

the maturity of the male and the female plants, say about ten days after the male has ripened. The instrument used for cutting hemp is something like a reaping hook, only the blade is much stronger, nearly straight, with the slightest inward curve, and about twenty inches long; the handle is straight, two feet in length.

If the crop is to be cut with the hemp-knife, the operator is required to cut at once through the width corresponding to the length of the hemp in his rear, in an even, smooth swath. It is afterwards spread out on a meadow for retting. This is "dew retting."

I think you will agree with me that the Kentucky mode is preferable, for the following reasons:

1st. Because it does not exhaust the soil, the seed not being allowed to ripen; but if it stands for seed, it is on all hands acknowledged to be an exhausting crop.

2nd. It saves one pulling, both male and female hemp being pulled or cut at once; and that one pulling saved amounts to more than one half the work of harvesting. It speaks to common sense that the first pulling alone, according to the European system, when you must choose and pull the plants one by one, takes more time than a general pulling or cutting of all the plants at the same time, and when they come in Europe to the second pulling, that of the female plants as they do not stand quite close together (the male plants having been removed,) the work does not proceed quite as rapidly, in proportion to the number of plants pulled, as it does in Kentucky.

3rd. When it is intended to ret hemp in water, the warmer the water is the more rapid and perfect is the retting.—Now, as the season advances towards autumn, the water cools rapidly. The ten or twelve days during which the female hemp is allowed to stand after the male is pulled, and the time afterwards required for hardening and ripening the seed, and taking it off (which is often protracted to one or two weeks by rain, for the seed cannot be knocked off unless the plant is perfectly dry,) may cause a long delay, during which the water often gets too cold for retting the female plant (as happened to me last fall), and then you must rett on the ground, when the colour is not so fine. This applies more particularly to Lower Canada, where the seasons are shorter.

4th. I think the fibre of the female plant is stronger when pulled before the seed is ripe.

The high price of labour on this continent accounts for the new mode of harvesting adopted in America. The Kentucky hemp is quite as strong as Russian, but its colour is not as clear, owing to its being retted on ground, and it accordingly compels the rope-maker to employ

a tar of a lighter colour, which is more expensive than that required for the Russian hemp. Their water in Kentucky is not soft enough for retting hemp.

The Kentuckians sacrifice the seed, but they have found out that the saving in labour both in the pulling, and afterwards in the curing of the seed, more than compensates for the loss of the seed. In other places, where labour is cheaper, it may be otherwise. We have still got a great deal to learn from experience.

For those who will try the European plan (as both plans ought to be fairly tried) and save the seed, I will state that, taken equal weights of flax seed and hemp seed, hemp seed will yield in oil two-thirds of the quantity that flax seed does. This statement, however, must not be looked upon as conclusive. It is merely a personal opinion, based upon the results of one experiment made this last fall at Messrs. Turcotte's oil mill at Beauport. These gentlemen had never worked hemp seed before. As we gain in experience we may expect more favourable results. But, even calculating upon that, if an acre of hemp yields, say twelve or fourteen bushels of seed, and I think it will do that if carefully worked, that yield would be an important item, well worth the farmer's consideration, where cheap labour can be obtained. The oil is employed, in Europe for painting. I got ours tried here by a reliable painter, and it gave much satisfaction. It appears, however, to change the colour of white lead a trifle more than flax oil does, but it is just as good for every other paint. The hemp cake is fed out to cattle with the same results as flax cake.

We have seen that by following the Kentucky mode of harvesting, the seed is sacrificed. In order to procure the seed necessary for the next season's sowing, they lay out a small patch of good land in hills, a couple of feet in diameter, disposed in straight rows, three feet apart each way. They plant seven or eight seeds in the hill. The same rules observed for the cultivation of indian corn will apply in the after culture of hemp-seed. Those plants, with plenty of room to expand laterally, will throw out, in every direction, branches that get covered with seed. Of course, their fibre is quite worthless, owing to those same branches, but the yield in seed is extraordinary. I took myself, from two plants, about one pint apiece of clean seed. You can form an idea of how small an area of ground would be required in order to yield one bushel of seed.

As to the pecuniary returns from hemp grown for the fibre, per acre, I must base my calculations upon the price paid our farmers' last summer, namely, half a copper a pound for unretted hemp, and one copper for retted, delivered at the

mill. One man was paid at the rate of sixty dollars per acre, irrespective of the value of the seed, but that was the highest. Those who had well selected the land generally ranged between that rate and thirty-five dollars. The drought in our part of the country was extraordinary. The hemp crop suffered very severely from it, as did the flax, so that our success was far from complete. Some farmers who had sown their hemp in good soil, but such as Sebastian Delamer describes as "apt to be scorched by the sun," were disappointed. Some others who pitched it in carelessly in poor soil, without due preparation, and expected a miracle, were more than disappointed. One must be prepared to meet these checks with patience. However, the general results of last summer's trial, allowing for the great damage done by the unusual drought, which, at one time made me fear that all was lost, were of such a nature as to encourage those upon whose help we must mainly depend—the careful, intelligent and enterprising farmers, whose example will tell in the course of time upon the others.

When the male and female plants are pulled separately, the female being kept for seed, the price of half a copper a pound for unretted hemp is not unfair to the manufacturer. Both plants are then brought to him ripe; the sap is dried up, the leaves are gone, and in that state it will not lose more than half its weight in retting, which will bring it to one copper per pound for retted hemp. True the manufacturer has got the trouble of retting but it may be worth his while to have ponds, and ret it in water, which will give him a superior article, the farmer generally retting on the ground. But that same price of half a copper a pound for hemp not retted, when both the male and female plants are pulled at once, is more than the manufacturer ought to pay; for while the male is dry, and worth that price, the female is still green and loaded with leaves, and will lose more than half the weight in retting; there ought to be some deduction in that case, say one-fifth or one-sixth on the whole; if the crop has been cut down with the hemp knife, the deduction ought to be much smaller, if any, because the manufacturer has not then got to pay for the weight of the roots, which is a considerable item. For my part, until the whole business is more practically understood by us, I would prefer it if the farmer were to ret his hemp himself, even on the ground, and deliver it at the mill at the rate of one copper a pound, as some have done. At that rate, one acre well cultivated, ought to yield him about fifty dollars. It would not impoverish the land if both male and female plants are removed at one time and would prepare it for wheat.