

same track and turns up the under sod, which is shovelled out also, then the ploughs go on to the next trench and open it in the same manner, then both of those trenches are ready for work; the first plough goes along the first trench, and turns the surface sod into the bottom of the trenches; the next plough follows and turns up the under sod or subsoil on the top of the surface sod, then on to the next trench the same way, until the whole is finished; then apply some lime, which is harrowed in previous to the next ploughing in March, if you intend it for a green crop. You are to remark that this operation would not answer unless your ground is thorough-drained, or in a dry state.

Turnips were the first crop taken off the piece of ground I managed in this way after thorough-draining it. The average crop was about 45 tons, whereas the other piece of the field was not more than 20 tons, after getting the same complement of lime, and also of manure; lime at the rate of 40 barrels to the acre, and about 40 tons of good farm-yard manure.

I have no doubt but this plan would answer for parsnips or carrots; it does remarkably well for mangel or beet; the largest I ever raised was in a few drills in this piece of ground, which was at the rate of 80 tons the acre. Its subsoil was a retentive clay, and the surface sod was nearly a mass of couch-grass.

I am a great advocate for your paper, which is a sheet-anchor for the Irish farmers.—Yours, &c., J. M'CORMICK, *Cuslebellingham, Sept. 30, 1847.*

From the Farmer's Gazette.

NATURE'S PLEA.

THOUGHTS AND FRAGMENTS FOR IMMEDIATE CONSIDERATION.

SIR,—The strongest argument that man can use in persuading his fellow man to pursue a proper system of agriculture—such as the natural habits of the various products of the farm, the soil and the seasons require—is supplied by nature. Certain circumstances exist: these should be duly and minutely noted; certain results are, or are endeavoured to be produced, the proper means for effecting which are, too often, too generally unthought of, and neglected.

Many circumstances combine to blight the farmer's hopes, a knowledge of which is most important. The good physician when called on, endeavours to ascertain the previous habits, pursuits, and constitutional affections of his patient, and the peculiarities and advantages, or defects of climate, and then prescribes. So the agricultural physician should study the habits and requirements of agricultural plants, and the circumstances and conditions that conduce to health, before he presumes to give advice on the treatment of agricultural maladies, and subject to his interest and his will—in the manufacture of food—the elements of nature.

If inanimate creatures, the products of

the farm, were imbued with life, reason, and speech, such as pertain to man, we should hear them express their reasonable demands—their grievances and bad barbaric treatment, in something of the following soliloquising strain:—"Man, intended lord of all creation, awake!—arise from the slumber in which, from apathy and indolence, you have indulged for ages. We are thy creatures, called into existence by thy Creator and ours, for thy pleasure, profit, and support; but mark you this, and note it well, engrave it on your memory, so that time nor circumstances can never efface nor blot it out,—we have not, unaided, the power of self-reproduction; the duty of providing the conditions necessary thereto rests with you; and we, like grateful servants, will perform our allotted duties faithfully, if you do yours, and repay thee amply for all thy labours; but neglect to provide our proper dues, such as nature intended we should receive, and, by our stunted growth, you will be punished for your penurious treatment of us, and we will show, and convince you, that we are not to be neglected with impunity."

A rich harvest has been reaped, sufficient, so far as abundant produce on the ground under crop can avail, to compensate for the past year's famine, although it is miserably inefficient to meet the exigencies of the times. Such might act as a stimulus and inducement to energetic exertion for the future, but there is a too palpable neglect of preparing vigorously for the next year's agricultural campaign. True, I observed the plough in several fields employed in timely duty, providing partially, for the beneficial effects that arise from atmospheric influence on newly-turned soil; but how? The narrow ridge, and shallow, thin furrow are as prevalent as if, with the former, it were possible to plough deeply, and not tramp and consolidate the turned surface, or that draining and deep cultivation were terms, the meaning of which has yet to be determined. The mode of cult of green crops is equally objectionable. The drills are all too close, and the ground is crusted and hard, so that, if nature had adapted the bulbs for expanding and forcing back the solid, unfinching soil, and the roots to penetrate, without assistance, through innumerable obstructions in search of food, there might be good crops. After-culture, or maintaining the ground in a loose, pulverized state, without which there must be deficient crops, has been sadly neglected; remedy for the present crop is now all but out of the question; the season of vegetation, even of the Swedish turnip, is on the eve of being numbered with the past. The ensuing crop need not, should not, be left to struggle with unnecessary obstructions, and now there is not a moment to lose in forcing on with the preparation of the ground. Even now part of a glorious season has been lost by those who have not yet commenced to plough or trench their ground. It should be borne in mind, that, as soon

as the harvest, or a portion of it, is removed, at every convenient time, the state of the weather permitting, the preparation of the ground for the next crop should have precedence of every other work—the saving of the remainder of the harvest alone excepted.

Nature is decisive in pointing out the proper seed time. We have the dormant season, when she is, or should be, at rest, and we have the season of spring, or germination, when she bursts the bonds of the seemingly non-existent state of the seed, and ushers it into its fast-fleeting reproduction age. Wheat alone excepted, which, by right, which should have twelve months to vegetate, mature, and ripen; our principal food crops require from six to eight months; but often one, two, or three months of the vegetative season are allowed to elapse before the seed is committed to its reproductive bed, and the blighted crop and unripened grain tell with vengeance that nature's laws were violated; hence the sluggish who neglects timely cultivation, cannot expect good crops. He must allow nature to direct as to the proper time, and he should remember that he can only accomplish timely sowing by preparing the ground in proper season also. Often the plough is set to work in spring, when the seed time has arrived. This should not occur again.

Only that the practice is still persevered in, it might now seem unnecessary to insist on deep cultivation, the benefits to be derived therefrom are so generally admitted, but the use and application of manure are less understood.

When tracing out the growth of plants by their roots, I have often observed the young tender fibre to contract with fermenting manure or putrescent matter, to become diseased, and to prematurely decay, and this in general, I believe, ultimately resulted in an additional set of branch fibres sticking out of the decayed one. I have speculated on the fact, and I feel strongly inclined to the opinion, although I have not had any experiment from which to decide the point, that using too fresh manure, and putting it directly under the seed, tend to produce the disease or defect in turnips described as "fingers and toes." We know it has the effect on carrots, and from their construction, being tap-rooted, they should be less liable to such a phenomenon than turnips.—Strong or fermenting manure under the seed, and in direct contact with the roots of plants, I have long reprobated, and compared it to giving strong drink or strong stimulating food to infants.

I have not space here to enter on a discussion of this important question: I can only state, that reason, nature, my observations, and some few experiments, with the concurrent testimony of many of my most experienced correspondents, decide, that the manure, as soon as possible after it is made, should be ploughed or trenched into the ground and allowed to ferment in it before seed-time. I can only refer at present to one great and paramount