

the land be rich, and as a natural consequence ripens late, and is most likely struck with the rust.

Land is sometimes rendered so poor from constant cropping, that it becomes saturated to that extent from the melting snow and the rains that follow in the spring of the year, that a whole field may not unfrequently be seen, one bed of thin mortar, and while in this state the delicate plant is raised to the tip of its roots by the severe night frosts. Now such results may be prevented in a great measure by careful summer-fallowing. Instead of ploughing a summer-fallow only twice, as many do, it should be ploughed three or four times in order effectually to kill the weeds and expose the soil to the free action of the atmosphere. During a fallow, says Liebig, a quantity of ammonia is collected from the atmosphere, potash disengaged from its combinations, and a certain quantity of the alkalies rendered capable of being appropriated by plants. Now no matter how much some of us may be disposed to question the truth of many theories in agriculture, practically we do know that land properly fallowed is rendered much more productive.

If we have barn-yard manure to apply to our fields, there is no better way than to work it well into a summer fallow, plough it well under as soon as it is taken to the field, before it has had time to lose any of its richness by evaporation. A summer fallow, to be really of service to the land, should be ploughed for the first time either the fall previous to sowing, or as early as possible in the spring. If a fallow is not broken up until the heat of summer, it is not effectually acted upon either by the rain or the atmosphere; and the roots of grass, and seeds of various weeds, apparently destroyed, will preserve sufficient vitality to make their appearance when little looked for among the wheat.

If these observations are correct (and they are not without the force of some experience), a fallow for wheat should not only be ploughed often but at proper periods, and it will acquire consistency and firmness; apply a reasonable quantity of manure, drain sufficient to take off at least, all the surface water; sow rather early than otherwise, and you are almost sure of a good crop. When the wheat plant stands in a comparatively dry and rich soil, it will grow vigorously and suffer little from the ordinary severity of the seasons.

THE POTATO.—It is evident that the potato is too precarious a crop to be relied on as a staple article of food. It must descend to the rank of a garden luxury; but what shall we substitute for it? How are the millions in these islands who have hitherto subsisted chiefly on that root to be fed without it? The answer is thus far obvious, that they must be fed either with imported food or with increased produce raised from our own soil by means of improved cultivation. That our own soil is capable, under an improved system, of yielding such an increased quantity of grain and animal food as would more than compensate for the loss of the potato, may be treated as an admitted fact; and if that loss shall stimulate such improved cultivation, it may be hailed as one of the greatest blessings which could have been bestowed upon us. From the potato have flowed the larger portion of those evils which are now desolating Ireland. The same evils would have resulted in England from the adoption of the potato as the sole food

of the labouring classes, a state of things to which we were rapidly tending. In England, the evil has been arrested before it had reached its height, by that mysterious visitation which baffles the skill and eludes the science of man, and by which a wise and good Providence is working out his designs. In Ireland the change, though good will ultimately arise from it, is attended with intense present suffering, aggravated and prolonged by the desperate fidelity with which the population of all classes cling to that treacherous root.

We have before us a letter from a correspondent on whom we can rely, who says, "In Donegal, every available acre is planted with potatoes. In Roscommon the old pasture is being broken up, and let on the con-acre system." A daily contemporary has stated, on the authority of Lord Clarendon's Agricultural Instructors, that in other districts the small farmers are pledging their last resources to plant as large a breadth as possible with potatoes; and that when asked what will be their position in the event of another failure of that crop, the answer is, "*In that case, we can do nothing but lie down and die!*" When it was suggested to them that a better and safer return from the land might be obtained by means of oats, beans, peas, and turnips, the reply was that they had no seed. If seed were given them, they would try those crops. As if the same resources which procured the high-priced potato sets would not have procured the seed of other crops, if there had been the inclination and the energy to resort to them. This is the old cry, the impossibility of cropping the land without the assistance of the Government or some other extraneous aid, of which the inspecting officers under the Temporary Relief Act heard so much during the famine of 1846-7, a cry which proved to be utterly unfounded when it was seen that such aid was not forthcoming.

If the cultivators of the Irish soil will persist in gambling in potatoes, and if the landowners will make no effort to restrain it, and to introduce a safer and more rational system of cultivation, both parties must abide by the consequences. The former must not be surprised if they are overwhelmed with poor's-rates, nor the latter if their estates pass into other hands. One thing is certain, that to pay the stakes for them in case of failure by grants from the Imperial Treasury, tends only to encourage this recklessness, and that the sooner all classes in Ireland are convinced that they will be left to their own resources, the sooner they will learn the necessity of self-exertion.

In that part of England which comes under our observation, we are happy to observe among the cottagers a greater disinclination for the potato culture this season, and a more extensive planting of beans and peas. These, however, and more particularly the former, are mere summer substitutes. A winter substitute for the potato is still a desideratum. The best we have seen on the table is the Haricot or white kidney bean. Well boiled, a little butter stirred among them while hot, and sprinkled with pepper, they form a delicious dish. They have been hitherto chiefly imported from France, and cost about 6s. the bushel. We are not recommending the cultivation of them in Ireland or the north of England. We fear they are too tender for field culture, even in our southern counties, but in the cottage garden wherever French beans can be cultivated for their green pods, there seems no reason against their cultivation, for their ripe seeds. They have the advantage of being a crop which does not occupy the ground long, and they can be easily stored. It is even yet not too late to plant them, and we would urge all who have any influence with the cultivators of cottage gardens to induce the trial of experiments in cultivating them on a small scale, and to introduce a taste for them as an article of food, by