

WEEDING THE CROPS.

We do not know any farming operation that is generally more neglected in Canada, than keeping the crops and pasture free of weeds. We can scarcely estimate the loss sustained by the prevalence of weeds in Canada East, at less than one-third of the produce of the soil. Indeed in many places it is much more. Weeds is the consequence of imperfect draining, bad ploughing, the want of summer fallow, and green crops—and a judicious rotation of crops being observed. The principal rotation in most part of Canada is, a crop of grain mixed with weeds one year, followed the next year by a crop of weeds, mixed with a little natural grass, and white clover.—We do not say that there are not exceptions, on the contrary we are ready to admit that there are many farms as well cultivated and managed, as we could expect them to be, considering the low prices of produce and the high price of labour. We do not offer these observations with a view to annoy or offend, but in the hope that they may produce improvement where required. Every farmer who is conscious that his own crops and land are clean, must know we cannot allude to him, and therefore he will not be offended; and those farmers who see that their own crops and land are full of injurious weeds, that are not only hurtful to themselves, but that scatter their seeds far and wide over the lands of their neighbours, who may be desirous, and incur a heavy expense to keep their lands clean, deserve to be told the consequences of their neglect, both to themselves and to others. The principle of allowing every one to act as they think proper in their own business, may be generally a very fair one, but as regards the allowing of hurtful weeds to perfect their seeds, and scatter them over the country, we humbly conceive that there should be a law to prevent it, and that every farmer should be obliged to cut down the weeds upon his farm, before they would mature their seeds. It is in vain that the industrious farmer, who wishes to pursue a careful and judicious system of agriculture, does all in his power, by a heavy expense of money and labour, to clean his land and keep down all weeds, his farm has constantly the seeds of weeds sown upon it from other poor farms, that only produce weeds in perfection. We may suppose how probable it is, that the seed of weeds sown upon a clean, well cultivated and fertile soil, will grow upon such a soil. Hence it is, that good farmers find a great difficulty in keeping their land clean, or in a proper state. We have never passed through the country in the summer season, without experiencing feelings of regret, to see a soil, naturally of excellent quality, bearing a produce, a large proportion of which consisted of hurtful weeds, useless both to man and beast. The crops and appearance of the country is disfigured by such a large quantity of weeds being permitted to grow, without any exertion being used to prevent

it or destroy them. Few countries on earth would be more beautiful in summer than Canada, if all her occupied soil was cultivated with the same care and attention that is observed in the greater part of the British Isles. We excuse ourselves for this neglect by saying that farming will not pay the expense of careful cultivation. We observe, in reply, that if careful cultivation will not pay, slovenly cultivation, that allows a large portion of the produce to consist of weeds, will not, under any circumstances, pay the farmer. A judicious system of agriculture does not require or justify a profuse expenditure: and, if such a system, managed under the superintendence of practical experience, will not pay, no other will pay. We do not say that any system of agriculture, however judicious, and managed by the very best practical experience, will pay in Canada, under our present circumstances and existing laws, but we say, that if such a system will not pay, neither can any other—and a good system has so far the advantage, that it will be beautiful to look upon, and a new produce three or four-fold greater will be created, that will afford food and employment to three or four times the number of men and animals, that a defective and slovenly system would yield. Under every circumstance, therefore, we presume that a judicious and careful system of agriculture, will be the best to follow in every country.

We give the following extract from "British Agriculture" published in *The Penny Magazine*, on the subject of weeding and keeping the land clean:—

"As one of the principal points in good farming, is keeping the soil clear from weeds and all such plants as impoverish the ground, or injure the quality of the crops, and as the present month may be considered the period for weeding and destroying the noxious productions of the soil, we will proceed to offer a few remarks regarding the ordinary sorts of weeds that infest land in general, and cannot forbear expressing it as our decided opinion, that notwithstanding the various improvements that have been introduced into our code of agriculture in most parts of the country, even where farming has attained a fair reputation, the extermination of weeds is still less regarded and attended to than the importance of the subject deserves. Weeds, in all sort of crops, lessen the quantity, and in grain crops lessen the quality too, whether intended for seed, or used for ordinary domestic purposes.

Amongst weeds, as amongst plants in general, there are many annuals—such as come to perfection in one year, bear seed, and die; and perennials, or those that continue alive an infinite number of years.—Some of the latter are propagated by the seed only, but others either by the seed or the roots. Among farmers, as well as horticulturalists, weeds are commonly divided into two classes—those propagated by seed, and those propagated by the root. In crops of grain, pulse, &c., weeds, by mingling their seeds with the crops, not only deteriorate their quality, but also rob the soil of a portion of the nourishment intended for the crops themselves, and frequently occupy so much space as greatly to encroach upon that originally intended for the useful plants to occupy. Some persons will argue, who

from their agricultural experience ought to know better, that crops of corn under almost any circumstances, have room sufficient to grow in; and that it is the want of nourishment alone that prevents the plants from succeeding so well when sown or planted thicker than usual. But this is by no means the case, for allow a piece of ground to become infested with weeds that do not grow tall enough to interfere with the ears and upper parts of the cornstalks, and yet the plants will be found to be slender, lean, and unproductive: being destitute, in a great measure, of those offshoots or collateral branches without which we never find a full and productive crop of corn, although the soil should be of the richest quality.

Since nearly all weeds (for there are a few that winds themselves around other plants and draw their nourishment from them), are fed and supported upon the same food that would nourish useful plants, it must be obvious that when weeds are permitted to grow among them, they will be robbed of a portion of the food that should have been theirs. And although it has been ascertained that the food of all sorts of plants is not precisely of the same kind; yet, generally speaking, such plants as are commonly growing in the same soil by the side of each other, may be considered as subsisting upon the same description of food or nourishment. Weeds, nevertheless, that are found growing in the same soil, are exceedingly different in their natures; for whereas the seed of some will decay or putrify in a year or two, if deposited in a moist soil and prevented from vegetating by the air being excluded from them, there are others whose seeds will remain many years, in similar situations, without having the vegetative principle injured or destroyed.—This being the case when arable lands become infested with weeds of certain sorts, the farmer often finds it the best plan to let the land rest for a few years, by which means, if the weeds were of the first sort spoken of, they will be entirely eradicated. On the other hand, it sometimes happens that grass-lands become so infested with useless or noxious plants, all such been properly termed weeds, and the best or perhaps only way of effecting a thorough destruction of them, is that of subjecting the soil to a few years tillage, which, however, upon old grass farms, agriculturists are often loath to resort to. It might have been mentioned, that lands overrun with couch-grass and other root-weeds of the same class, by being laid down to grass for half a dozen years, will be found completely freed from them, for on examination it will be found that the roots have been completely decomposed and destroyed. But the precise length of time necessary for the thorough destruction of root-weeds, very much depends upon the nature of the soil; a hard and dry soil being a great deal more in the farmer's favour for effecting his purpose, than a moist, soft, and spongy one. It may be remarked, however, that it is not always convenient to change the character even of a small portion of a small farm which is decidedly either an arable or a grass one; and hence the evil of permitting the soil to continue infested with weeds from year to year is frequently submitted to.

It must not invariably, however, be considered as a decided proof of bad management, the appearance of certain weeds in the crop of the farmer, unless at periods of the year when a careful vigilance should have kept them under some sort of subjection; for the theory of vegetation is so truly wonderful, that notwithstanding the great enlightenment of the present age, among the generality of the farming community, it