

autumn cultivation is in progress, and it is the foals of these that have to be weaned that special care is needed for the next few months. Foals, like older horses, like companionship, and two foals together do better than one alone. If they could be given a green clover patch no doubt it would conduce to their advantage, but for a few days at least they are better confined to a roomy box or pen away from the sound of their dams. It is not much trouble to get the foals to eat, but only choice food should be offered, as without every advantage they are liable to lose flesh and become hard-looking. Green-cut clover and a little green fodder corn are much relished and are nourishing. In some of the draft breeding studs of Scotland, the foals after weaning time get frequent gruel drinks of oatmeal, bran and treacle. In our own practice we have found boiled oats and bran good morning feed, with crushed oats and bran at noon and night, along with cut green corn, to give good results. We always try to secure a few quarts of skimmed milk twice a day, and with a stallion foal we wish to rush ahead we have found it profitable to get him a quantity of new milk twice a day. One has to be cautious in rushing a colt in rapid growth to allow plenty of exercise that his legs may not go wrong. Many of the knuckled yearlings and older colts at our fairs have been put wrong by getting too great weight on the young limbs without sufficient exercise. We don't want a colt to have any of the appearance of a fed veal. It is the strong, sound, mature horse we desire to produce, and too much rushing in foalhood does not conduce to that end. Many foals raised in this country do not get the run of a field after weaning at this season till the following spring; but that is not the best practice, according to the Scottish breeders referred to above, who allow their foals the run of a field day and night till cold weather sets in, and daytime all through the winter season. Our climate will not admit of winter pasturing, but our aftermath clover fields are as good as need be for fall pasturing. Where access to such a field cannot be had, a good-sized yard should be provided to sharpen the appetite and keep the legs right. Later in the season, when succulent food such as clover and green corn are past, their place should be substituted with boiled roots and grain, mixed with cut hay and bran some hours before feeding. This is relished after they become accustomed to it, and keeps them in a thriving, healthy state. Sometimes foals do not thrive well because of intestinal worms, which are indicated by staring hair, tight hide and general unthriftiness. The worms can often be seen in the droppings of the foal. When such are present the administration of a purgative, followed by a half-ounce dose of oil of turpentine mixed in a pint of milk, followed by half a dozen half-dram doses of powdered sulphate of iron—one dose morning and evening—will usually affect a cure.

## FARM.

### Fall Cultivation of the Soil.

BY SIMPSON RENNIE, YORK CO., ONT.

In fall cultivation there are two very important points to keep before the mind. First, by giving such cultivation as will not only retain but increase the fertility of the soil; and 2nd, to keep in check the ravages of foul weeds. All stubble land intended for grain crops the following year should be plowed lightly immediately after harvest. Now, this may be done with any kind of plow or even the cultivator, but the cultivator is not practicable on clay land that is somewhat weedy unless first plowed. If possible plowing should be done in the month of August or as soon as the crop is taken off. By plowing early more of the foul seeds which have ripened in the crop and fallen to the ground can be encouraged to germinate if not plowed too deep, and if plowed shallow the ground will not break up so lumpy. After plowing we usually roll it down smooth and leave it until there comes a nice rain, then go on with the harrows and cultivator and make it as fine as possible. By thus making the conditions favorable for germination the foul seeds will be encouraged to grow. Then later in the fall plow again rather deeper and turn down any weeds that have germinated and grown. By plowing early the first time, such as the ragweed can soon be got rid of, or any other weeds which do not mature their seed until after harvest. Couch grass also can be destroyed in a single season by this same cultivation if properly done.

Again, when the land is made nice and loose it holds the moisture and retains the manurial ingredients from rains which would otherwise be lost. I may say I have sometimes sown rape after harvest when I would get the land nicely plowed and worked fine, but the result is not satisfactory unless it happens to be a showery fall. In a dry fall, the moisture taken up by the grain crop usually leaves the land too dry and the rape will make very poor headway.

In preparing land for fall wheat, say barley or pea stubble, I find it is better to plow only once and not more than four or five inches deep, then work the land fine with the harrows, cultivator and roller, and all the better if this can be done some considerable time before sowing. I also find fall wheat to do well after a clover sod, which should be plowed at least six inches deep with a jointer plow, and before sowing work the surface fine, but plow only once. I find the wheat is not apt to winter-

kill after clover sod if worked in this way. After harvest is a good time to draw out any manure which may have been left from the spring or made during the summer. This I like to apply on the land intended for roots the following year. It is preferable to apply manure before a root or hoed crop. By so doing any weed seeds that may be in the manure would likely be destroyed by the cultivation of the roots, while if applied for a grain crop any weed seeds in the manure would likely grow up in the grain crop and not only injure that crop, but probably re-seed and become a nuisance for years after. In applying manure for roots do not plow it down too deep. On stiff clay land intended for carrots or mangels I find it better to plow the manured land again late in the fall if not too wet and never plow again in the spring, but only work the land well with cultivator and harrows.

Before closing I want to speak a word of warning. Think of the thousands of acres of land in our fair Dominion which have become almost useless through the weed nuisance. I think it is high time that our system of cultivation be such as will not only keep up the fertility of the soil, but also will keep the ravages of all foul weeds in check. In my experience there is no better method than the above in which the foul weeds can be destroyed and at the same time keep up the fertility of the soil at so little expense.

### Shallow Cultivation Soon After Harvest.

To the Editor FARMER'S ADVOCATE:

SIR,—In reference to fall cultivation of the soil for the production of spring crops, I may say that it is preferable to give the land shallow cultivation by skim plowing, gang plowing, or disk harrowing as soon after the foregoing crop is removed as it is convenient to do so. When time is available, we prefer skim plowing, harrowed down fine so that all seeds of grain or weeds may germinate, and also in a dry season, as the present, to produce moisture in the soil. We commence to ridge up about Oct. 1st, plowing narrow ridges about one rod wide, setting the furrow well up, and going to a depth of not less than six inches. Our soil being heavy clay, somewhat flat and not



LINCOLN SHEARLING RAM; 1ST PRIZE AND CHAMPION, ROYAL SHOW, 1898; BRED AND SHOWN BY HENRY DUDDING, RIBY GROVE, LINCOLNSHIRE; SOLD AT PUBLIC AUCTION FOR \$5000, TO GO TO BUENOS AYRES.

sufficiently underdrained, narrow ridges and good cross furrows are necessary to take off surface water. Shallow plowing will not do. In fact, I believe it would be of advantage to loosen the bottom of the furrow with a subsoil prong to make the land porous to a greater depth. Heavy clay requires the frost to pulverize it. Occasionally we rib a field into narrow drills late in the fall if the land has become soured by unfavorable treatment, and it has always given good results. We prefer not to plow when the land is too wet, but if it is a question between plowing wet in the fall and having to leave it to the spring, we choose the former, as spring plowing, except sod, invariably gives poor results in all crops, except, perhaps, for peas.

JOSEPH MOUNTAIN.

Perth Co., Ont.

### Autumn Cultivation in Quebec Province.

To the Editor FARMER'S ADVOCATE:

SIR,—In this section of the Province of Quebec (Central Southern) harvesting is now at full swing, and by Sept. 1st the grain crop will be housed, except an odd piece of late sown oats, etc., and then follows the harvest of the corn and potatoes, and later on the root crop, but the fall plowing will be well started between whites. Our mode of management is to plow all land that has grown a hoed crop (and is sufficiently manured to be seeded down to grass) as soon as the crop is off, so that the early spring may see it all sown to wheat or barley, and seeded to clover and timothy, thereby insuring a good catch and giving an early crop of grain and a long autumn growth of aftermath. No fall feeding of either new seeding or meadows is allowed, so that winter-killing of meadows is very rare. At present the aftergrowth on meadows and wheat and barley stubble is unusually heavy, insuring good protection from the winter blasts. The old

meadow land intended for hoed crop is manured as far as the summer and early fall made manure will reach, to be immediately plowed in as deep as a good breaking plow will turn, say eight inches or more for either corn or potatoes. Stubble land or greensward intended for grain we plow as early in the fall as we can, to be manured on top in spring, but some prefer leaving stubble land unplowed until spring, when the manure can be plowed under. Plowing is often delayed here on account of the land being too dry, but we usually have time after it is sufficiently moist, about the latter part of October or first part of November. Our reasons for so deep plowing for hoed crop is that it gives much easier work in cultivating to have the sod well under, and the manure is far enough from the surface not to make it dry and porous; there is no danger but that the crop will find its way down to it. These are some of the points in our mode of cultivation, which, no doubt, differs very much with other parts of our country.

Shefford Co., Que.

P. P. FOWLER.

### The Silo Filled in Three or Four Days.

To the Editor FARMER'S ADVOCATE:

SIR,—In the August 15th number of FARMER'S ADVOCATE you have a very timely and eminently practical article on silo filling. I have read and re-read it, and I am sure that it will be very helpful to those who have not had much experience with silos. We think that the greatest mistake made with corn for the silo is the growing of varieties that do not mature, and you have emphasized the necessity of having the corn well matured. We have had a silo for seven or eight years, and our way of handling the crop is as follows: We sow the corn with the seed drill, very thin, using two tubes, leaving the drills good three feet apart. This season we sowed sixteen pounds per acre, and still we find that it is too thick when well matured. "Compton's Early" is the variety that does best with us in North Grey. We are ready to secure the crop from 15th to 20th September (not later). We commence to cut in the field, and cut a day or two before filling, so as to wilt. We always get a gang of hands to keep cutting in the field and filling day by day—three or four men in the field, who cut the corn with hooks and help to load the truck, and the teamster who hauls. We use two pairs of trucks, one loading and the other unloading, which makes rapid work—20 to 25 loads a day are put in the silo. Two men at the machine, and a boy driving the horses. We use our own three horses on the power, which are quite sufficient. One man in the silo to level and tramp, and the whole business is done in three or four days. For some years we have not covered the corn with anything—just tramped it every day for a week, and sprinkled twenty or thirty pails of water over the top to form a crust of mold to exclude the air, and the result is a large quantity of succulent food for the cattle in the winter. And I may say that for the last month we have been feeding corn out of the silo twice a day to our stock with good results.

Grey Co., Ont.

GEORGE DONALD.

### Corn in the Glazed Stage Too Green for the Silo.

To the Editor FARMER'S ADVOCATE:

SIR,—Our experience of twelve years with the silo may be of some advantage to the many readers of your valuable paper. Two of our silos are of concrete construction, built outside of the barn, and will hold about twenty acres of corn each. When we start at the corn two men go to the field to cut; they use a hoe with a handle about two feet and a half long; the hoes are made out of a piece of old saw, seven inches wide and five and a half inches deep; a strong piece riveted on the back to connect with the handle; this piece is inclined a little to the right, so that when you strike the blow to cut the hill of corn your hand passes the side of the stalks, and yet the hoe is cutting the corn off level with the ground. We have found this much the best implement with which to cut corn. Some advocate using a knife, others a machine. We have used both, and neither can compare with the hoe, as you can cut it right off by the ground and leave no stubs, while both knife and machine will leave stubs from three to five inches long—the very best part of the stalk. Two men can cut from four to five acres a day, and lay it in bunches to throw on the wagon. Just as soon as there is enough cut to load, the teams go to the field with truck wagons, with the sides off the hay rack and two stakes at each end. It takes three men to load; they lift it up in armfuls and throw it across the rack, beginning at each end and finishing in the center; they have to be particular in getting it put on straight, so it pulls off easily. A boy drives the teams between the barn and the field. It takes three teams to haul it in as fast as we put it through the cutting box. We use a Smalley cylinder box, with carriers to elevate it; we build a platform to the side of the cutting box about a foot or fifteen inches high, so that the men pulling the corn off on to the table do not have to reach up for it. It takes two men to pull it off and one man to feed it; there is also one man in the silo spreading and tramping the outsides. The power used for the cutting box is an engine. It takes ten men and a boy to run this outfit. The man in the silo has to be careful and mix the light leafy stuff with the heavier. Some claim that the corn should lie and wilt before you start to draw it in. I have always claimed that it should not, and that the corn should be ripe when you