

to show the benefits arising from the scientific cultivation of the soil.

1st. It is clear, that if the principles in the foregoing remarks were reduced to practice, an immense amount of animal labour would be saved. The cultivation of the soil would then become almost as exact as the laws of combining proportion in the science of Chemistry.

2nd. Such a style of Farming would ensure a vastly larger crop of every kind of grain and esculents. And this again would affect the whole animal creation, adapting itself to the design of the Farmer in the management of his livestock.

3rd. It would enable the tillers of the soil of any country, to supply the wants of the inhabitants of the soil,—of the whole population, except in extraordinary cases of dearth or famine, which no wisdom, or foresight, or power of man could avert.

4th. This mode of procedure would dignify and ennoble all the pursuits of the Husbandman.

II.—PRACTICE OF AGRICULTURE.

By the practice of Agriculture we understand the giving effect to the principles we have already laid down. All that we may advance on this branch of the subject shall be brought under the two heads, *General* and *Special*. Under the former we shall comprehend all those employments of the Farmer that may be performed at any period that may best suit his convenience, though he should aim as much as possible at regularity and order in all his operations, as it is in this way he will not only accomplish the greatest amount of labour, but what he does will be most beneficially felt. Under the second head we shall embrace the work, that in ordinary circumstances, should be done during the currency of the month the Periodical is issued.—Here we shall have no lack of subjects, and hope to be able to throw out some hints that may prove of practical utility to the Farmer, thereby not only largely augmenting his temporal well-being, but elevating his whole social and moral condition.

We had prepared for insertion here an article on Surface Manuring, but want of space compels us to pass on to the special work of this month.

SPECIAL WORK FOR THE MONTH OF JULY IN NOVA SCOTIA.

Weeds.

The curse is still in process of fulfilment, "Thorns also and thistles shall it bring forth unto thee." The land must be poor indeed which does not at this season of the year produce an abundant supply of weeds, which, like the corrupt principle in the human heart, too often shoots far ahead of the crop sown. In Nova Scotia, whether in the fields or gardens, their growth is amazingly rapid; and, unless destroyed before the crop reaches any stage of advancement, bid fair to master it altogether. As the weeds, then, generally grow much quicker than the seed sown, it is of the greatest possible consequence to rid the ground of them even before the crop makes its appearance. As in the case of animals much, very much of their growth and perfection depends on the way in which they were treated or nursed when young, so is it with vegetables. If the weeds are allowed to grow till the plants are in an advanced stage, the soil is robbed of those very substances which the plant requires, and robbed at the very time when it is most needed. Besides, the plants being drawn up by the weeds, assume a spindly enfeebled form, which materially affects their whole future growth. It is therefore in every way necessary for securing a good crop that the weeds be carefully pulled out as early as possible after they make their appearance. Of course we here principally refer to those weeds that are annual. The perennial weeds, such as couch-grass, bishop-weed, &c., &c., ought, if possible, to be thoroughly cleaned out of the land before it is cropped; and, if this cannot be done, it were vastly better to allow the field to remain unoccupied, or fallowed and thoroughly worked during the summer. There cannot be a greater waste of time and means than to sow seed or cultivate the soil when it is foul or thickly studded with perennial weeds. It is neither doing justice to the seed,

nor the soil, nor the manure, and the produce at the end of the year will furnish but a poor remuneration for the toil of the Husbandman. It is otherwise, however, with annual weeds.—There is no way of extirpating them but by pulling them up or hoeing them out of the ground. Some think it enough to cut them down either with the reaping hook or scythe, but this is just to perpetuate the evil, by converting the annual into biennial plants. They ought to be thoroughly rooted out, and that, if possible, on their first appearance.

Hoeing and Thinning.

This is a matter of the greatest consequence in all green crops, and especially in the case of biennial roots. It does not matter how well the soil is cultivated, or how suitable the fertilizing media to the nature of the soil and of the crop, if the hoeing or thinning process is either partially neglected or delayed till too late.

1. **TURNIPS**.—This is of the greatest importance for the Turnip crop. If the Turnips are not thinned at the proper time, and the hoeing not judiciously attended to, it will affect to a far greater extent than is generally supposed the whole future produce. Now this process of thinning, to be done effectively, should consist of two stages. The first stage ought to be when the leaf of the plant is almost two inches in length. To facilitate this process, as well as to allow the air a free admission through the soil to the roots, the plough ought to be run up the drills, removing the earth about two inches from the young plants. This earth will thus cover the weeds between the drills, which, by decomposition, will enrich the soil. The hand-hoe should then be taken and the Turnips thinned about five inches apart. Some hoes are the exact width. When this is the case the work can be much more expeditiously gone about. The more the roots are loosened and exposed the better, as it admits a free circulation of air and urges the rootlets to push out and grow, and thereby to bring a greater supply of nourishment to the bulb, as well as to fix it more steadily in its position for future growth. When the plants have grown considerably, and the leaves begin to touch one another, it will then be necessary to give them another thinning, removing every alternate plant and thus leaving them about ten inches asunder. When the land is very weedy the horse-hoe should be run between the drills once before and once after the second thinning.

2. **MANGOLD WURTZEL**.—This is a most valuable esculent for cattle, and, from the large quantity of saccharine matter it contains, of special benefit to milk cows. If sown in drills, pretty nearly the same process may be gone through, as with the Turnip. As to the distance between plant and plant, much here as, in other cases, depends on the character of the soil. If it is rich and well fitted for the growth of biennial roots, containing a sufficient supply of the alkalis, the distance may even extend to fifteen inches with advantage to the crop. It is the worst economy to allow plants of any sort to crowd each other—much of the foliage is thereby deprived of the free current of the atmospheric air and of the solar rays, and the crop is neither so large nor so good.

3. **CARROTS**.—In the culture and management of the Carrot every means should be employed to render the soil as friable as possible. The oftener the plough and horse-hoe are run through the drills the better for the growth of the root. There is no necessity of thinning the Carrot more than 4 inches apart.

4. **PARSNIPS**.—This valuable root should be thinned as soon as the plants appear one inch above the ground. They ought to be eight inches apart.

5. **POTATO**.—This is the month for working the soil in which this most valuable esculent is growing, and the more thoroughly it is worked, the more productive will be the crop. Perhaps there is not a department in Agriculture where the labour of the Husbandman will be more amply remunerated than in the cleaning and cultivating of the young Potato plant. This arises from the very nature of the tuber itself. It is not, as many imagine, a root, but a subterranean stem, every eye, as it is called, forming a distinct bud. And what is every bud, whether on the stem or branch, but a distinct plant. What is every tree of the forest but a repetition or multiplication of buds.—