

consideration of the farmer, and probably would prove quite as profitable a crop as Flax. On these considerations we have pleasure in giving insertion to the following very concise and practical Essay, written, as we infer, at the instance of the Iowa State Agricultural Society, but which will be found equally valuable, for the information it gives, in Upper Canada.

#### Essay on Hemp Culture.

BY J. L. BRADFORD, PRESIDENT OF THE KENTUCKY STATE AGRICULTURAL SOCIETY.

SIR.—The culture of Hemp is an interest of great and growing importance in the great West. Its production heretofore has been mainly confined to Kentucky and Missouri, but there can be no reasonable doubt in the minds of those who have given the subject the least attention, that Illinois, Iowa, Minnesota and Wisconsin, have vast advantages over the two named States in its production. Many writers have advanced the idea that Hemp, like Cotton, could not be grown by free white labour; and that its production would, for some time at least, be confined to the slave States. Nothing can be farther from the truth. The climate the very best adapted to Hemp growth, is found far north of the home of the negro, and where he would absolutely perish from the effects of climate. Hot, short, quick, forcing seasons of growth, just such as the region referred to actually possesses, are, of all, best adapted to the plant-growth of this great staple, and the day is not distant when the named States will be as noted Hemp producing States as Kentucky and Missouri ever were.

It is to be regretted that in our Census returns, Hemp and Flax have been confounded, but it may, however, be safely assumed that the growth and preparation of Hemp is so far below the actual consumption of the country as to assure the Iowa agriculturist of a continued good demand and paying prices for many years to come; and the experience of Kentucky and Missouri has fully proven that the production of even an inferior staple has been and is yet remunerative. The reader must bear in mind the fact that American Hemp is almost exclusively what is technically called *dew rotted*, that is, spread upon the surface of the earth and there rotted by the slow process of the elements. France grows more Hemp than Flax for the linen manufacture, and the finer grades of cordage and twines. The fibre is greatly superior to American, from the fact that her climate is of a lower temperature than that of the portion of this country that grows Hemp, and the further fact that she has abundant supplies of pure soft water for steeping in the rotting process; and the same is true of the

Russian production. The soil of Kentucky is as well adapted to the growth of this plant as any in Europe or America, but there her adaptedness ends; her general temperature is too high and she is entirely destitute of water of the proper quality for the steeping process; hence all attempts to furnish our Navy from this State have been failures, notwithstanding that department has offered great inducements to her growers to water-rot. Iowa has certainly a climate much colder than Kentucky, and pure soft water in her small lakes and streams without limit, and most certainly a soil equal in fertility to any on the globe.—Why may not then her enterprising people reach forth their hands and lay hold of this prize, so well adapted to her soil, climate and situation. In the process of dew-rotting, the fibre, especially in warm climates, is materially deteriorated, and in some cases so far injured as to produce a very low grade of lint, unfit for anything but the very coarsest and lowest grades of bagging. This is especially the case when exposed to the dew process in open wet winters in Kentucky, thus proving that the true Hemp latitude is north of this State. Cold, snowy winters, on the contrary, universally produce an improved quantity of lint, always brighter and stronger.

#### CULTURE OF SEED.

The first step in Hemp culture is the production of good sound plump seed. Laud intended for seed must be good tilth and well prepared for planting by corn planting. It should be laid off in straight rows four feet apart each way and planted in hills, seven or eight seeds to the hill. The same rules observed for cultivating corn will apply in the after culture of Hemp seed. When the plants reach six or eight inches high, they should be thinned to from three to four plants. Hemp plants are divided into what the farmers call male and female, the former producing the pollen or impregnating powder, the latter bearing the seed. A very little observation will enable the growers to distinguish between them. As soon as they can be distinguished, the male should be drawn up by the root, except here and there a solitary plant left, that the female plants may be properly impregnated. The female is to be retained until its seeds are perfected, when it is to be harvested by cutting at the ground and removal to cover. When cured detach the seed with a stick of convenient length, winnow and put up in barrels or sacks, perfectly dry, out of the way of rats and mice.

#### PREPARATION OF LAND.

The soil for Hemp must be a strong calcareous, deep, warm, loamy, perfectly dry and deeply and thoroughly prepared by plow, until a fine state of tilth is produced, more or less according to its previous condition.