FOUNDED 1866

for spring application. one of the most ima source of nitrogen, and applied in the spring. t would be washed away It is a by-product in the d to a large extent it is committee has been ap-sidency of F. D. Acland, agricultural interest in and some of the actions it was being hoodwinked It goes without saying nufacturers, nor farmers, iots; there is a deal of on of the community, and money out of the, war are simply lining their equivalent, and with a te of ammonia, and also nition works, the price on on its normal figure. mal figure may be anybut the manufacturer's He wants an open marprice which the war deaim and enables him to have little ground 'to as treated in the like charge a war price for He is forced 'to sell . a price fixed by 'three ar Office has said it has ot sell to anybody else. rop of 1915 to the War bout £5 per ton. Reprice for what he was ar Office was supplied, was was the quality of this price that some men hamed to see it leaving ament was slow to move. th pressure to bear on lphate of ammonia by xport until the agriculmet. This suspension olonized, because it is cannot at the outside one-third of the entire phate of ammonia, and erest that as 'much as can spare should be exnot reach the enemy. eing urged to buy their once, and not wait unnulated that the price

y then be too late. are to determine many se who look a little hegrounds for disquietude. and coasting shipping is ne thing reacts on the ks after a farmer places before they reach him. of will on the part of or the merchants, but eated by the war. been commandeered for

FEBRUARY 24, 1916

ter is that the vast majority of our people are living in a kind of fool's paradise. They are earning huge wages in the manufacturing of munitions, and in ship-building and cognate trades; but they do not recognize that there is a false prosperity, it does not arise 'from trade, but from the demands of war, and war always means destruction. It cannot mean the multiplication of national capital. It means the very This transport difficulty has operated reverse. to the detriment of the Scottish potato trade. Scotland grows far more potatoes than she consumes. Her first customer is England, both for

her surplus seed and her commercial stocks. This season the crops in some places have been wasted in the ground for the lack of labor and seasonable weather in which to lift them. Even where the lifting was successfully accomplished, disease has broken out in the pits, and where these have been offered for sale purposes, it has been found that only about one-half their con-tents can be sold for human food. This sound half cannot be shipped off at once to the Eng-lish market, and there is loss all round. Readers will probably think that this is a some-what doleful letter, and it is so. The outlook

THE FARMER'S ADVOCATE.

agriculturally is depressing, and unless the weather improves it will be more so. To-day we have a lower reading of the barometer than has been recorded for a long time. Rain has fallen heavily, and the wind is both bolisterous and cold. What we want in this old country is pro-hibition, the throttling of the trade in liquor, the hibition, the throtting of the trade in indust, the cessation of every form of sport; the recognition of duty on the part of everyone to work his very hardest, and to the full limit of law-ful time; and a reverent recognition of a Divine hand in what is transpiring in the world. SCOTLAND YET.

305

Growing Corn for Silage Purposes in Ontario.

Oats are said to be the most important crop in Ontario, but from the viewpoint of the livestock farmer corn is fast coming to the fore as one of his main crops, if not his real stand-by to produce feed for winter. And of course, silage corn takes the most prominent place. In 1915 there were 758,509 acres of corn in Ontario, and outside of the seed-corn-producing areas, in a few counties in the southwestern peninsula of this Province, almost the entire acreage was grown for silage purcoses. The corn crop undoubtedly is destined to become the great feed crop of Ontario and perhaps of all Canada.

SOIL FOR CORN.

Corn does well on a variety of soils. Perhaps the best is a rich, friable clay loam, heavily fertilized. However, big crops are grown on soils ranging in nature from light, sandy loam to fair-ly heavy clay. Where the crop is grown on the latter class of soil, of course, more care must be taken with its cultivation, and the preparation of the land if good success is to be obtained. Land for this crop should be fairly well drained, if not naturally, by means of under-drains. Corn never does well with wet feet.

It is generally conceded that the best soil for the corn crop, for the average farm growing silage corn, is a clover sod. However, an older sod, provided it is not infested with white grubs, or wire-worms, is quite suitable. Sod is guarally considered preferable to stubble land for corn. The season of the year at which this sod should be ploughed is a moot question. In the seedcorn-producing belt, where a large proportion of each individual farm is devoted to the growing of seed corn, the land is usually ploughed in the fall. It is obvious that the grower could not satisfactorily prepare all his land if it were left until spring. Consequently, fall ploughing is general, and the growers hold that they get better crops from fall ploughing than from spring ploughing. However, in the more easterly and northerly portions of the Province, and even in counties like Middlesex, Oxford, and other Central Western Counties, where corn is grown almost exclusively for silage purposes, most growers have found spring ploughing of the sod to give better results than where it was ploughed in the fall. We nave found this to be the case on our farm "Weldpreviously stated in these COIU this farm is composed of a rather heavy clay soil, with a very hard and close sub-soil. Spring ploughing is advantageous in all districts where the land is more or less heavy, and where it requires the full season to properly mature the corn for silage purposes. The springploughed sod, is looser, warmer, gives better drainage, and through the decay of the sod the corn gets a more rapid start than on the fall-ploughed land. These points are important in the growing of corn for the silo in most sections of this country, for much depends on the start the young corn plants get as to whether or not a heavy crop of silage is produced.

shelled corn, unless he knows that it will germinate and produce strong, vigorous plants. It is far safer to buy seed corn on the cob, and then test each individual ear by taking six kernels from it, two from either end, and two from the centre, on opposite sides of the cob. Testing may be done in a shallow box two inches deep, marked off into inch squares, by passing a string around nails driven into all edges of the box, one inch apart, and so wound as to divide the box into inch squares, each containing the six kernels from an individual cob. Damp sawdust or moistened sand may be used to germinate the corn, and to get the required heat the box may be set on top of the jurnace in the cellar or behind the kitchen stove. Each ear that does not germinate 100 per cent. should be discarded. Professor Moore, of Wisconsin, uses in testing corn, pieces of muslin marked into squares with a lead pencil, each square to hold the six kernels from a cob. This is about all the average grower of silage corn can do by way of selecting his seed. If he is situated in the seed-corn belt, of course, he can mark promising hills when the corn is in the milk stage, and can then select the best ears from them at cutting time, and, after kiln-drying these ears, a further selection for type and quality may be made, finishing off with testing ready for planting.

VARIETIES FOR, SILAGE.

There is a great deal in variety. We are not prepared to say which is the best variety for all conditions. No doubt different varieties will do better under varying circumstances. However, we do not believe it is wise for growers to be always anxious to get new varieties unless these have been proven to be better than the old and tried varieties. We think it would be well to tried varieties. We think it would be well to stick fairly closely to the six or seven recom-mended kinds, viz., in Flints: Longfellow, Salzer's North Dakota, and Compton's Early; in Jents: White Cap, Bailey, Wisconsin No. 7, and perhaps Learning and Golden Glow. This last variety is a very early Dent and a heavy yielder.

PREPARATION FOR. AND TIME OF PLANTING.

In the preparation of the soil for planting, the lisc harrow and cultivator should long with the drag harrow until the land is thoroughly pulverized, and three or four inches of a fine, loose, mellow mulch prepared. It is sometimes unwise to plant too early in the season, and it is better to work the soil after a heavy rain, and plant after the rain, than to have the corn in the ground just before a long, protracted downpour ensues. The grower cannot always tell, and it is generally safe to plant from May 15 to June 1, according to locality, and season.

er can afford to take the chance of buying this of days to mature in the thickly-sown row, that they do the hill-planted corn of the same variety. Growers still believe, and this point should be emphasized in corn sown thickly, that maturity is necessary to good silage.

In sowing the corn thickly it can be done with a check-row planter by arranging the chains to sow rather than to plant, or it may be accomplished more easily by using the grain drill and stopping those spouts, not required, to make the rows the necessary distance apart. We had to go over ours twice with the grain drill to get on 50 lbs. per acre. We believe in putting in enough seed, no matter whether the corn is sown or hill-planted, and it is generally well to give the land a stroke or two with a light harrow just as the corn is coming up, and possibly once or twice afterwards. This kills a large number of weeds and saves work later. It will bull out some of the young corn plants, but usually if plenty of seed has been sown, there will be enough left.

CORN TO PLANT AN ACRE.

It might be well for the reader to know about how much seed it takes to plant an acre of corn. One-sixth of a bushel will plant an acre, four kernels to the hill, hills 42 inches apart each way. About fourteen good ears will shell this amount. It is generally safer, however, to purchase about one peck for each acre to be planted in hills, and for sowing in drills from 80 to 50 lbs. per acre is required. In shelling the corn, for planting always discard about one-half an inch to an inch of the butts and tips of the ears, using only the best of the corn for seed.

CULTIVATION NECESSARY.

The growing corn should be cultivated at least The growing corn should be cultivated at least once a week, until it gets so large that the horses and cultivator cannot be worked in the crop. When rains are frequent, it is well to cultivate after each rain. Care must be taken in the first cultivation, that the corn is not covered, but it is well to go fairly close to it, and as the crop grows and the roots spread, the cultivator should be set so that it does not come cultivator should be set so that it does not come quite so close to the corn plants and does not cut so deeply. The greatest advantage of the check-row system of planting is that it permits of the corn being cultivated both ways, thus saving hoeing, and making it possible to the better This is a decided advantage, but clean the field. where the corn is sown thickly in drills, it may be thoroughly cultivated one way, and, growing so thickly, it does not allow the weeds to get much of a start. We might say here that in the thick-sown row we would prefer to have the stalks from two to four inches apart, averaging possibly about three. That is, where corn is being grown so thickly that it does not cob.

Train services are be nd the fact of the mat-



perland Rose (imp.) (27712) lbs., and is for sale,

WHEN TO APPLY MANURE.

Assuming that clover, or a two-or-three-year sod is being used for the crop, it is necessary that a fair coat of manure be applied. Owing to the fact that farm labor is scarce, and also because most farmers have not a suitable covered pit, or yard, in which to store the farmyard manure, we believe it is advisable to apply the manure directly from the stable to the field, spreading it on the snow as made. It is not advisable to apply the manure in the winter where the land is too rolling, so that much of its substance would be lost through run-off. From twelve to twenty tons per acre should be applied according to the amount available and the condition of the soil. We would not favor the heavier application, unless the soil were somewhat run down. It is generally better to apply manure in fair quantities and frequently, rather than in very heavy coats and at longer intervals.

SELECT GOOD SEED.

It is necessary, if a good crop of corn is to be expected, that nothing but the best procurable seed be planted. Most farmers, growing slage corn, cannot mature their own seed, and must depend upon Southwestern Ontario, or the corn-growing States for their supply. From the latgrowing States for their supply. ter source, and even from Southwestern Ontario, much poor seed has been sold in bulk. No farm-

HILL OR DRILL.

During recent years it has been believed that the best results came from planting in hills 42 inches apart each way, with a check-row corn planter, and leaving from three to four stalks per hill. This is undoubtedly the best method by which to grow corn for husking, but experi-ments carried on, on our farm at "Weldwoou" in 1915, showed that from corn sown thickly in drills, at the rate of 50 lbs. per acre, and the drills three feet apart, a yield of almost double the number of tons per acre was procured, as from land on which the corn was grown in hills 38 inches by 42 inches. All the land got the same treatment and the corn grew side by side. An analysis of samples of corn from each method of planting showed that the thick-sown, pound for pound, contained almost as much feeding value as the thin-sown corn, which was well cobbed. Many of the best dairy farmers in Oxford county, and in other parts of the frovince, sow their corn rather thickly in drills, be-lieving that they get more feed than from the hill-planted corn. The question is still a debatable one, and it will be necessary that considerable further experimental work be carried out before a definite conclusion can be reached. It must be remembered, in connection with our experiment at Weldwood, that it was a wet season. Some authorities hold that the results from thick-sown corn would not be so favorable in a dry year. Those who wish to try the thick-sown method are advised to use nothing but good, early-maturing varieties, and to give theme the same number

WHEN AND HOW TO CUT.

Corn for silage purposes should be fairly well matured when cut. Some authorities believe that the most advanced ears should be glazed and dented when harvested, and that the most poorly developed should at least be up to the boiling stage. Over the greater part of Ontario there is little danger of getting the corn too well matured. There is more likelihood, in many cases, of having to cut it too green. We prefer allowing the crop to grow as long as possible, cutting before danger of hard frost is too great. Last year our corn at Weldwood was cut September 28. It had been slightly frosted, and we do not think slight frosts injure the corn for sliage purposes very much, especially in a wet season when the corn is quite sappy. This corn was cut and remained on the ground for two or three days before ensiling. It still contained sufficient mois-ture that it was not necessary to add water when going into the silo. In 1914 our corn was cut and stood in the shock for several days be-fore being ensiled. When putting it into the silo we had a small stream of water running into the cutting-box. This corn made fine silage and fed out quite satisfactorily. The corn we are feeding out this winter is also very satisfactory sllage. When the crop is allowed to get very dry, either-from being frosted or from remaining in the field for several days after being cut, it is well to add

a little water when ensiling. In cutting corn for the silo the best results are generally obtained where it is cut rather short. We prefer to have it cut one-half inch or less, the finer the better. It is necessary that the