

promptitude and strength that it destroys all the weeds which spring up under it. It therefore can never be sown along with grass-seeds; but, for the same reason, it is found to be an admirable preparation for a crop of wheat, as the land must be previously brought into a state of garden culture, and, if heavily dunged, when treated in this manner, alternate crops of wheat and hemp have been successfully grown upon the same ground during a series of years."

THE PLACE OF HEMP IN THE ROTATION OF CROPS.

The Baron de Morogues, in his essay on the means of improving agriculture in France, observes that as hemp is sown late in spring, the land may be made to bear two crops in the year, by causing the hemp to be preceded by green food of some kind or other. Thus, in the Department of Maine-et-Loire, hemp is sown in May, immediately after a crop of *raves*, or large, yellow field radishes, which answer many of the purposes of turnips; and in the Department of the Pas-de-Calais, it is made to follow a crop of *escourgeon*, or four-rowed winter barley, mowed green.

Combining hemp and flax with the Norfolk four-course system, on rich and deep soils, a convenient rotation would run as follows:—1st Turnips, fed off on the land by sheep; 2nd. Barley, sown with grass or clover seeds; 3rd. Hay or pasture, for two years; 4th. Flax, which never does better than on the upturned sod; 5th. Turnips again, or beetroot, heavily manured, resting the land, and helping to make manure in turn; 6th. Hemp; 7th. Wheat. Between the flax and the root crop which follows it, it would be easy to steal a crop of green food (vetches and rye) to be cut or eaten on the land in early spring.

TIME OF SOWING AND CHOICE OF SEED.

The time of sowing hemp varies greatly according to the climate, and in the same climate according to the locality. It extends as widely as from the month of March to the month of June. The grand rule is to avoid all danger of severe spring frosts, as the plant is liable to be affected by them. Still early sown hemp is always the best. Great care must be taken to sow none but last year's seed; old seed will not come up at all, or at best very uncertainly. With hemp, as with flax, the question of thin or thick sowing must depend upon the object of the grower and the quality of the land. In fact, on middling land, hemp should be sown thinner than on heavy land. When it is wanted to procure a very long and fine sample of fibre, thick sowing is necessary; because the stems then draw each other up, and even blanch each other to a certain degree, thereby causing the bark to be more delicate. Hemp which grows so wide apart as to throw out side branches, produces a large quantity of seed, and a very strong fibre, but which is only fit for ropes or the coarsest cloth. It has been found by experiments in England and America, that salt sown at the same time with the hemp-seed, acted as a beneficial stimulant. In the neighborhood of Bologna and Ferrara, in Italy, where the culture of hemp is probably carried to greater perfection than anywhere else, where it is not uncommon to see hemp stalks rising from twelve to sixteen feet above the surface of the ground, it is usual to spread at the same time with the seed fecal matters, the dung of fowls, powdered oil-cake, and chips of horn and bone.

In the Department of the Pas-de-Calais, which approaches very nearly to the climate of England, the rule is to sow hemp from the 10th to the 20th of