

AGRICULTURAL.

From the Genesee Farmer.

ROTATION OF CROPS.

I have ever considered the notion which has been advanced in some of the English Agricultural journals, that the matter thrown off in the soil by the species of plants is poisonous to other plants of the same kind, if grown in succession, as most unphilosophical, and contrary to fact. Some of the advocates of a doctrine of an absolute necessity in all cases for a rotation of crops, found in this supposition of excrementitious poison, a very convenient argument for their system, and hence it has obtained some currency both at home and in this country. Farmers, however, of all men, should be the last to be wedded to theory, as theirs is a profession eminently practical. It is too late in the day to "doubt" that the system of rotation in crops, under proper circumstances, is of the first importance in agriculture. Its effect, however, does not depend on the extinction of excrementitious poison, but by a renewal of the proper food of plants. That the influence of rotation has been underrated by some English and American theorists will not be disputed, and when the time comes to underrate, of which some symptoms can be discerned already, it is at least probable it will be as injudiciously decried. That corn will grow in succession for half a century on the Genesee flats—wheat for thirty years on some of the favoured wheat lands of west New York—and oats for twenty years on some of the slaty soils of Cattaraugus, without much diminution of quantity, I can readily believe; but exceptions like these to the system of rotation only demonstrate the propriety of the course in general. To us it appears the doctrine of rotation is founded on very simple principles, capable of easy and successful application, and hardly leaving room for doubt or disputation. That plants during their growth do take up, and appropriate as nourishment, very different materials from the same soil, will not be questioned by any who has paid the least attention to vegetable physiology. For instance, does the pine apple or the orange take as much silex from the earth as bamboo or the rattan, some of the species of which have an outer covering so hard as to strike fire when struck together?—or, to select a more familiar example, does the heden contain as much of the salt called potash as the elm or beech?—and how does it happen that while 1000 lbs. of wormwood yield 7-1 lbs. of saline matter, the box and the aspen produce but 70? This faculty of taking up particular substances as food, and the necessity of the supply, holds good in the cereal grasses, such as wheat, rye, barley: in corn and oats; in roots, such as potatoes, carrots, turnips, beets, &c. They all find and assimilate as nourishment different ingredients from the same soil, or appropriate them in very different proportions. If the soil of my farm abound in those elements essential to the production of wheat, I can raise crop after crop from the same land, and rotation is needless; and this course of successive crops will be successful in exact ratio to the continued supply of proper food. If, however, the proper food of the wheat plant be limited, a rotation of crops, and manuring, by which this quality can be restored, is indispensable. It is so with corn, oats, and most other plants. The rich alluvion of the Genesee flats is apparently inexhaustible by corn: perhaps 60 parts in 100 are suited to the growth of that important article; but this fact does not prove that other and less favoured soils cannot be exhausted, or will not be benefited by a rotation. I have seen some of the oat lands spoken of by Mr. Allen in a former number of the

Farmer, and feel a pleasure in bearing testimony to the general correctness of his views, and justness of his remarks, yet the facts he has stated furnish perhaps one of the strongest arguments in proof that different plants take up different materials from the same soil, and therefore that rotation must, in most cases, be advantageous. Those lands in the southern tier of counties of which Mr. Allen has spoken, as producing such abundant crops of grass and oats, are, it is well known, worthless for wheat, the flour of the little they do produce being of a very inferior quality, and no more resembling that of the counties bordering on the lakes, than does the rye flour of the eastern states. I should put but little confidence in the theoretical notions of any man, who could imagine that the farming of a whole country can be made to conform to a single system, or pattern. There is an almost infinite variety in the original ingredients of our soils and their portions, and the mode of treatment, to be judicious, should be as near as possible made to conform to these variations. There are some general principles everywhere applicable, and there are others which have but few exceptions; of the latter class I consider to be the doctrine of the utility of rotation in crops. My friends, the practical as well as the theoretical Ulmus, or the "doubting" R. M. W., may be so fortunate as to possess farms which will admit of unbroken succession of wheat crops, but I imagine the farmers of Old Onondaga will in general agree with me, that the simple rotation of wheat and clover has more enhanced the productiveness of their farms, and consequently rendered them more profitable and valuable, than would successive but necessarily diminished crops of that valuable grain, and important staple of our country.

From the Maine Farmer.

WINTER WHEAT

Those who have succeeded best in this State with the winter wheat, have sowed it as early as the middle of August. As yet it is a very uncertain crop among us; but because it is so now it does not follow, as a matter of course, that it always will be. It is necessary that the seed should be acclimated—that it should be naturalized to our climate, and to this, no other plan can be pursued with success, than to sow the product of one year for the crop of the next. Here many who have begun the culture of winter wheat have failed. They have procured their seed probably from New York, or from a state farther south, sowed it, and awaited the result with much anxiety. Perhaps they reap a small crop, we will say, just get back their seed. This discourages them and they give up as a hopeless and unprofitable pursuit. Now instead of doing thus, they should save this same seed and sow it again, and so continue sowing the product for a series of years. This is the only way in which it can be acclimated, and that this may be done successfully we have not the least doubt. Indian corn, when brought from the South will not ripen here, and yet it has been rendered perfectly suitable to our climate, and indeed much farther north than we are, changing its habits and characteristics according to the latitude, and passing through insensible gradations, from the tall and gigantic corn of the South, to the small and hardy kind of the Canadas. It is true, that Indian corn is an annual, and does not have to stand the winters any where—but what then? Is the change which it has undergone the less striking? It is not possible to have wheat perfectly winter proof, even in the most favoured climes of the South and West, the planter not unfrequently finds that the ravages of winter have blighted his hopes by destroying his wheat. Will not

those who have already begun in the cause of rendering Maine independent as it regards bread stuff, persevere in this business of cultivating the winter variety of wheat, and those who have means and inclination to assist, begin this month (August)? Even if they should not not succeed during their life time, they may leave a valuable legacy behind them; for certainly none could be more valuable than one which would be the means of lessening the toil of the farmer, and at the same time increasing his profits.

From the Bridgewater Patriot.

A KITCHEN GARDEN.

The importance of a little spot to raise vegetables for family comfort, convenience and economy, is not known to every one. I have practised for many years raising my own potatoes, beets, carrots, parsnips, cabbages, &c.; also, sweet corn, and beans, peas, squashes, and other garden vegetables for my table. Thus I obtain a wholesome food, and save much expense of purchasing meat;—I am not plagued with a big butcher's bill,—nor do I require so much bread, as when I have none or few of these valuable fruits. The labour, too, which I perform with my own hands has its benefits; it is both healthful to the body, and a saving of expense. I often find myself with a sweaty brow and a tired limb; but what of this? It surely brings health, and no one ought to be ashamed to handle the hoe or the mattock: it is man's natural employment. We were made to till the earth, and it is a good preventive against a thousand ills, moral as well physical. Besides, what mechanic or farmer can bear to sit down, day after day, to nothing but a dish of pork and potatoes, when by half an hour's work each day in his garden, he might be well provided with various dishes of green sauce? If he has a family of young children, it is still more important that he should attend to this matter.

Now, ye men of industry and economy—ye lovers of life and of money—I enjoin it upon you to have a kitchen garden—a little quarter of an acre, where you can employ yourselves for a while both morning and evening, in bringing to maturity those good things, so useful and so healthful in your families. The earth is the mother of us all, and on her we depend for our nourishment. We therefore must not forsake her. If there is no labour of the husbandman, then our bread will fail us. The soil must be cultivated, in order to its producing plenteousness for the food of man and beast. The professional man, and the mechanic, and the man of trade, should not be so exclusive in his occupation as to refuse an occasional and personal attention to these things. To a man who takes pleasure in beholding the progress of vegetable nature, it will be no task to attend to the trimming of his garden plants, thus giving vigour to his body, and a profitable employment to a thoughtful mind. Is it a mean thing to be seen with a hoe or a spade upon your shoulder? Fudge! 'tis the prejudice of ignorance. Awake, then! "In the morning sow thy seed, and in the evening withhold not thine hand."

From the Mechanic and Farmer.

STRING BEANS.

Those of our friends who are fond of string beans would do well to pick, strip, and cut as many as they may think proper for use next winter, and have them dried—they will shrivel up very much, and appear as though they must forever be useless, but don't be frightened, when they are well dried, put them in a bag or box and lay them away. When it is desirable to use them, take a portion—soak them until they become fully swelled, then boil them, and you will agree with us that they are excellent.