

these rocks are found in their native beds invariably in a North-easterly direction, and that the surfaces of the harder rocks *in situ* in the peninsula, wherever exposed by the removal of the drift, are found to be smoothed, polished, furrowed and scratched in a direction from N.E. to S.W. Any one who has had occasion to visit Niagara Falls will see this phenomena strikingly developed along the top of the cliff on the American side, and at the excavation for the Hydraulic canal, about half a mile below the Fall. That this smoothing and scratching of the rocks could not be produced simply by the action of torrents of water carrying stones with it, may be satisfactorily proved by examining the rocks in the bed of the river, which, even where the current is most rapid, exhibit no analogous effect.

Importation of Seeds.

MR. EDITOR,—I have just read an article in the *Agriculturist* of last year, on the subject of imported seed, and thought I would communicate something to the same point. About ten years ago one of my present neighbours sent home to Sussex a few oats, which were carefully sown in a garden and multiplied from year to year, until enough were produced for public sale and distribution. These Canadians, as they are called there, are now widely spread, and well known as coming to harvest two or three weeks earlier than the common English oat, are heavier, and produce a larger crop.

When in England in 1858, I saw them standing alongside of others, and they were a fortnight ahead of the common sort, and an incomparably better sample. Last year, notwithstanding the unfavorable weather, they sustained their character, and my brother-in-law, writing to me says: "I have bought Canadian Oats weighing 46 lbs. per bushel, (they have sometimes weighed 48 lbs.) although many English Oats are not worth finding. Mr. Agate sowed all Canadians this year, perhaps 100 acres, and I think they are better than ever."

Now Sir, I think all this goes to prove that it is profitable for English farmers to get their seed here, but that owing to the shortness of our season compared with theirs, English seed will not suit this country. I know that English oats and barley have failed up here. Yours respectfully,

PETER FULLER.

Meaford, January 38, 1861.

Swiss Cultivation.

The following is a notice of the farming on the Rhine:—The cultivators of the soil must, in many cases, live more than two miles from the scene of their daily labours. The general aspect of the plain is no doubt monotonous, but is a monotony of beauty, and a beauty which fills the

mind with images of peace and plenty. In this vast plain there are scarcely any fences, but there are innumerable rows of trees, which probably mark the boundaries of property, with many little plantations of copsewood, and some considerable masses of forest. A large proportion of the whole surface is in grass, which is cut for forage, and is in extensive tracts, suggesting the idea of large properties, or large holdings. The face of the land under tillage conveys a very different impression, and would have amazed us, if we had not seen the same thing in France on a smaller scale. Here we find six distinct crops on four or five acres. By the side of an acre of wheat, for instance, on one broad furrow, you find an acre of potatoes; then follow half an acre of tobacco plants six feet high, half an acre of hemp, an acre of barley or rye, half an acre of hops, or poppies, or clover, and all generally clean and fair crops. A field of five acres in one species of produce is quite a rarity, and this over a range of 200 miles! These little plots of many colours, standing side by side, give the cultivated land the aspect of a nursery. Do they indicate minutely divided property as in Belgium, or minutely divided tenantry, as in Ireland? These are questions not to be answered without consulting books to which I have no access. I saw no Indian corn, or, at least, nothing which I could recognize as such, for I ought to tell that I have never seen the plant growing, except two or three stalks in a garden. Perhaps it has been superseded by potatoes, of which the quantity raised is very great. I am equally at a loss to account for the vast breadth of land in grass, the whole produce of which would seem to be used as hay, for we did not see a single horse, cow, or sheep, pasturing in the fields. Perhaps the intense heat of this season renders it necessary to feed the animals under cover. Here, in Switzerland, the cows pasture on the mountain tops all day long at 6,000 or 7,000 feet above the sea; but in the low land, where we are living (Interlaken) they are let out only in the morning and evening, and housed during the heat of the day.

Do Sheep Require Water in Dry Weather?

Many farmers provide no water for sheep in winter while they have access to snow; but this is poor management, as sheep require more water while eating dry food; and to eat snow slake their thirst is a tedious, unpleasant, and unsatisfactory way, in which the animal will not take so much moisture as is necessary for health and good condition. In summer, sheep will do well without water, as has been proved by experiments; and we have learned this by years of observation, having frequently been most of the day in sight of the only watering place in the pasture, and never seeing the sheep drink.