FARM.

Queries for Corn-growers.

What variety of corn do you prefer, 1st, for the production of ears and grain, for feeding and sale? 2nd. What variety do you prefer for ensilage? 3rd. What is your method of soil preparation, manuring and sowing, or planting? 4th. —What quantities of seed per acre do you advise? Concise answers on the foregoing and other points, will be helpful to others. Forward at once, giving your locality and nature of soil.

Eradicating Quack Grass.

To the Editor "Farmer's Advocate":

Sir,—I have several times read in the "Farmer's Advocate" queries and replies as to the best methods of eradicating quack or twitch grass. I have had considerable experience with it, and I often think of the big times we used to have with the quack roots when I was a boy. If we found a spot of quack grass in a field, we would start to root it out. We would plow the ground (shallow of course, as we wanted to keep it as near the surface as possible), then harrow it; and then with forks and hand rakes (we had no horse-rakes then) gather all we could get into small heaps, and when dry have smudges enough to send the mosquitoes back to the swamps in a hurry. Of course, we had not nearly all the roots out of the ground; we only had them nicely thinned, so that they could grow stronger and faster, and we had fitted the ground in such nice shape, too, that it just suited the roots that were left. The result was that the next year a similar job had to be done on that ground, or Mr. Quack would have possession in earnest. But it is now a good many years since I treated it that way, yet I have had a good deal of it on different farms to deal with, and I have had no trouble to speak of with it. The old method makes a lot of useless work; and, secondly, it is a waste of material that can easily be turned into a fairly good fertilizer. What we must consider is, that the object in this case is to exterminate, and not propagate. To do this we must take nature's way, which is nearly the opposite of what has been practiced. If we examine a bed of quack grass that has not been disturbed for two or more years, we will find a mat of roots as near the surface of the ground as they can grow, and get sufficient earth to grow in. What we want to do is to reverse that order as completely as we can. As soon as the frost is out of the ground, while it is quite wet and soggy, and before growth starts in the roots, hitch a good strong team to a plow that will turn over a good wide furrow, and behind that put a man that does not care whether his furrows are set up on edge or not (if they are, part of the roots will be near the surface), and cut wide enough so as to turn the furrows over flat, and plant that quack as evenly and deeply as it is possible. Then, with whatever crop is grown on the ground that season, give as shallow cultivation as possible, so as not to pull up any of the roots; and as they are now down too deep to thrive well, they will nearly all rot, and enrich the soil. If a few of the roots here and there, not buried so deep as the rest, do grow, it will take some time for them to get ahead, and then it is only to repeat the simple operation.

A SUBSCRIBER.

Northumberland Co., Ont.

Poor Sugar-beet Pulp.

To the Editor "Farmer's Advocate":

We have taken the "Farmer's Advocate for several years, and consider it a first-class agricultural publication. However, I do not think that the letters you have published so far concerning sugar-beet pulp will give farmers a perfectly fair idea of its value for feeding purposes. However it may be with farmers who live near enough to the factory to haul the pulp away while fresh, I can say from experience that the stuff that comes to us after lying in a heap at the factory for an indefinite length of time, and on the car for perhaps a week, then handled over two or three times while still heating, is practically worthless for feed, and this is the state in which farmers at outlying points are sure to get it. It is not only my opinion, but also that of most of those who have tried it in this district—that it is not worth the handling—and those who uphold it as equal in value with mangels or turnips must have had very different material to deal with from that with which the company favored us.

MASON.

Huron Co.

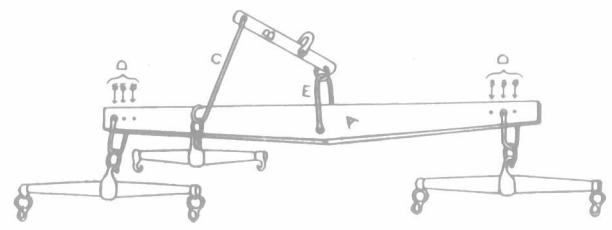
A Splendid Knife.

The premiums, the farmer's knife and the wrist bag, received, for which accept our thanks. They certainly are splendid value.

Wellington Co., Ont. C. R. GERRY.

Three-horse Equalizer.

Regarding the three-horse equalizer, a drawing of which I send you, I wish to say that it is not intended for wagon work, only for use on implements, in which the tongue is a little to one side of the center of draft. As you already know, in using three horses the center of draft must be immediately behind the middle horse, and, therefore, the necessity of placing the tongue



to one side of where the connection for draft is. Hoping that this explanation is clear and quite satisfactory.

W. J. ANDERSON.

Simcoe Co., Ont.

Advantages.—Takes fewer clevises and does away with extra doubletree; carries middle horse's traces well up.

A.—Doubletree, 6 ft. long.

B.—Equalizer (steel), 12 inches; 4 inches below and 8 inches above.

C.—Hook; equal to two clevises.

D.—Extra holes, for use in plowing.

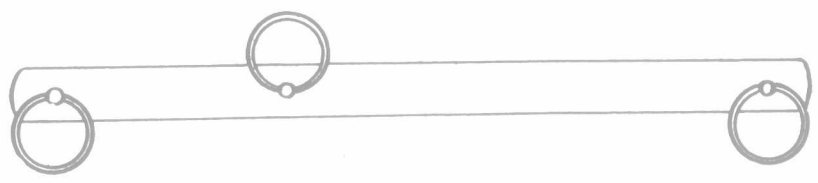
E.—Extra large clevis.

F.—Connecting clevis (should be kept well oiled).

Still Another Three-horse Evener.

To the Editor "Farmer's Advocate":

I have used various kinds of three-horse whiffletrees, but for plowing or harrowing the "three-ring iron" is generally used in this section. It is shown below. This is made of ½-inch by 2-inch iron; 4 inches from middle hole to bottom hole, and 8 inches from middle to top. It stands upright in use, with plow attached to middle



ring, whiffletree for the center horse to top ring, and doubletree for two outside horses attached to lower ring. This doubletree is made about a foot longer than the ordinary two-horse doubletree. This rig allows the horses to work close together, as the whiffletrees overlap.

Elgin Co., Ont. L. M. BROWN.

Seeding in Prince Edward Island.

To the Editor "Farmer's Advocate":

In oats the leading varieties grown here are Banner, Egyptian, Rosedale, Waverly, Ligowo. I have sown the Waverly for two years, and have had good returns. In wheat the principal varieties are White and Red Fife, White Russian, Campbell's White Chaff. There is not much barley grown alone, but mostly with other grains. Two-rowed is preferred. Peas and vetches are grown with oats for green feed. On account of the weevil very little is allowed to ripen.

In selecting seed grain, if I want, say, 25 bushels oats to sow a certain field, I want at least 30 bushels to commence with. Set the fanners, if possible, where a draft is blowing through; open the slides so as to have all the wind possible; take out all the riddles; put in the coarsest seed screen in the bottom, to allow all the small grains to pass in the seed box; fill up the hopper, and turn hard. My reason for removing the riddles is, they carry the largest of the grains over with the chaff and small grains. If one had large doors in each side of barn floor, with a heavy wind blowing through, there is no machine invented will do as good work. My barn is too much sheltered to take advantage of the wind.

Institute delegates from Ontario tell us we sow our oats too thick. I sow of oats, 3 bushels by measure, or 3½ bushels by weight, per acre; wheat, 1 bushel and 3 pecks; barley, 2 bushels; buckwheat, 1 bushel. I seed down all my grain crops, never taking two grain crops unless manured.

As I feed all the grain I raise on the farm, the bulk of the grain I sow is a mixture of oats and barley: 2 bushels oats and 1 bushel barley. I can get more grain in the mixture per acre than sown separately.

I always try to get my plowing done in the fall, and as soon in the spring as the land is fit I run a three-horse spring-tooth harrow over each field, and as the "Farmer's Advocate" tells us, it will retain the moisture and not let it dry out or bake, which I know to be true from experience. When the weather becomes warm enough to sow, I put the disk harrow over it twice, and it is ready for the seed (I use a broadcast), and one more scratch with the spring-tooth and then seed down. Once over with the spike harrow, and then if dry on top roll at once.

I sow 8 lbs. timothy seed, 5 lbs. late mammoth clover, and 2 lbs alsike per acre.

Prince Edward Island. CHARLES CRAIG.

Alfalfa Seeding.

One of the greatest boons which new agriculture is bringing our farmers is alfalfa or lucerne, which is being grown throughout Ontario in increasing areas each year. As an ingredient of a permanent pasture seed mixture for dry, hilly land, it is unequalled; as a hay crop on the same kind of land it is invaluable, since once established it remains for years, yielding heavy crops of the very best hay, with no labor or expense but that of harvesting it. For soiling, it is even better than for hay, as for this purpose the full value of its food constituents is realized, with no loss by over-ripeness or imperfect curing. In some of the rolling parts of the country, as in sections of Southern Ontario, many of the steep clay hillsides, where other crops could not be very profitably grown, have been seeded to alfalfa, and are now yielding magnificent crops. The clay of the hillsides supplies the mineral elements in abundance; the alfalfa takes its nitrogen from the air. The hills afford good drainage and permit deep rooting, and here lucerne does its best. It will usually succeed, however, on any deep well-drained soil, fairly rich in lime and potash.

As a considerable area will likely be sown this year, a few hints on seeding will not be amiss. Having chosen a good clean piece of suitable soil, preferably last year's root or corn ground, buy about twenty or twenty-five pounds per acre of the very best and cleanest seed obtainable. It is extremely foolish to take any chances with the seed of a crop intended to remain for years. Before purchasing, examine a sample carefully for weed seeds, and also test for germination. On soil at all likely to suffer from drought, sow the alfalfa without a nurse crop; on moist land, or rather in moist climates, a light seeding of barley, say a bushel or five pecks per acre, may be sown without seriously injuring the chances of the lucerne; in fact, it will help to keep down weeds. The seed should be covered lightly with the smoothing harrow. On dry land, some disk it in, but we believe harrowing is better. On account of the danger of weed seeds, we would not advise application of barn-yard manure—it should have been applied to the previous crop—but we would recommend an application of air-slacked lime and about twenty-five bushels per acre of wood ashes. More particularly would this be beneficial on light loam or sand. Alfalfa is an irrigation plant, thriving best on the rich alkaline soils of the arid regions. Like clover, it is a gross feeder of potash, and like clover, also, the bacteria of the nodules of its roots will not flourish in an acid soil.

Artificial inoculation with these bacteria may be advisable where lucerne or sweet clover has not previously grown. It is believed that the bacteria of lucerne and sweet clover are practically the same, or very closely related species. The red clover bacteria are thought to be quite another kind, and hence of little or no use for inoculating alfalfa soil. The simplest method of inoculation is to sprinkle over the field a load of loamy soil from an old alfalfa field. However, the best way to ascertain whether it will succeed on any given farm, is to experiment on a small scale to begin with. The experiment need not be expensive, and generally speaking it will prove satisfactory on well-drained land. A plot of alfalfa near the barns is a great convenience for supplying green fodder, to be fed in the stables in the summer, as it can usually be cut three times during the season of the first year, and sometimes twice the first summer.

Treat Seed Oats for Smut.

It is probable that there is an annual loss of fully three million bushels of oats in Ontario through the injury to the crop caused by smut. This could be largely prevented if the seed oats were immersed for twenty minutes in a solution made by mixing one pint of formaldehyde (formalin) in from forty to forty-five gallons of water. This solution has the power of killing the spores of smut and leaving the oats uninjured. If the treatment is made several days before seeding takes place, the oats should be spread on a floor and thoroughly dried; but if it is made immediately before sowing, it is only necessary to partially dry the seed. Great care should be taken to prevent smut spores from bags, bins, grain-seeders, etc., becoming mixed with the oats after the formalin has been used. This treatment is easily performed, comparatively cheap, and very effectual, and if thoroughly performed, need not be repeated from year to year.

PROF. C. A. ZAVITZ.

Premiums Appreciated.

I beg to acknowledge the receipt of your premiums in good order—the microscope and reading glass. They are very nice, both of them, and I thank you very much. CHAS. D. BROWN.

Waterloo Co., Ont.