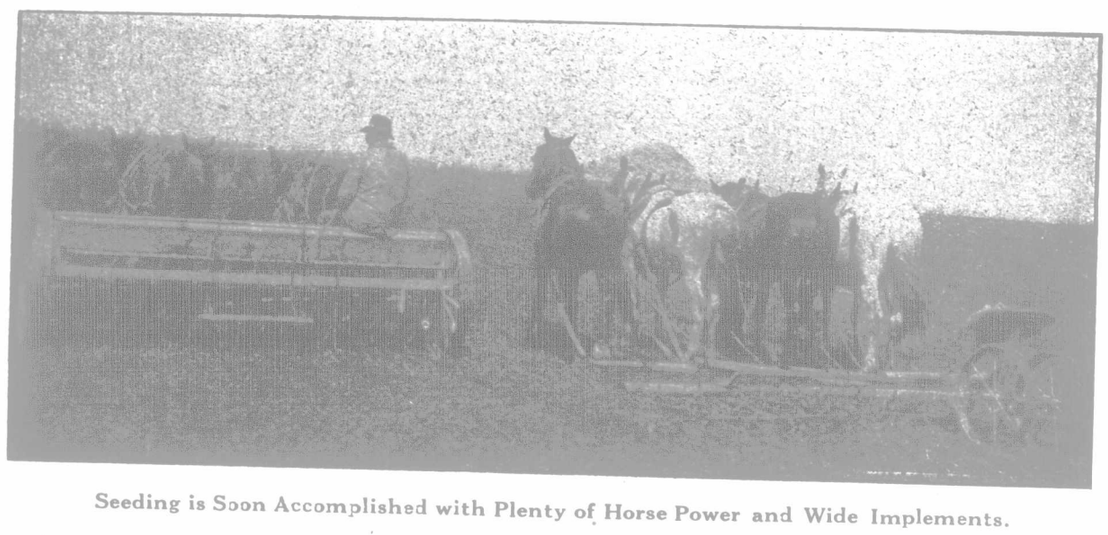
Spring Cultivation.

The past winter has been a particularly mild one, especially in the Western section of Ontario. There has been little or no snow and the temperature has not dropped very low at any time. It is seldom that a winter will pass with as little cold and stormy weather and with so much bright sunshine. Spring is now at hand and it is only a matter of a few days when it will be necessary to think about getting the spring grain in the ground. Previous to the opening of spring a good deal of work can be done in preparation for the rush of seeding. If the implements are not already in repair, and the horses given a little work to harden them in readiness for the long, hard pull of seeding, it is well to make preparation without delay. Some farmers put a good deal more time and work on their fields than do others, and taking one year with another, the better the preparation of the seed-bed the more remunerative the crop. In the average season sufficient moisture at the right time is the influencing factor in the crop yield. In districts where there is little rainfall a good deal of stress is laid on conserving what moisture does fall. It would be better for Ontario farmers if more attention were paid to the matter. It is a fact that a dust mulch checks the rapid evaporation of moisture from the soil but yet comparatively few strive to prevent the loss of moisture which occurs on bright, windy days of spring and summer. Harrowing the field as soon as the horses can be put on it is a good practice. This not only forms a dust mulch which checks the loss of moisture but it so breaks the surface that the cultivator or disk will make a better seed-bed than if the harrows had not been first used. It is generally recognized as good practice to go over all the plowed land with the harrows as early in the spring as possible. It will prevent the top soil from crusting, improve the physical condition of the soil, and tend to hasten growth when the seed is sown. As to what cultivation is necessary to put the soil in good tilth depends on the condition of the soil. Once over with the cultivator or disk will put some fields in as good tilth as will twice over. The amount of work to put on a field must be judged by each individual. No hard and fast rule can be laid down. If once over is enough, we then harrow the soil in the opposite direction to what we cultivate. It pays to give extra cultivation in order to have a fine seedbed. This is especially true if seeding down. The tiny seeds of clover and grasses have difficulty in taking root if the ground is at all lumpy. When sowing grass seed it is advisable to turn the spouts so that they will sow in front rather than behind the hoes or disks of the grain drill. By so doing the small seed is not covered so deeply. Harrowing after the seeder is good practice.

In some sections it is a common practice to roll all the spring crops soon after seeding is finished. It is obvious that this will crush the lumps, make the field look smoother, and possibly make it better for the binder in harvest time, but to leave a field rolled results in a great loss of moisture by evaporation. It will also be noticed that on fields with a smooth surface there is much more drifting of soil than where the roller has not been used. While drifting does not cause so much loss in this country, owing to the wind not having a very great sweep, it was very damaging on many farms in the Western Provinces last spring. If rolling is considered necessary it is advisable to follow it soon after with a light harrow. If there is a good seed-bed we doubt the necessity of rolling.

As a rule, the corn and root fields are not touched until the spring grains are sown. By that time there is usually considerable crust on the soil, and the cultivator breaks it up in chunks. If these fields were given a stroke with the harrows before seeding it would put them in better condition for working later on.

The shortage of labor has increased the use of large implements drawn by three, four and five-horse teams. One man with four horses hitched to the disk, cultivator or harrows can do the work which two formerly did with a single team and narrow implements. The harrows may be hitched behind the disk or cultivator. Last spring we saw a man driving one team on the seeder and leading a team behind on the harrows. A few years ago one would not think of doing this, but necessity is the mother of invention. It is well to have the implements sharp in order to do the best work. The grain should be cleaned before seeding comes, and formalin should be on hand to treat the seed before sowing. The amount of seed to sow per acre depends on the fertility of the soil, the stooling qualities of the grain and also on the size of the kernels. From two to two and a half bushels of oats per acre is a very good rate of seeding. Seven pecks of barley gives a good stand, and good crops of spring wheat are grown by sowing two bushels per acre. Provided you put the soil in good tilth and get the seed in well, you need not be alarmed if your neighbor does finish a few days ahead. However, it is advisable to get the grain in the ground as soon as the soil is fit to work in the spring. A few days may make a considerable difference in the crop. Spring wheat wants to be in early with oats following closely.



Seeding is Soon Accomplished with Plenty of Horse Power and Wide Implements.

Plowman's Association for Eastern Ontario and Western Quebec.

At a meeting of farmers, Agricultural Representatives and representative men from Eastern Ontario and Western Quebec, called on Tuesday, March 18, by the 1918 Ottawa Committee of the Ontario Plowman's Association at Ottawa, it was unanimously decided to form a plowman's assocaition for Eastern Ontario and the Western counties of Quebec. The fact that plowing is such an essential part of agricultural practice and because of the fact that this part of Canada is such an important dairy section, necessitating the use of the very best tillage methods, it was felt that there should be a plowing match at Ottawa this year. Very few if any, plowmen could get to Chatham from the Ottawa Valley, especially from Quebec and many had planned to compete in the 1918 match which was unfortunately called off on account of the epidemic of Spanish Influenza. It was pointed out that it was not proposed to set up the new Association in opposition to the Ontario Plowman's association, but that it would be a local association to serve a special purpose.

The officers elected are as follows: President, B. Rothwell, Ottawa; 1st Vice-President, W.F. Stephen, Huntingdon; 2nd Vice-President, O. D. Casselman, Chesterville; 3rd Vice-President, Wm. Hodgins, Shawville; Secretary, F. C. Nunnick, Ottawa; Treasurer, J. W. Nelson, Ottawa. Dr. J. H. Gisdale, Acting Deputy Minister of Agriculture for the Dominion is Honorary President and J. H. Grennier, Deputy Minister of Agriculture for Quebec, is Honorary Vice-President. The directors are not yet elected, but will be selected as follows, before the first meeting of the new board which will be held in a few weeks: two farmers from Ontario and two farmers from Quebec; two Agricultural Representatives from Ontario and two from Quebec; and four directors from the city of Ottawa.

Destroy the Grain Thief.

The annual loss from smut reaches many hundreds of thousands of dollars in a year. While many of the farmers are applying methods to prevent this loss, there are others who continue to neglect treating their seed for smut before sowing it. Lack of time during seeding and the belief that the coming season will not be favorable for smut, is the cause of much neglect. It is not uncommon to see ten or even twenty per cent. of the wheat and oat heads smutted, or reduced to a complete loss. The smuts are fungous diseases and are caused by minute colorless plants which have not the power of manufacturing their own food. Consequently, they become parasites and live on the cultivated plants. These spores usually form in the heads of the grain and the spores are scattered by the wind or at the time of threshing. These tiny, minute spores cling to the kernels of grain and if not destroyed will commence to grow along with the grain when it is planted in the spring. The fine fungous threads of the smut plant grow up through the grain plants and attack the flowers when they commence to develop. They exhaust the food stored in the kernels of the newly-formed head of grain, leaving in their place a mass of black smut spores. A few diseased heads may infect the seed of an entire field. The loose smut of oats and the bunt of wheat are two of the most common smuts and cause the greatest loss. It is believed that infection takes place only through the seed. If there are no smut spores on the grain when it is sown there will be no smut develop in the ripening crop. Formalin has been used very effectively in the control of the above mentioned varieties of smut. There is a diversity of opinion as to how best to apply this treatment, and in what proportions to use it. Using a pint of formalin to forty gallons of water and soaking the seed for twenty minutes has been the method long employed with exceptionally good results. However, this is rather a laborious task and requires a good deal of time. Sprinkling the seed with a solution of one pint to thirty gallons has also proven effective and is much easier done than the former method. The grain is placed in a heap on a clean canvas or floor, and the formalin solution sprinkled over it and the grain turned with the shovel until every kernel is moistened. The pile is then covered with canvas or sacking and left for two hours, after which the grain is spread out to dry. It is important that the seed be dried quickly and thoroughly and not bagged up until ready to sow. Another used with good results and less work was to have the solution much stronger, use less of it and bag the grain up immediately, depending on the formaldehyde fumes to destroy the smut spores. In our issue of March 13, Prof. J. E. Howitt, of the O. A. C., outlined what is called the dry formaldehyde treatment. One part formalin, forty per cent. formaldehyde, and one part water is the solution which is sprayed over the seed at the rate of one pint to twenty-five bushels of seed. The solution is sprayed on to the grain by one man, while another uses the shovel. The grain is placed in a pile and covered with blankets or canvas for five hours, after which the seed may be uncovered, bagged and sown at once. Care must be taken that the solution is of the exact strength recommended. This latter method eliminates the necessity of spending time raking and shovelling the grain over to dry it.

The formalin may be secured at any drug store for a very small sum. Consequently the cost of treating the seed is neither here nor there, but the results may mean an increase of possibly ten or fifteen bushels per acre, besides having it much cleaner in the barn at threshing time. Why take the risk when insurance against smut may be had for a few cents per acre? It does not take long to sprinkle the seed with formalin solution, or to use the dry method above mentioned. When next in town, secure your formalin so it will be ready when seeding operations begin. You cannot afford to neglect treating the oats in the spring and the wheat in the fall.

Homesteading With Profit and Pleasure.

EDITOR "THE FARMER'S ADVOCATE":

Interested by a recent article in "The Farmer's Advocate," a returned soldier with a couple of boys and some other relatives writes to enquire concerning the prospects for location in Grande Prairie, and asks a little general advice. I have ventured to reply to him at some length and to offer the suggestions to "The Farmer's Advocate" with a view to helping others and at the same time contributing a thought to the live problem of assisting soldier settlers.

"If you like farming, have had experience and are not afraid to rough it for a while, I should say you would do very well indeed to come to the Peace Country and take up land, especially as there would be a party to associate and co-operate from the start. Such a bunch can share teams and implements for a while, live together for a time if necessary; and, looking to the future, would be in a position to invest in a power outfit to break the scrub and semi-scrub land that nearly everyone now coming into the country has to be satisfied to take a good percentage of, unless he chooses land otherwise objectionable. You see, settlers have been coming into Grande Prairie for the past ten years, and the first ones came 550 miles ahead of steel. It is, to my mind, a very good mixed-farming country indeed; but perhaps not over fifteen per cent. of it (mostly high land bordering lakes) is reasonably safe for the production of wheat on a commercial basis. Oats will ripen feed grain on most of the land in the average season. All kinds of live stock do well, though horses sustain many losses until acclimatized. They can be bought here.

"We are now agitating for railroad extension through to the western part of the Prairie, and have hopes of getting it this season. When this is accomplished and direct coast connection assured, this country will be in an enviable position indeed. Now is the time to get in on the ground floor. You might not find two whole sections to your liking, but if you had to spread out somewhat at first, you might later consolidate by sale and purchase.

"If you go at farming and particularly at pioneering, go slow in investing your capital. Put two-thirds of it where you cannot touch it for a year. You will then know better how to spend it wisely. Even then, keep about half of it in reserve for contingencies. Many of the veterans are being saddled with debt for expensive teams and things they do not need badly on the start. Interest will accumulate and pay day come, while perhaps a crop depended upon will freeze and leave the homesteader in the hole. I have been through the mill and speak from experience. I have made the mistake so many make of thinking they must have this, that and the other thing and straining resources to pay for them. First thing one knows, he is paying the bank nine to twelve per cent. interest, compounded every three months. I have learned the lesson. We are now making solid progress and are well satisfied with the country. We do without things, no matter how attractive they look, until able to pay for them. This keeps one's head always above water and enables him