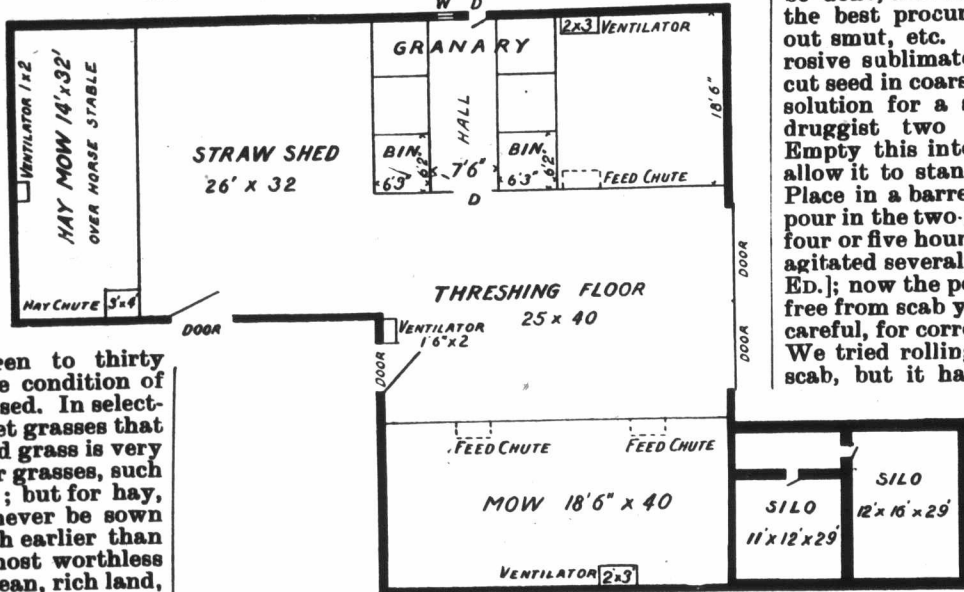
Generally speaking, we could not practically follow any fixed rotation of crops with good results, as some land would produce a good yield, the following crop would not be suited to the soil and consequently be a failure. You must know what your land is adapted for, then proceed to get the most and of the best quality possible. This is our plan: To sow on clover sod peas or corn; the following season wheat; next two seasons barley and seed down again; timothy sod, sow oats; and should the soil produce good corn, try a crop of corn. A root crop is recognized generally with the rotation, but it would be too large for us to attend to and consume on an average. We can grow more consecutive crops of barley than of any other crop, so for years it has been the staple. Spring wheat, Eldorado [NOTE.—This name must represent a different variety from the original Eldorado, as it was a well-remembered failure to the writer and many others in yield and flouring qualities.—ED.]; oats, American Banner; barley, Mandchouri and common six-rowed; peas, Runner and Golden Vine; corn, Yellow Flint for husking, Stowell's Evergreen and Hickock for feeding. We always have the land fall plowed, and in spring we complete the preparation with a spring-tooth cultivator and sharpest-toothed harrow we can get; sow with a drill, and finish with roller. Although some prefer to use broadcast seeder, I think grain is properly placed and covered and less seed required on an average when the drill is used. The quantity of seed per acre depends largely on the condition of the land. Wheat, 1½ bushels to 1¾ bushels per acre, according to size of kernel; oats, 2 bushels to 3 bushels; barley, 1½ bushels to 1¾ bushels; peas, 2 bushels to 2½ bushels of small variety, large peas 3 bushels to 3½ bushels. Circumstances often alter cases; and no set rule can be used for above; for instance, in a good growing season less would suffice, when in a dry one more would be wanted, and land in high state of fertility takes less during drought. Better only cultivate one way, shallowly when

(Continued on Third Column.)

A Well-Contrived Barn.

To the Editor FARMER'S ADVOCATE:

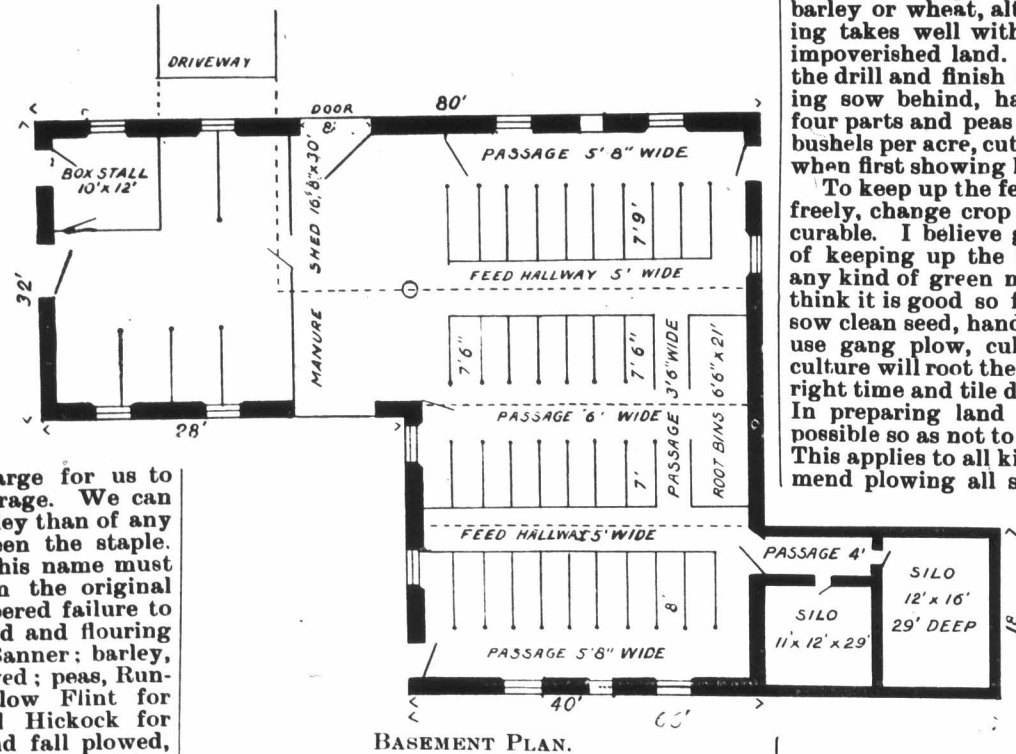
SIR,—Some time ago I noticed in your valuable paper a request for the plan of a barn of moderate size. I started then to prepare for you a plan of a barn which we erected some three years ago, but press of work prevented my finishing the plans before this. I hasten to send them at this late time, trusting they may be of some service to you. I have tried to make the plans self-explanatory. The main building is 40x62, and the wing is 32x40. The stone foundation is nine feet high, and the posts of the frame are 18 feet 6 inches. The main building has a mow in each end, with double threshing floor in the center. In one end of the wing is a mow for hay



FLOOR PLAN OF MR. R. K. JACKSON'S BARN.

over horse stable; the rest of it is used for a straw shed. There are two driveways, one a double one into the main building, and the other out of the wing. In this way we can drive right through the barn, and there is no backing down the gangways. The barn is built on level ground, so that there is no earth against the walls to cause dampness in stables.

The ground floor is laid out in horse and cow stables, with a manure shed between. The shed door is hung on weights. In this way the shed is completely closed in, and the manure never freezes so as to prevent its being drawn out any time dur-



BASEMENT PLAN.

ing the winter. We always draw it and spread it on the fields during the winter, and none of it is lost by being washed away in the barnyard. The cow stable is fitted up with the Hoard model stall, which has been described several times in the FARMER'S ADVOCATE, and which we have found to be most satisfactory. We have seen no stall that so well meets the requirements of comfort and cleanliness, which are the essential qualities of a stall. The silos are filled from the main gangway of the barn; this permits of a shorter carrier being used. The passage in front of the smaller silo we find a great convenience. We can throw down our ensilage any time, and it is not in the feed hallway of the stable in the way, nor making the cattle restless by its presence, which they very quickly detect.

Lanark Co., Ont.

R. K. JACKSON.

corn gets large, as cultivator breaks off so many rootlets.

I do most assuredly think it is necessary to treat all kinds of seed that is affected or likely to be with smut. This is the best way to remove all such, if not to thoroughly clear to assist materially to hold in check. It is just what every farmer should practice. Smut, scab, etc., are even worse than weeds, having more effect on the crop in most respects. To treat peas for bugs: Treat with insecticide (carbon bisulphide) by placing the seed in tight bin or box and pour above over; allowing it to get all through seed by keeping covered closely will destroy all the bugs. [NOTE.—It is highly recommended to place the liquid in a shallow pan on the grain in the tight bin, when it will evaporate and penetrate the entire bin.—ED.] Have never treated any other grain, but think it should be done, and all farmers should endeavor to use the best procurable means to assist in stamping out smut, etc. To treat potatoes for scab: Corrosive sublimate will do the best work; put the cut seed in coarse linen sacks, then place sacks in solution for a short time [NOTE.—Purchase of a druggist two ounces of corrosive sublimate. Empty this into two gallons of hot water, and allow it to stand over night, or till all dissolved. Place in a barrel thirteen gallons of water, then pour in the two-gallon solution. Allow it to stand four or five hours, during which time it should be agitated several times, when it is ready for use.—ED.]; now the potatoes are ready to plant. If soil is free from scab you will get a clean crop. Be very careful, for corrosive sublimate is a rank poison. We tried rolling cut seed in sulphur to keep off scab, but it had but little effect. Get new seed every year, or plant on different kind of soil if you wish to get best results. There is nothing more unsightly than scabby potatoes. Try either of these methods for a good crop of real Irish fruit: Manure heavily, plow under, sow turnips, and keep clean; next season plant potatoes, or sow rye on your

old potato patch in August, and plow under following spring, when ready to plant your potatoes. We have not found anything better than clover and timothy for all purposes; they are the principals, millet and Hungarian are used as supplementaries or extras; in case of a short crop of hay the last are used. When seeding for a clover meadow we mix the seed, as three parts clover and one part of timothy, sowing eleven pounds per acre; when on low land seeding three parts timothy, one part clover, sowing eight pounds. Last season we used equal quantities of clover and timothy seed, sowing eleven pounds per acre. Do not be afraid of seed. There are other good grasses that would be advisable to use when seeding for pasture, as orchard grass, blue grass, and something of a lasting nature. We get best results when sown with barley or wheat, although in some instances seeding takes well with peas. Do not waste seed on impoverished land. Always sow the seed behind the drill and finish by rolling, or when broadcasting sow behind, harrow lightly and roll. Oats four parts and peas one part, sown two and a half bushels per acre, cut with binder into small sheaves when first showing light color, make good hay.

To keep up the fertility of the land we cultivate freely, change crop and apply all the manure procurable. I believe green manuring is a good way of keeping up the fecundity. Have never tried any kind of green manuring in a direct way, but think it is good so far as it goes. As for weeds, sow clean seed, hand weed grain, and after harvest use gang plow, cultivator and harrow. Careful culture will root them out. Proper cultivation at right time and tile drainage is the most important. In preparing land sow and finish as rapidly as possible so as not to allow any moisture to escape. This applies to all kinds of crops. I would recommend plowing all sod in fall for this reason—it does not dry out so quickly in a dry season. Use roller both ways on spring-plowed sod. For hoe crops do plenty of surface cultivating. Never cultivate deeply, nor too near corn or vegetable crops. Now is the time to make preparations for operating your "Klondyke." Times are certainly getting brighter, and every opportunity should be seized.

The Agricultural Experimental Union.

The work of the Ontario Experimental Union is to test in various parts of the Province the most promising varieties of agricultural crops, with a view to determine their value generally, and also their adaptation to local districts. This work has grown since 1886 from one experiment, conducted by 12 experimenters, who sent in 8 full reports, to 18 experiments, conducted by 2,835 experimenters, from whom 610 full reports were received by the Secretary, C. A. Zivitz, O. A. C., Guelph, in 1897. As we have previously pointed out, these tests are carried on in all parts of Ontario Province, in uniform plots, similarly managed as to thickness of seeding, etc., so that the results arrived at are the averages from over the Province from all the reports received. The varieties sent out to the ex-

perimenter's year

Variety.

Goose.....
Harrison's B.....
White Russet.....
Bart. Tremal.....

Oderbrucker.....
Siberian.....
Joanette.....
Bavarian.....
Poland White.....

Mandcheur.....
Oderbrucker.....
Kinnakulla.....
Black Hulle.....

Early British.....
Prussian Bl.....
White Won.....
Egyptian.....

Japanese.....
Silver Hull.....
Common G.....

Bushels.....
Oats, 14.....
Peas, 1.....
Tares, 1.....
Oats, 14.....
Peas, 1.....
Oats, 14.....
Tons, 1.....

Variety.....
Cloud's Earl.....
Mammoth.....
Wis. Early.....
Evergreen.....
Salzer's N.....
Compton's.....
LEGU.....

Grass Peas.....
Tares.....
Crimson C.....

Variety.....
Pearce's B.....
Large W.....
Large W.....
Guarande.....
Danver's.....

Purple-top.....
Hartley's.....
Buckbee's.....
Jersey N.....

Evans' In.....
Simmers'.....
Carter's.....
Carter's.....
W. Silos.....

Variety.....

Pearl of.....
American.....
Empire S.....
Burpee's.....
Tonhook.....
Great D.....

Don.....

The follo.....
sults obtain.....
and fodder.....
ferent Prov.....
Saunders, I.....

INDIAN CORN.

Yield at the Several Experimental Farms—Season of 1897.