columns, for the information of our readers. It is suggested by Mr. Stairs that, some of the grass lands which have lately been overflown by the tidal wave, and which are not likely to yield a good hay crop next year, might be broken up and sown to hemp for a season or two. This would certainly tend greatly to their permanent improvement. We print this month the first portion of Mr. Jolly's paper, and will return to the subject again next month, when the remainder will be given. In the meantime we shall be glad to receive any hints or suggestions or objections from any one who may feel an interest in the development of our agriculture.

We would further suggest to our friends the Editors of Newspapers, that in the present absence of any very exciting political matters, they might advantageously devote a corner of their columns to an extract from Mr. Joly's communication. Every shipbuilder, merchant, and fisherman is interested in the production of good and cheap ropes and twines, and they have a right to expect that our farmers will do their part by producing the raw material; but many of our farmers never see an agricultural paper, and the only mode of effectually reaching them is through the political organs which every body reads :-

It is necessary that I should begin by stating, for those who may not be acquainted with the fact, that the male or fecundating flower of the hemp, and the female or seed-bearing flower, grow upon separate or distinct plants, so that hemp, unlike flax, whose every plant bears seed, is divided between female, or seed bearing plants, and male plants, which do not bear seed, but are indispensable for the fecundation of the female plant.

I have never read nor heard that it was possible to distinguish the sex of the plant in the seed of hemp; male and female must, therefore, be sown and grown up together. There is nearly an equal quantity of each; if anything, the female slightly predominates. The male ripens about three weeks sooner than the female. It is known to be ripe when its stem and leaves assume a yellowish hue. That colour makes it easily distinguishable from the female, which, at that time, is still perfectly green.

There are no two countrics—scarcely two localities in the same country—where hemp is treated identically the same way; but I think all the various modes of treatment can be safely classified under

one or another of the two following heads —the old fashioned European or the new fashioned Kentucky mode.

The choice of ground, the way to prepare it, the sowing of the seed, and the cultivation between seed time and maturity. are the same in both these modes of treatment, which, in fact, differ but on one point, the harvesting of the crop.

# CHOICE AND PREPARATION OF THE GROUND.

I will quote some good authorities on that subject, whose words will carry much more weight than mine, merely stating that, from experience I have found them to be perfectly correct:—

### Mr. Bradford of Kentucky, says :---

"The soil for hemp must be strong, calcareous, deep, warm, loamy, and a perfectly dry one, deeply and thoroughly propared by ploughing and cross-ploughing, according to its previous condition, until a fine state of tilth is produced."

Henry Clay says :----

"The lands which produce hemp best are those which have lain some time in grass or clover. Manuring is not much practised yet (in Kentucky). Clover is used in lieu ot it. Fall or winter ploughing is practised with advantage. It is indispensable in old meadows or old pasture grounds, intended for producing hemp."

Sebastian Delamar says :---

"Hemp gives but a very usatisfactory return on soils of too sandy or clayey a nature, on shallow soils, on those which are apt to be scorched by the sun, or are unable to receive their due share of atmospheric influence. Fresh broken lands in the midst of woods and forests, are favorable to its growth."

#### SOWING THE SEED.

We sow hemp, in the District of Québec, about the first week in May. You can safely sow in Upper Canada, at least a fortnight sooner. Sow it broad cast about one bushel to the acre (for hemp grown for rope making, which is the only kind, I think, that can be advantageously raised, for the present in Canada). Hatrow before sowing, and harrow and cross-harrow lightly after sowing.

Never sow seed older than the preceding summer's growth, for it is admitted by every one that hemp seed loses it vitality rapidly. The seed must be plump and full, and rather dark in colour. Whitish and greenish seeds are always bad.

Last year I imported seed from Piedmont, north of Italy. It came to an absurd price, but with proper management, it ought to be got here for four or five dollars a bushel. This year I import Kentucky or Missouri seed (I think it is

the same), for which I expect to pay, delivered in Quebec, from three dollars to three dollars and a quarter per bushel. Mr. Wm. Evans, of the Agricultural Warehouse, Montreal, imports all my seed. From experiments made last year, I am, so far, inclined to give the preference to the Missouri seed over the Piedmontese. Some of the plants from the latter are, it is true. much taller than any produced by the former; but the crop yielded by the Missouri seed was a good average length, and much more equal in height and thickness than that from the Piedmontese seed.

There is no cultivation whatever required between seed-time and maturity; the rapid growth of hemp chokes up all weeds; in fact, it weeds itself.

#### HARVESTING.

I have now reached the point at which the European and Kentuckian modes of treating hemp begin to differ from one another—I mean the harvesting—and I will proceed to show in what that difference consists.

## THE MALE PLANT.

In Europe when the male hemp has become ripe, it is pulled by hand, plant by plant, allowing the female plant to stand, in order that her seed may ripen, which takes about three weeks from the time the male is pulled. After being pulled, the male plants are laid out to ret, or, as it is more generally called in the country, to rot, either on the ground, or in water, like flax. The same process of retting is followed both in the European and Kentuckian treatment of hemp. When destined to be retted in water, hemp is put up in bundles, which must not exceed ten inches in diameter or thereabouts, at the thickest part, so that the water may act easily on the centre of the bundle. Five or six days in stagnan water, when the weather is still warm, is generally sufficient. It takes much longer in running water. When the water is cold, owing to the lateness of the season, it is better to ret on the ground. It takes from one month to six weeks to ret on the ground, the time depending completely upon the greater or lesser frequency of rain.

When the bark which contains the fibre can be easily detached from the wood, in long strips uniuterrupted, from the root to the top of the plant, the retting is completed. Hemp ought not to be spread upon the field to dry the moment it is taken out of the water, for it is then soft and brittle, and might be injured. The bundles must be put up standing along a fence, or wall, or, if neither be quite convenient to the pond, some light scaffolding erected for the purpose, after slackening the ties, which can be readily done by pushing them up towards the thinner part of the bundles.