

yet. Clover is used in lieu of it. Lands which remain in clover four or five years without being too constantly and closely grazed, recover their virgin fertility. The character of the soil in the other counties above mentioned, does not vary materially from that in the Elkhorn district.

The preparation of the ground for sowing the seed is by the plough and horses, until the clods are sufficiently pulverized or dissolved, and the surface of the field is rendered even and smooth. It should be as carefully prepared as it were for flax. This most important point, too often neglected, cannot be attended to too much. Scarcely any other crop better rewards diligence and careful husbandry. Fall or winter ploughing is practised with advantage; it is indispensable in old meadows, or old pasture grounds intended for producing hemp.

Plants for seed are ordinarily reared in a place distinct from that in which they are cultivated for the lint. In this respect, the usage is different from that which is understood to prevail in Europe. The seeds which are intended to reproduce seeds for the crop of the next year, are sowed in drills about four feet apart. When they are grown sufficiently to distinguish between the male and female stalks, the former are pulled and thrown away, and the latter are thinned, leaving the stalks separated seven or eight inches from each other.

This operation is usually performed in the blooming season, when the sexual character of the plants is easily discernible; the male alone blossoming, and, when agitated, throwing off farina, a yellow dust or flour, which falls and colors the ground, or any object that comes in contact with it. A few of the male plants had better be left scattered through the drill, until the farina is completely discharged, for an obvious reason. Between the drills a plough is run sufficiently often to keep the ground free from weeds and grass; and between the stalks in each drill the hoe is employed for the same object. The seed plants are generally cut after the first smart frost, between the 25th September and the middle of October, and carried to a barn or stock yard, where the seeds are easily detached by the common flail. They should be gathered after a slight, but before severe frost; and, as they fall out very easily, it is advisable to haul the plants on a sled, and, if convenient, when they are wet. If transported on a cart or waggon, a sheet should be spread to catch the seeds as they shatter out. After the seeds are separated, the stalks which bore them being too large, coarse and harsh, to produce lint, are usually thrown away; they may be profitably employed in making charcoal for the use of powder-mills. In Europe, where the male and female plants are promiscuously grown together in the same field, both for seeds and for lint, the male stalks are first gathered, and the female suffered to remain growing until the seeds are ripe, when they are also gathered; the seeds secured and lint obtained, after the rotting, from both descriptions.

After the seeds are threshed or, it is advisable to spread them on a floor to cure properly, and prevent their rotting, before they are finally put away for use next spring. Seeds are not generally used unless they were secured the fall previous to their being sown, as it is believed they will not vegetate if older; but it has been ascertained that when they are properly cured and kept dry, they will come up after the first year. It is important to prevent them from heating, which destroys the vegetating property, and for that purpose they should be thinly spread on a sheltered floor.

The seeds, whether to reproduce seeds only, or the lint, are sowed about the same time. Opinions vary as to the best period. It depends a good deal upon the season. The plant is very tender when it first shoots up and is affected by frost. Some have sown as early as the first of April; but it is generally agreed, that all the month of May, and about the 10th of it especially, is the most favorable time.

An experienced and successful hemp grower, in the neighborhood of Lexington, being asked the best time to sow hemp, answered, "immediately before a rain," and undoubtedly it is very fortunate to have a moderate rain directly after sowing.\* When the object is to make a crop of hemp, the seeds are sown broad-cast. The usual quantity is a bushel and a half to the acre; but here again the farmers differ, some using two bushels, or even two and a half. Much depends on the strength and fertility of the soil, and the care with which it has been prepared, as well as the season. To these causes may be ascribed the diversity of opinion and practice. The ground can only sustain and nourish a certain quantity of plants, and if that limit be passed, the surplus will be smothered in the growth. When the seeds are sown, they are ploughed or harrowed in; ploughing is best in old ground, as it avoids the injurious effect of a beating rain, and the consequent baking of the earth. It would be also beneficial subsequently to roll the ground with a heavy roller.

After the seeds are sown the labors of the cultivator are suspended until the plants are ripe, and in a state to be gathered; every thing in the intermediate time being left to the operations of nature. If the season be favorable until the plants are sufficiently high to shade the ground (which they will do in a few weeks, at six or eight inches height,) there is strong probability of a good crop.

When they attain that height, but few articles sustain the effect of bad seasons better than hemp.

It is generally ripe and ready to be gathered about the middle of August, varying according to the time of sowing. Some sow at different periods, in order that the crop may not all ripen at the same time, and that a press of labor in rearing it may be thus avoided. The maturity of the plant is determined by the evaporation of the farina, already noticed, and the leaves of the plant exhibiting a yellowish hue, it is then generally supposed to be ripe, but it is safest to wait a few days longer. Very little attentive observation will enable any one to judge when it is fully ripe. In that respect it is a very accommodating crop, for if altered a little too soon, the lint is not materially injured, and it will wait the leisure of the farmer some ten days or a fortnight after it is entirely ripe. Two modes of gathering the plants are practised, one by pulling them up by the roots, an easy operation with an able bodied man, and the other by cutting them about two inches (the nearer the better) above the surface of the ground. Each mode has its partisans, and I have pursued both. From a quarter to a third of an acre is a common task of an average laborer, whether the one or the other mode is practised. The objections to pulling are, that the plants with their roots remaining connected with them, are not afterwards so easily handled in the several operations which they must undergo; that all parts of the plants do not rot equally and alike, when exposed

\* Would it not be well to soak the seed in water a few hours previous to sowing? We have found this to answer nearly as good a purpose as rain after sowing with all seeds which we have tried it. The vegetation of mangel-wurzel is wonderfully accelerated by it.—Ed. Am. Farmer.