

For the same reason that it is proper to free the young plants from weeds when the coronal roots begin to shoot, I hold it to be a doubtful practice, then, to sow grass seeds.

If the ensuing fortnight be mild and moist, the young clovers and grasses will have put forth leaves, which are so many millions of mouths, breathing the atmosphere at the expense of the wheat plants, besides taking from them much nourishment.

I had a remarkable instance of this on my farm last season. A field of wheat was looking beautiful after the first hoeing, I had sown a large portion of artificial grasses over it, imagining the coronal roots would gain ground over them; but a fortnight of genial weather wrought a sad change,—the little grasses came on charmingly, but the poor wheat changed in a "yellow and settled melancholy," and never recovered itself—the ground had been so well manured that the sample proved fine, but the crop did not reach twenty-six bushels per acre, where I should have obtained forty, and the straw was short of half its length.

The result was different by sowing the grass seeds at the second hoeing, which I tried in another field, a fortnight or three weeks additional growth having enabled the coronal roots to take a firm hold of the soil; nor did the crop appear to receive a check at the period when the grass seeds developed themselves.

The produce, in this case, was only thirty-five bushels per acre; but that the grass did not suffer here is proof, by the beautiful sample, I venture to call it, of the variety, *Talavera Belyatis*.

I am inclined to think it a faulty practice at best, to sow grass seeds of any description among wheats, which appear to me to receive all the nourishment the soil can afford them. I am prosecuting an experiment accurately to ascertain the truth of this, which, if this paper has not proved interesting, I may hereafter have the honour of reporting to you.

By referring to Specimen No. 7, it will be seen that the grain having been grown superficially, or on the broad cast system, by a neighbour, and merely lightly harrowed in, the coronal and seminal roots appear crowded together, so, as it is presumed, to identify in some sort their offices, which, by the other mode, appear to be kept separate. This is a subject for further enquiry, as no positive conclusion has been arrived at; but as far as the structure of the plant seems to be a guide, it would appear to be clear that in certain seasons, and under particular states of the atmosphere, this crowding of the roots must prove prejudicial. The observation is made in order to invite attention to this point, in the hope that some enquiring mind will be led to make experiments on the subject.

In the collection now on the table, amounting to about 200 varieties, or subvarieties, is a fine selection of wheats, which I received from Mr. Landon which I greatly value, as coming from an individual so unwearied and so distinguished for his admirable labours. They were grown by Mr. Vilmoren of Paris, and presented by him to Mr. Landon, and, as a classification, illustrative of the varieties described in the "Maison Rustique," are invaluable. I grew every sort last year. Some have greatly increased in size, being eight or nine inches long, two or three inches longer than their original tips; but the moist weather which prevailed at the period of ripening, discoloured them so much as to destroy their beauty, and almost their resemblance to the parent.

LECOUTEUR."

Waterproof Boots and Shoes.

The Thanks of the Society of Arts were voted to Mr. William Rey, 111, London Wall, for his method of constructing Waterproof Boots and Shoes, 1841.

The leather is made waterproof by applying to one or both sides, according to the part of the shoe for which it is required, a solution of caoutchouc in turpentine and linseed oil. The upper leather is lined to any required height with chamois leather, coated on one side with the solution, and is sewed together with its lining, to the welt and inside sole. The under side of this sole, the welt, and the stitches, are then saturated with the solution, and a middle sole, coated on both sides, is put on, in lieu of the *offal* or filling of refuse leather, which is usually employed. The whole is then covered with the under sole, coated on the inside.

Farmers above all other classes, require waterproof shoes and boots, being constantly exposed to wet in the feet, that is so injurious to health. The method recommended is worthy of fair trial.



THE CULTIVATOR.

"Agriculture is the great art which every government ought to protect, every proprietor of lands to practice, and every inquirer into nature improve"—Dr. Johnson.

Toronto, May, 1842.

The System of English Agriculture Suitable to Canada.

As it is possible that some of the Subscribers to this Periodical, may be of opinion, that the system of agriculture practiced in the British Isles, might not be so suitable for this country, as the system of the neighbouring states of the Union, we think it may be necessary to submit our own views on the subject for consideration.

After a practical experience of agriculture in the old country for several years, and a residence in this country of near twenty-four years, during all which period, we have been engaged in the same business; we are firmly persuaded, that the more closely we adopt the most approved system of agriculture practiced in the British Isles, (with the exception of turnip growing to the same extent), the better and more profitable will be our crops, and stock of every description. This is an opinion that has not been lightly formed, or adopted from prejudice. We candidly state, that we attribute our deficient and weedy crops, and the mixed and inferior quality of our cattle and sheep, to no other cause but that of our not adopting, and practicing the English system of husbandry. We state further, that the most approved modes of cultivation practiced in the British Isles, in the production of wheat, barley, oats, rye, peas, potatoes, turnips, carrots, parsnips, clover, and other artificial

grasses, and the management of meadows and pastures generally, would be the very best and most perfect modes that could be adopted in British America.

Let any farmer adopt the English plan of preparing land for wheat, or any other grain crop that is grown in that country; let him sow the seed in the same manner; and weed, hoe, and manage the crop as they do in England, and if he does not succeed in raising a better crop, than by any different practice, we shall give up all claims to practical agricultural experience. We make an exception in regard to sowing fall wheat in Canada East, as, from the severity of the winters in that part of the Province, it sometimes partially fails. We believe, however, that if sown in proper time on well prepared summer fallow, and lightly covered with the plough, it might succeed as well in that part of the country as in Canada West. At any time we would most willingly try an experiment with any of the crops we have mentioned, and adopt the English mode of cultivation and management throughout, against any mode of practice of purely American origin, and we confidently anticipate that the English mode will be proved to be the best, most successful, and profitable.—English practice is often adopted partially, and not followed up to perfection. This is the true cause of its failure. It is only by following up, from the first time a field or parcel of land, is brought under arable culture, the English practice of ploughing, draining, manuring, sowing, weeding, hoeing, and harvesting, that we can reasonably expect the same results they obtain in Britain. Though we make selections from the English practice of husbandry, in preference to the practice of any other country, we shall be cautious not to offer any information that would have the slightest tendency to lead inexperienced farmers into error.—As to farmers who are more competent than ourselves, they will be able to judge for themselves, and act upon our suggestions as they may deem proper. Turnip growing enters largely into the British system of agriculture, and is found the most profitable part of it. This part of their system we cannot profitably adopt to the same extent, neither would it be necessary for us in the present state of our thin population. Large quantities of turnips could not be safely or profitably stored here, to feed cattle in our severe winters, and as we have not many cities or towns to supply with fresh meat, we can without difficulty, winter feed a more than full supply for all demands, with our inferior grain and root crops, to a reasonable extent. In no country would it pay to stall feed cattle for the purpose of salting the beef, and exporting it in that state. It is only to supply markets with fresh meat, that fattening cattle in the winter can pay; they must be grass fed for any other purpose. We trust that this explanation will be deemed sufficient by the Subscribers to this paper. It shall be our unceasing endeavour to make *The Cultivator*