

tions through your paper, to be answered by you or your correspondents.

1st.—Is it better that potatoes be planted in hills or in drills?

2d.—Is it better for potatoes that they be manured in the hill or drill, or the manure be spread upon the ground?

3d.—Would not Carrots and Beets, if cultivated extensively in the fields be a remunerating crop?

4th.—What crops answer best for a rotation?

A COUNTRYMAN.

We recommend the above Queries to the attention of our correspondents. We hope we may be enabled, through them, to give some information on these topics in our next; at any rate they shall have our attention.

(For the Farmer's Manual.)

LETTERS OF "A FARMER."
LETTER XVI.

In the *Farmer's Manual* of December, I perceive some observations on a succession of crops taken from a literary work of high character. The writer introduces the novel, though no doubt correct, doctrine of plants excreting, and admits the fact that this herbaceous excrement may, in due time, help to enrich the soil, but rejects the opinion that this excreted substance is less useful to the grasses from which it was excreted than to other plants. In this opinion I differ with him, although I fully concur in the opinion of the necessity of an annual change of crop.

That different plants require different properties of the soil is indisputable, and this may furnish a sufficient reason for a rotation crop, and that all plants excrete certain substances from which they have extracted such nutrition as they may have required, is no doubt the case; but that any plant will derive nutriment from the excrement of its own species, is as impossible in the vegetable as in the animal nature.

In our best meadows, red and white clover, timothy and herds grass all grow together, and the produce of hay from this mixture is far greater than it would be from any one species alone; and the reason of this is evident—for each different kind brings into action that particular property or portion of the soil which it requires, without deteriorating the other kind; and the circumstance is often remarked that the same kind seldom predominates two years in succession: thus, if in the first year the growth of red clover is the greatest, the timothy may predominate the next, and another kind succeed the following year. From which it would appear that the greatest quantity of any kind would doubtlessly have the greatest quantity of excrement, which, although affording nutrition to another kind, obstructed the progress of the species from which it had been excreted. All which confirms my opinion, which long experience has satisfied me is correct, that our best meadows are improved by ploughing them as often as every four years.

The above-named writer seems to conclude that all soils that have their annual produce taken from them without an equal supply of manure must degenerate, but I think he does not give full credit for that inexhaustible supply contained in the blessings of the atmospheric influence on the top of our furrows, and the immense treasures of the sub-soil at the bottom.

It does not require more than ten years acquaintance with a turf-bog to witness an increased convexity of its surface, while an old tilled field in less time becomes evidently more concave, although a large proportion of our farmers seem insensible to the great importance of ploughing deeper. Many old fields may be found with a subsoil within four inches of the surface, while others, by having been duly pulverized and fertilized to the depth of nine inches, have become a source of lasting wealth and profit to the owner. But here I would again revert to my former observations, that I will not recommend ploughing nine inches deep at first. Let it be a progressive work—plough a little deeper every time, and it will soon be found that the subsoil has become neutralized and fertilized, both by atmospheric influence, and such vegetable and putrescent manures as may be applied.

Having witnessed the most salutary effects from attention to the suggestions I here make, and having myself made a rich soil on a bed of brick clay, I can with confidence recommend its attention to all of my profession. Try small experiments, and you will not fail, in due time to satisfy yourselves with the facts resulting from your own experience.

Some persons, I find, most unreasonably complain of some technical terms used in the *Farmer's Manual*, particularly in speaking of chemical processes; but in most cases I have observed such complaints to originate with those who exhibited the greatest apathy, indolence and want of energy in agriculture. I would recommend to all such rather to make further inquiry than to condemn any thing they are unacquainted with.

Although some things recommended in other countries do not apply to this, yet the careful observer will acknowledge, that they seldom see anything published on Agriculture which do not contain something of interest to

A FARMER.

Sunbury, Jan'y 1845.

SUNBURY AGRICULTURAL SOCIETY.

At a meeting of the Sunbury Agricultural Society, held at M'Lean's, in Maugerville, on the 2d instant, Premiums were awarded to the following persons, for Manufactures and Produce, as follows:

For the best Homespun Fulled Cloth, to R. Copperthwaite. Second best ditto, to Benjamin Barker.

Best Indian Corn, to T. Harrison, Esq. Second best, Isaac Burpe. Third best, John Duffy.

Best Potatoes, to Isaac Burpe. Second ditto, to T. Harrison, Esq. Third ditto, to Benjamin Barker.

Best Turnips, to C. L. Hatheway. Second ditto, to Isaac Burpe.

Best Timothy Seed, to T. Harrison, Esq. Second ditto, to ——. Third ditto, to Stephen Burpe.

The competitors for Corn came to 16½ bushels to the quarter acre, and only differed a peck in the quantity each had raised; but in 1842 four exceeded 20 bushels from the quarter.

The greatest quantity of Potatoes was 222½ bushels from half an acre, and of Turnips 184 bushels from a quarter of an acre.

The Society has to regret, that although they have annually offered a shilling per pound premium for Red Clover Seed none has been produced. Our Meadows abound with it, and the imported seed produces well, yet we have not attained the art of saving the ripe seed, while a beautiful article is annually brought from the United States at a high price, and our soil and climate are both favourable to its production. Any information of the method of