

It must be remembered, that the manures now being brought forward, are nothing new in themselves, but are merely the concentrated essence of the stimulants and fertilizers contained in, and hitherto supplied by the contents of the barn-yard, they do not supersede that supply; but on the contrary greatly augment and render it of much greater efficacy,* by drawing upon other sources, which chemical research has found available for that purpose. The greater portion of the mass accumulated in the muck heap, was merely the vehicle with which the manure, properly so called, was incorporated, and by which it was conveyed to the land. The bulk of the article was often little more than so much fine soil arising from the advanced process of decomposition of the animal and vegetable substances of which it was composed, and which, in a short time, would have been comparatively worthless as a stimulant and fertilizer.

Barn-yard manure undoubtedly contains the principal constituents necessary to supply to the numerous plants under cultivation the amount of the natural food required by each, so long as the demand shall not exceed the supply; but when (as at present) it is expected that, instead of 12 or 15, there should, in order to a profit, be a return of 25 or 30 for one, then a demand, of course, follows for a supply of such substances, whose component parts shall be the very essence of those manures hitherto given in bulk; or a rapid deterioration must follow the overtaxing the fertilizing powers of the natural soil.

The successful application of these artificial manures must be accompanied by a knowledge of the various amounts of the different ingredients necessary to the crop under cultivation, as the requirements of one class of plants may be totally different from another, and it will be equally necessary that a knowledge of the component parts of the soil should be obtained, in order to derive the greatest possible amount of benefit; the manure must not only be adapted to the plant, but also to the soil; for while some soils are nearly devoid of certain ingredients, others may be already in excess, and consequently, instead of an addition in the manure supplied, may require a corrective, to render them the most productive;

* A French chemist now in England proposes converting the whole barn-yard manure into guano, and is engaged in the process.

hence arises the necessity of chemical analysis; of so much importance indeed is this, that the various Agricultural Societies of Europe have connected with them an agricultural chemist, from whose lectures much benefit is experienced, and to whom application is made by the various members of the Society for information, and by whom the different descriptions of soils on their farms is analysed; and they at once obtain the knowledge of the description of manure best suited to the soil for any particular crop they intend cultivating. The Province of Demorara has just appointed an agricultural chemist, at a salary of £1000 per annum; and it cannot be doubted that a portion of the funds of the Agricultural Societies of Canada West could not be more beneficially appropriated, than in procuring and amply remunerating a clever practical man for the same purposes; and we do hope that when the Provincial Society shall be matured, that this subject will not be lost sight of.—Again;—but prudence has just whispered in our ear,—husband your resources a little, remember, an Editor's labours, like the pains of purgatory, (unless you get a friendly lift) are,

(To be continued.)

We had purposed inserting, for the benefit of our readers, an article on the analysis of soils,—so plain and simple, and the apparatus needful, to be procured for three dollars,—but want of space precludes the possibility in the present number, but will endeavour to make room for it in our next. We are obliged to exclude, from the narrowness of our limits, as much plain, useful, practical information, as is worth ten times the amount of the subscription to the *Farmer*.

We would especially direct the attention of our readers to the first of a series of letters from Martin Doyle to the young farmers of Ireland. They will be found replete with the most useful information, and at once convey instruction in a clear, simple, and pleasant manner.

It would have given us much satisfaction and our readers much pleasure, if our space would have allowed us to insert a letter of Baron Liebig, which we find in that excellent agricultural paper, the *Albany Cultivator*; and as we know many of our subscribers take that paper, it would be well if they would lend the August No. to their neighbours.

We are sorry to hear that the Turnips in some parts of the District are likely to turn out equally bad with the Potatoes. We saw a large quantity the other day apparently affected by the same blight, so bad indeed that the Cows would not touch them. We hope that our Farmer friends in other Townships will favour us with information on the subject.

THE PAINS & CO. OF THE HORSE.—I am anxious, in this place, to add my anathema against that inhuman instrument of torture, the bearing-rein. It is no less detrimental to the utility of the animal than it is replete with agony to him. It must have been invented by a savage, and can only be employed by the insensate. Whence the benefit of unbearing a draught-horse when going up-hill? Because the head can then be thrown into its natural position, and materially assist by its weight in drawing the load. If it is beneficial to loose the head at that time, it must also be so on other occasions. Look at the elongated mouths of the unfortunate animals thus so wantonly abused—torn by the bit in their unavailing efforts to overcome this truly barbarous instrument! What produces that dreadful disease, poll-evil, but the action of this cruel strap; constraining the head during the violent exertions of the animal, producing inflammation and ulceration of the point upon which it articulates with the spine? Poll-evil, so generally supposed to originate from blows inflicted on the part, is attributable alone to the gagging-rein. I never saw a horse used entirely for the saddle attacked with this affliction. In order to obtain momentary relief from the torment inflicted by the bearing-rein on the poll and mouth, the poor creature is compelled incessantly to toss up his head. By thus strapping down the head you say, practically, "I expect you to draw a certain weight, but I will take away part of your power of doing so." Some have urged that the bearing-rein contributes to the safety of the animal, who, without it, would be more liable to come down. However applicable such an argument may be to those employed in quick draught,—though even with them the utility of this instrument is not only exceedingly doubtful, but fast giving way to a more rational method of treatment—it assuredly does not apply to cart horses, for little fear is ever entertained of their falling; and broken knees, so common among the faster breeds, is rare amongst them.—*J. H. Winter, M.R.C.V.S.*

TOWNSHIP CLUB MEETING.

The Township meeting for October, will be held at the usual place, (the Town Hall,) on Saturday the 3rd inst., at 4 o'clock, P.M.—Subject for discussion,—