

stated. A considerable quantity of butter contains the elements of decay or decomposition which are infused into the milk by the cow eating weeds and drinking impure water—hence too much care cannot be taken to purify the pastures. The same remark will apply to milk designed for the manufacture of cheese, as bad cheese. But little cheese is consumed in this country as compared with Great Britain. In the latter it is made an important article of food. Here it is used as a relish or as an appetizer; our own people generally having a taste for rank or strong cheese, a little of which goes a great way. The Englishman prefers a mild cheese, a considerable quantity of which can be eaten without detriment to the stomach, as is not the case with strong. The former can be preserved much longer and being healthier, it is apparent our tastes should be changed, on our own account and for the benefit of the dairymen. Makers should strive for a more equal standard in the manufacture of cheese, and to help obtain the desirable end, I would recommend to the Society to establish a scale of points, requiring uniformity, and establishing a degree in colour, size, condition and taste, upon which to award the premiums. Until this plan prevails and our dairy maids give up over-doing the cheese vats with so much rennet to hurry up the curd, and get the cheese out of the way, we must expect a large per cent of inferior cheese, and loss to the makers. Smaller cheeses are required for home use, so that the last end may be used up before it spoils. An important improvement can be made in cheese houses. They should be lined on the inside to keep out the heat, and to enable the dairymen to graduate the temperature, so that it may be kept if possible at a uniform degree. With greater care in the manufacture, and a standard of uniformity, we shall increase the number of consumers, and place the making of cheese upon a more perfect and permanent basis.

FRUITS AND FLOWERS.

Several causes combined to make this department somewhat less attractive than it was last year. In the floral department however the display was much better than could reasonably have been expected. The large tent was artistically arranged under the immediate superintendence of Col. E. C. Frost, of Watkins.

[We suspect the principal cause is that flowers don't pay; out of New York, Boston, or Philadelphia there is no chance for a Horticultural exhibition.]

HEMP CULTURE.

BY L. J. BRADFORD, AUGUSTA, KENTUCKY.

The culture of hemp is an interest of great and growing importance in the

West, its production heretofore being mainly confined to Kentucky and Missouri; but there can be no reasonable doubt in the minds of those who have given the subject any attention, that in the production of hemp, Iowa, Minnesota and Wisconsin have vast advantages over the above named States.

Many writers have advanced the idea that hemp, like cotton, could not be grown by free white labor, 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 growing is found far north of the home of the negro, and where he would absolutely suffer from its effects. Hot, short, quick forcing seasons of growth are best adapted to the plant.

Growth of this great staple in a climate such as the region referred to actually possesses, makes the day not far distant when these 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; it may, however, be safely assumed that its growth and preparation are so far below the actual consumption of the country as to assure the agriculturist of a continued good demand and paying prices for many years to come; and the experience of Kentucky and Missouri has fully proved that the production even of 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 being greatly superior to American, from the fact that her climate is of a lower temperature than that portion of this country that grows hemp, and the additional 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 adaptation 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, with a climate much colder than Kentucky, and pure soft water in her small lakes and streams, a soil certainly equal in fertility to any on the globe; why may not, then, her enterprising people reach forth their hands and lay hold of

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 poor grade of lint, unfit for anything but the coarsest and lowest kinds 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 quality of lint, always brighter and stronger.

CULTURE OF SEED.

The first step in hemp culture is the production of good, sound plump seed. Land intended for seed must be in good tilth and well prepared by early 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 the height of six or eight inches, they should be thinned to from three to four plants. Hemp plants are divided into male and female, the former producing the pollen or impregnating powder, the latter bearing the seed. A very little observation will enable the grower to distinguish them. As soon as the distinction can be made, the male should be drawn up by the root, except here and there a solitary one left that the female plant 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 stout stick of convenient length, winnow and put up in barrels or sacks, perfectly dry, and out of the way of rats and mice.

PREPARATION OF LAND.

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

PUTTING IN THE CROP.

The ground having been faithfully prepared, the grower must hasten the operation of seeding with the utmost despatch, as, generally, the earlier the seeding the heavier the lint of the plant. Mark off the land with a small plough, and very shallow furrow, or it may be marked off by a drag made of a small log of wood—anything to make a line to guide the sower accurately; then proceed by hand to broadcast your seed evenly at the rate of fifty pounds of seed per acre as the minimum, or even up to seventy pounds as the maximum quantity, varying with the strength of the land, the object being