

AGRICULTURAL.

MARL.

'Nothing is nourishment for a vegetable but what enters into the permanent composition of a vegetable.' Man is enjoined to earn his bread by the sweat of his brow. He finds the most noble mentements to duty scattered around him, and he is very seldom disappointed in obtaining the rewards, competence and health, which industry promises to her votaries. But I have another remark to make as to the food of vegetables. How scrupulously careful is the farmer of his grain, hay, and roots, which are destined to nourish and fatten his animals; and yet how thoughtless and inattentive as to the food of his plants! Vegetable and animal substances are suffered to waste in his fields and yards, unnumbered of the havoc which the rains, winds, and sun, are daily making upon them—while a moiety of his fertilizing materials, the urine of his stock, is altogether lost. He will not suffer the flocks of his neighbours to rob his own of their food; yet he sees, with but feeble efforts to prevent it, his plants plundered by pestiferous weeds of the food which is essential to their health and vigour.

To find the composition of marl, pour a few ounces of diluted muriatic acid into a Florence flask; place them in a scale, and let them be balanced: then reduce a few ounces of dry marl into powder; and let this powder be carefully and gradually thrown into the flask, until after repeated additions, no farther effervescence is perceived. Let the remainder of the powdered marl be weighed, by which the quantity projected will be known. Let the balance be then restored. The difference of weight between the quantity projected and that requisite to restore the balance, will show the weight of air lost during effervescence. (That air proceeds from the calcareous earth alone, which contains forty four per cent of this carbonic acid air. Suppose five hundred grains of marl lose forty four grains by the escape of air, then that marl contained one hundred grains, or one fifth of its whole weight, of limestone.) If the loss amount to twenty or twenty-five per cent of the quantity of marl projected, the marl assayed is calcareous marl, or marl rich in calcareous earth. Clayey marls, or those in which the argillaceous ingredient prevails, lose only eight or ten per cent. of their weight by this treatment, and sandy marls about the same proportion. The presence of much argillaceous earth may be judged by drying the marl, after being washed with spirit of salt, when it will harden and form a brick.

To determine with still greater precision the quantity of calcareous earth in marl, let the solution in muriatic acid be filtered and mixed with a solution of carbonate of potash, till no farther precipitation appear. Let the sediment subside; wash it well with water; lay it on a filter previously weighed, and dry it. The weight of the dry mass will show how much carbonate of lime the quantity of marl submitted to experiment contained. See *Kirwan on Manures*.

The quantity necessary to be used, varies according to the nature of the soil; but the utmost caution is requisite, because if too large a portion be scattered on the land, it cannot be easily removed, and if too little be employed, the deficiency may be readily supplied. On sandy, gravelly or light soils, it will be advisable to spread as much as will form a thick coat, in order to bind and stiffen the ground. But, of what ever nature the land may be, the most judicious cultivators recommend such a portion to be laid on it, as will form a thin coat over the whole surface.

The proper season for marling is the summer; as this kind of manure is then perfectly dry, and not only lighter, but also more easily reduced to a powder—Marl, however, may be advantageously spread during the winter frosts; as in the latter season there are few opportunities of performing other labours of the field.

Previously to marling, the land ought to be diligently cleared from all weeds, and rendered level—both with the brake and the common harrow, so that the marl may be equally spread on the surface, where it should be sowed to be during the winter. In the month of February, March, or April, and in dry weather, it will be proper to draw a bush harrow, well weighted, over the land, that the marl may be uniformly distributed; but, as this manure is very ponderous, and sinks to the bottom of the furrow, if injudiciously ploughed in, it has been suggested to turn it into an *ebb furrow* for the last crop: during the growth of the latter, the marl will incorporate with and become part of the soil, from which it does not readily separate. So permanent, indeed, are its fertilizing properties, that if land be properly marled, it will continue arable for the space of twelve or fourteen years; and, for pasture, during a much longer period.

A good artificial marl may be prepared by mixing equal quantities of pure clay and lime, in alternate layers, so as to form a heap, which should be exposed

to the winter frost: this compound is well calculated for light lands; but if the soil be strong and heavy, it will be necessary to substitute loam and sand for the clay. Such compositions may be usefully employed where marl is not easily procured; as they will amply repay the labour bestowed on mixing them, being little inferior to the genuine calcareous earth.—*Domestic Encyclopedia*.

An English writer on agriculture observes that 'whoever finds marl finds a mine of great value. It is one of the best and most general manures in nature; proper for all soils, and particularly so for clay.' It is usually found under moss or peat, in low sunken lands, and especially nigh the sea or large rivers. It has been sometimes discovered by ant hills, as those insects bring up small pieces of shells from their holes.

PROSPECTUS

Of a Work about to be Published, entitled

A GUIDE TO TOWN OFFICERS,

SHERWING

THEIR APPOINTMENT, DUTIES, LIABILITIES AND PRIVILEGES,

According to the Laws of the Province.

BY DANIEL DICKSON.

One Volume, about 200 pages. Price to subscribers 5s.

THE TABLE OF CONTENTS embraces the Appointment, Duties, Liabilities, Emoluments and Privileges, of Overseers, Assessors, Collectors, Surveyors, Inspectors, and all other Town Officers who are annually appointed; with appropriate remarks upon each.

* * Agents to this Paper, and such others as we may send Copies of the Prospectus to, are requested to solicit Subscribers to the above Work, and forward them with the least possible delay, as the number of Copies will be regulated by the amount of Subscribers.

Having promised in our last number to give a few specimens of this Work, along with the prospectus, that the public may be enabled to form some idea of its merits, we have selected the following passages.

Under the title "Constables," after showing their duties and powers in keeping the peace, apprehending criminals, &c., to shew that they are the proper Officers to execute the warrants of Justices on all occasions, it contains the following Section:

"Our Provincial Legislature, in order to further the ends of justice, to maintain the good order of society, and to promote the prosperity of the Province, has found it necessary, in a great variety of instances, to enact Laws, requiring some things to be done, and forbidding others; and to enforce obedience to these Laws by imposing fines upon offenders. These fines are in most cases to be recovered before Justices of the Peace, who are authorized, on conviction of an offender, and failure in payment of the penalty prescribed, to issue their Warrant of Distress to levy the amount on his goods and chattels, and although the statutes seldom mention to whom such warrants are to be directed, or by whom executed, the Constables are nevertheless the proper officers for that purpose, and bound to execute these and all other lawful warrants of Justice when required, which if they neglect or refuse to do, they may be fined as in other cases of neglect of duty."

Under the title of "Assessors of Poor Rates," in showing their duty relative to making the Assessment, after quoting the Law on that subject, followed by explanatory remarks, it continues:

"The Assessors should be careful not to assess any property within the Township, unless there is some person resident within it, who is liable pay the rate, and from whom it can be legally collected. It is not the property, but the Inhabitants of the township,

in proportion to their known estate, that the Assessors of Poor Rates are directed to assess. Now, it sometimes happens that a man lives in one township and has property situated in others; he must, therefore, be assessed, for the whole of such property in the township where he resides, and not in any other.

"There are also certain classes of Inhabitants, such as clerks, servants, and apprentices, who generally possess only that species of personal property which the law does not contemplate as rateable; they ought not, therefore, to be assessed for such property. Most of the deficiencies which so frequently occur in the poor fund, are owing to an indiscriminate assessment both of real and personal property; the collection of which is afterwards found to be impracticable."

Again, under the title of "Collectors of Poor Rates," these remarks follow the Sections of the Act regulating the collection of Poor Rates:

"From these four sections of the Act, it plainly appears, that when any person assessed for Poor Rates, after being duly requested, neglects or refuses to pay the amount, on any pretence whatever, the Collector must proceed to enforce the payment of it, by applying to some Justice of the Peace for a Warrant of Distress to levy for the amount; and that he has nothing to do with the right any person has to be exempted from paying such tax, or the proportion in which he has been assessed. These are questions for the consideration of the Sessions, to which the party may afterwards appeal. but in the mean time, it is the Collector's duty to enforce the payment; and if he neglects to do so beyond the time limited, he makes himself liable to the penalty.

"The Justice who may be applied to for a Warrant, should not grant it until the Collector has made Oath of the refusal to pay, and until the person so refusing has been first summoned to appear before him and shew cause why the Warrant should not be issued; because, on the summons, the party may shew sufficient reason to the Justice why it should not; as, for instance, that he has already paid the assessment; or that he is not the person assessed; or, that he was never requested to pay, and is willing to do so; or, otherwise a Collector, out of private resentment, or some other improper motive, might sell a person's goods without a sufficient cause. Besides, a Warrant of Distress is in the nature of an Execution; and it is an invariable maxim of the English Law that no man shall be punished before having an opportunity of being heard. See 6 Term Rep. 198—4, Burns J. 152.

PICTOU SABBATH SCHOOL.

It must be gratifying to the friends and supporters of this Institution to be informed, that since the publication of its last annual Report in February 1835, there has been an average attendance of 175 scholars, who are divided into twenty classes, with as many teachers, of whom twelve are male and eight female. Attached to it there are 350 vols. of well selected religious publications, which are in weekly circulation; and there is reason to believe that these books are carefully perused by many of the pupils, as also by parents. Through the continued liberality of Town members, and donors, the committee will be enabled in the course of another year, to make an addition of fifty or sixty volumes to the library, which perhaps will render it one of the most valuable of the kind in this Province. There are also in use among the junior classes, eight sets of the "YOUTH'S COMPANION," which are eagerly sought after, and well read.

From the amount of instruction thus imparted, together with the exertions of the the teachers while in school, much permanent benefit is to be expected. The rapid increase of our youthful population urgently demands corresponding diligence on the part of the instruc-