

FARM AND FIELD.

WORK FOR THE MONTH.

THE CORN CROP.

The corn crop is a very important one, in all sections of the country, and should have that careful and constant attention which its importance demands. Thorough cultivation has more to do with insuring large, paying crops of corn than any other one thing, and we know of many southern farms where the soil is anything but rich, which produce very good corn crops each year, without manuring, the secret being that the cultivators are kept running constantly the entire year, without which there would not be enough corn to pay for putting in the crop. From the time the crop is high enough to cultivate without endangering it being covered up with the soil, until it comes out in tassel, when the cultivation must be stopped until all the pollen has fallen, the soil must be constantly worked, not merely to keep down the weeds and grass, but to make the soil loose and mellow, thereby inducing a constant and vigorous growth. In the cultivation of the soil in the corn-field, the object should be to keep the surface as smooth or level as possible, and for this purpose only such cultivators as will leave the work in that shape should be used. There are several which will do this, but we do not care, here, to name them, and, aside from this farmers have ideas of their own in regard to the desirability, gained from practical experience on their own farms, of the different makes and styles. To save time as well as worry and horse-flesh, always have the cultivator teeth sharp, and keep them so at all times, for once going over the ground with a sharp one will do more good than twice going over with a dull one. There are several kinds which can be sharpened on an ordinary grindstone.

FODDER CORN.

While on the corn subject, it would be well to call the attention of our readers to fodder corn, and urge them to have a good supply on hand. If the grass crop, either through having a poor season, or through having to use sod for other crops, is a short one, insufficient to carry all the stock through the winter properly, even with the supply of ordinary corn fodder made on the farm, the fodder corn comes in nicely. It is when properly cured, not merely very good for milch cows and for young cattle and for the smaller stock, but for horses, whether work or driving, it has no superior, and perhaps no equal. The majority of our southern farmers show how fully they believe this when they top and blade their corn in the field, using the blades, when properly cured for horse feed almost entirely.

It is surprising what a large amount of fodder can be raised on a single acre, and those who do not know this would soon become converts to the system if they once tried it properly. It is utterly useless, however, to attempt to grow fodder corn on poor land. The land should not merely be very good land, but it should be heavily manured especially for the crop, stable or barnyard manure being the very best. The soil should be thoroughly plowed, and if it breaks up nicely with the plow, sow the corn immediately after, the two harrowings which the piece should have covering the corn at about the right depth. The corn should be tared and rolled in fine dry plaster to dry it, before sowing to prevent loss from birds, poultry, etc. Before the corn commences to shoot into top or tassel, it should be cut and thoroughly cured, when it should be stored in an airy barn or shed, there to remain until wanted for feeding. It is usually tied into convenient bundles for handling.

FALL POTATOES.

It is rather risky to plant potatoes after the latter part of June, yet we have seen, in favoured localities and when the season was a good one, very good crops of potatoes which had been planted as late as the beginning (the first week or ten days) of July. At all events, those who have not set out any late potatoes for their own use, had better risk the chances, and at once set out a good-sized patch, doing it in the best possible manner so as to insure a rapid growth, which will go far towards insuring a good crop even when planted so late. No farmhouse is complete without a generous supply of white potatoes for winter use, and it will pay to take the risk of getting a good crop even when planted so late in the season as the early part of the month (July). There are several very fine late varieties, but as some are better suited to certain localities than are other sorts it the same list, we cannot say which would prove to be the best for each particular locality or soil. We would advise using from medium to large sized seed and putting to two eyes, as we have, invariably, secured better results from such than from small or inferior sized seed.

CATERPILLARS.

From this time on until fall, when the froes have shed all their leaves, the caterpillars will be in "full bloom," and it is always advisable to "nip them in the bud," else they will destroy many trees, either partially or wholly, while they materially influence the fruit crop, frequently so entirely defoliating the trees as to effectually prevent the fruit from either growing or ripening. The very first bunch of "nests" which is seen must be destroyed at once, and so on to the end of the chapter. Where it can readily be done, and without endangering the shape of the tree, cut off the branch on which the caterpillars have spun their nests and burn the whole thing, insects and all. If this cannot be done, saturate a bunch of rags with coal oil (kerosene) tie to the end of a stick of suitable length, ignite the rags and apply the flame to the "nests," and those insects which are not burned to death will soon die from the serious effects of the singeing they are sure to get, as the "nests" as well as their (the caterpillar) hairy covering are inflammable. A whole orchard can soon be gone over in that way and a vast amount of good done, in preventing the ravages as well as the increase of the troublesome insects which are now so common in nearly every orchard.

IMPLEMENTS.

Sometimes a cheap implement is found to be a very dear one, in the long run, and we have made it a rule never to buy any machine of implement merely because it was cheap in price. There is a large demand for cheap implements, and to supply this demand, manufacturers have used inferior material and inferior workmanship, to accomplish it. As a natural consequence, the breakage soon makes such an implement much more costly and of decidedly less real working value, than such implements which are made as good as they can be made and which naturally command higher prices.

If more care was taken with implements and machines in general, both in and out of use, they would do far better work while they were in use. Such small "leaks" as this, on the farm, are, however, but slightly regarded by farmers who do not realize what heavy aggregate losses are thus sustained. *Western Plowman.*

GRAPEs in plenty should be found on every farm. Barns, sheds and other buildings will afford support for the vines. Plant some good sorts wherever there is a place.

THE SOIL AND FERTILITY.

The soil is not a sieve through which soluble matter may freely run. It has a great power of retaining substances that would otherwise run out and be lost. There is a great difference in soils in this respect, the retentive power depending upon a number of things. The action is probably largely a surface one, and, therefore, we should expect a fine soil would retain solutions much better than coarse soils. Thus a fine clay the particles of which are very minute has the ability to hold salts of nitrogen, etc., with much greater success than a sandy soil, where the particles are much larger. The clay soil is called heavy, and the sandy one light, when, in fact, a cubic foot of sand weighs many pounds more than an equal bulk of the clay. The terms, light and heavy, are used to denote the degree of adhesiveness and not of weight.

The power of a soil to retain moisture, etc., is in direct ratio to the quantity of organic matter present, as well as the fineness of the soil particles.

Stiff clays, that take up the greatest quantity of water when poured upon them, are not the ones that absorb the most moisture from the atmosphere in dry weather, because they cake and become as one piece and even crack into large blocks.

The best soil for a drouth is one that has such a mixture of clay and sand with a good supply of vegetable matter that it remains loose and freely admits the air. This helps to explain how it benefits hoed crops to stir the soil during a dry time. The crust is broken and the particles are loosened up, and the atmosphere which is more or less moisture laden is given a free access to the soil. Carbonate of lime helps in giving an absorbing power to a soil and a tenacity at the same time.

An English writer says that the materials which are most influential in soils may be arranged in the following order of their importance in relation to moisture—organic matter, marls, clays, loams and sand.

The temperature of the soil is an important item, and depends largely upon the amount of moisture present. A wet soil is a cold soil, and is often spoken of as such. Dry land absorbs heat more rapidly and loses it more slowly than that which is wet. Draining is one of the most effectual means of raising the temperature of a soil. Experiments show that the average temperature of a drained soil is three degrees higher than that of the same quality of soil undrained. The importance of a warm soil is of the greatest importance in the spring, when seeds are germinating and plants are starting out for another season of growth. There are many seeds especially those of the tender vegetables that will not germinate until the temperature reaches a certain height, and with such plants the season is short, and a week or ten days delay, in late spring, may mean a loss on the crops, while if the soil had been warmed by thorough under-draining the profits might have been larger.

The temperature is influenced by the colour; thus a dark soil absorbs much more heat than a light one. This fact is of so much importance that in some of the vineyards in France charcoal is spread over the surface to absorb the heat in early spring and thus warm up the soil below and give the vines an early start.

The leading essentials of plant food have been treated so frequently in the agricultural journals that they are getting fairly familiar to the farmer. The question of fertility and the methods of exhausting and restoring it are also somewhat understood by the least informed. It is only a small part of the weight of a crop that is derived