

AGRICULTURAL.

ROTATION OF CROPS.

Rotation of crops, is certainly among the most valuable of the modern improvements in agriculture. The scientific researches of many farmers have enabled them to discover some of the principles of vegetation, formerly but little understood. And it is believed that they will generally soon be fully convinced by experiment of the great benefits to be derived from rotation of crops. The different kinds of vegetables require nutriment peculiar to each class, and by planting the same kind on the same soil for a number of years in succession, the vegetables or plants degenerate for the want of their peculiar aliment; or as the common expression is, the soil becomes exhausted. It is therefore conceded to be an injudicious practice to cultivate the same crop, upon the same soil, for even two years in succession.

The same remark is applicable in horticulture; although a plentiful supply of manure annually, may afford some remedy for a previously exhausted soil.

By a judicious succession of crops, and the frequent use of that most important instrument to farmers, the plough, the fertility of the soil may be maintained. So many valuable essays have of late been published upon this subject, that we will not extend our remarks. Connected with this subject is the adaptation of the different soils to the various kinds of plants. Many skillful farmers acquire some practical knowledge of this subject, without understanding its true principles. Indeed, these principles cannot be well understood without the aid of the science of Chemistry. Chemical Science is indispensable to the Physician; but it falls not exclusively within his province. The practical farmer will find it of vast service in his pursuit. Its study ought therefore to be encouraged.

By ascertaining the food which different kinds of vegetables require, and the nutritious qualities of the various soils, the agriculturist is enabled to decide how he can, generally, produce the largest crops, with the least labor and expense.

He cannot have sufficient foresight to guard against unpropitious seasons; but acting upon enlightened principles and correct theories, his prospects of a good harvest will seldom be cut off. Our present object is to submit a few remarks upon one of our essential agricultural products, the potatoe.

In this section we raise no vegetable of greater profit or more general use than the potatoe.—And its annual consumption seems to be yet on the increase. We learn from aged persons, that some fifty or sixty years ago, ten or fifteen bushels of potatoes were considered as a large crop for each farmer; and at that period, it was as uncommon for a slaughtered swine to weigh 250 lbs. as it now is, to weigh seven or eight hundred.—Now a thousand bushels or even fifteen hundred, is not an uncommon crop, upon a farm of one hundred and fifty or two hundred acres.

It has been believed by many, that high, sandy, or gravelly soils are best adapted to the growth of potatoes. But the modern theory, proved by experiment, is, that a low, cold bottom, or clay-pan is preferable. I have for several years cultivated this vegetable upon a low, level, clay-pan, take care to have proper drains in case of heavy rains; and find that it not only yields largely, but that the quality or flavor of the potatoe is superior to that of those produced on high, sandy soils. A cold bottom is more congenial to them. And it is generally known, that in a cold, wet season, they flourish better, than in a very warm and dry one. But when planted in low lands, the

drains should always be kept open, to prevent overflowing.

It is said that in some parts of Ireland, famous for excellent potatoes, the potatoes are planted in low, and boggy lands, in beds, between which a ditch or drain is cut; and that the mud or most nutritious portion of the soil which gradually collects in these ditches, is taken up to cover the potatoes. The practice, which many farmers are adopting, of laying out their low and marshy lands into beds rising in the centre, of four or five rods in width, with intervening drains, running towards a common outlet, will prove, highly beneficial; and when there shall be a great increase of population, and the value of our lands shall be greatly enhanced, this practice will be adopted by all good farmers. It will then be admitted by all, that our valleys and swamps contain the most fertile soil. In these, have been collecting for ages, decomposed vegetable matter, which constitutes the deep black soil. This kind of soil conveyed on to high sandy barren land, with a mixture of animal manure, will convert the latter into fruitful fields. And the fertility of the low land is increased by spreading upon its surface, loose sand or gravel from the hills.

The old practice of making the potato hill in an oval form or the shape of a sugar loaf, is very censurable. The same remark is applicable to the corn hill. Because, hills so formed, do not absorb so much moisture, when the rain descends, as hills flat at the top.

It is believed that a former practice of planting small potatoes, is now universally condemned. Many are yet of opinion, that it is as judicious to plant cut potatoes, or slips, or the eyes, as whole potatoes. This practice is contrary to the course of nature. Nature is always right, in all her operations. The Farmer should take nature for his great and unerring guide.—Hundreds of various theories had been published upon this important point. The result of our observation and reflections, respecting it, is, that it is always best to plant the best potatoes whole, except those containing too many eyes, of unusually large size. The latter may be divided. I raised a potato, perfectly sound, of an oval form, weighing two and a half pounds. This I cut into twelve pieces, which from twelve hills, yielded two bushels. If slips are planted, the plants or sprouts come up more slender and feeble. In favourable seasons, they may often look very well, but not so well as those from the whole potato. Care should be taken to prevent the growth of too many sprouts or stalks. Four or five in a common hill are sufficient. The size of the potato depends very much upon the number of stalks, and the size as well as richness of the hill. Potatoes degenerate by means of an improper mode of cultivation, and not from the climate. This vegetable of inestimable value contributes most to the health, growth and fatness of cattle, after being boiled, or steamed. It ought never to be given to swine in a raw state, unless, possibly, in the warmest season of the year, and after being partially dried.

[From the New England Farmer.]

MARL.—It would be well if every cultivator was aware of the important fact, that whoever finds marl, finds a mine of great value. It is one of the best and most general manures in nature; proper for all soils and all crops. Marl is usually found under moss or peat, in low, sunken lands, and especially nigh the sea or large rivers. It has been sometimes discovered by ant hills, as those insects bring up small pieces of shells from their holes. It may be known by the application of a mineral

acid, and even good vinegar will cause an effervescence.

"To find the composition of a marl, pour a few ounces of diluted muriatic acid into a Florence flask; place them in a scale and let them be balanced; then reduce a few ounces of this dry marl to powder; and let this powder be carefully weighed, and gradually thrown into the flask, until after repeated additions, no farther effervescence is perceived. Let the remainder of the powdered marl be weighed, by which the quantity projected will be known.—Let the balance then be carefully restored. The difference of weight between the quantity projected and that requisite to restore the balance, will show the weight of air lost during the effervescence. [That air proceeds from calcareous earth alone, which contains 44 per cent, of this carbonic acid air. Suppose 500 grains of marl lose 44 grains by the escape of air, then that marl contained 100 grains, or one fifth part of the whole weight of lime stone.] If the loss amount to 20 or 25 per cent. of the quantity of marl projected, the marl assayed is calcareous, or marl rich in calcareous earth. Clayey marls, or those in which the argillaceous ingredient prevails, lose only 8 or 10 per cent. of their weight by this treatment, and sandy marls about the same proportion. The presence of much argillaceous earth may be judged by drying the marl, after being washed with spirit of salt, when it will harden and form a brick.

NEW METHOD OF FEEDING CALVES.—M. Labbe, member of the council of administration of the Agricultural Society finding that the carrot is one of the most nutritious kinds of food for cows, greatly increasing the quantity of milk, and furnishing a richer cream, he reduced half a pound of carrots to a pulp, boiled it four or five minutes in half a pint of water, and added the whole, in two portions, to the noon and evening mess of a calf, five days old. The same food, as a substitute for milk, was increased daily, so that on the eleventh day the boiled carrots were given as the entire food, except that after the eighth day a boiled potatoe was added to each of the three daily messes. The calf not only thrived finely, but grew so fat, that on the twentieth day; not intending it for the butcher, they were obliged to moderate the food.

WHEAT.—A farmer advises his brethren to roll their wheat, so as to throw under the earth the roots that are now on the surface.

HEALTH SECURED,

BY MORISON'S PILLS,

The Vegetable Universal Medicine of the British College of Health;

WHICH has obtained the approbation and recommendation of some thousands, in curing Consumption, Cholera Morbus, Inflammations, Bilious & all Liver Diseases, Gout, Rheumatism, Lumbago, Tick Dolorous, King's Evil, Asthma, Small Pox, Measles, Whooping Cough, Cholera, and all Cutaneous Eruptions—and keep unalterable for years in all climates.—Forming at pleasure the mildest Aperient, or by increasing the dose, the briskest and most efficacious Purgative, capable of giving relief in all cases of disease to which the human system is liable.

The Subscriber has been appointed Agent for the Eastern Division of the Province, for the sale of the above valuable Medicines, of whom only they can be had genuine, with Morison's Directions for their use.

OF WHOM ALSO MAY BE HAD,

A few BOOKS, describing the properties, uses, & almost innumerable cases of Cure, effected by this extraordinary Medicine.

Nov'r 23, 1836

JAMES DAWSON.

A WET NURSE WANTED.

Apply immediately—at this office.

May 3