

cally, it serves either as a direct food to the plant, in the case of grasses, or indirectly, by its action in rendering available the organic compounds in decaying vegetation—humus, for instance.

The nitrogen of swamp muck is unavailable in its usual condition. Thoroughly drain the land and apply 60 to 75 bushels of marl per acre. On light soils apply about 25 bushels per acre, sufficient to help the decomposition of organic matter and supply lime to the crops. For grasses, add about two bushels of salt per acre and apply as surface dressing. For clay lands, apply by the waggon load; hardly too much can be added. Use muck also, if available. Farmers having marl deposits will do well to test their value in different lands. Small plots in a couple of fields will be sufficient. Those not having them should examine their swamps and marshy lands, and dig a few feet beneath black soils.

Lime, in the form of marl or carbonate, should not be used with manures. In the changes resulting, ammonium carbonate is formed; this is a volatile compound. Lime, in the form of sulphate, *i.e.*, gypsum or land-plaster, is best; it produces ammonium sulphate, a stable compound—in other words, it *fixes* the ammonia.

There is no market for marl at present established in Canada. Its value depends upon its situation and the nature of the surrounding land. The commercial value for lime in fertilizers is sometimes placed at \$5 per ton. At that rate, Ontario dried marls are worth from \$2 to \$3 per ton. Rich marls are sometimes utilized for burnt lime.

ERASMUS'S paraphrase of the New Testament is clear and explanatory; but you cannot expect anything deep from Erasmus. The only fit commentator on Paul was Luther—not by any means such a gentleman as the apostle, but almost as great a genius.—*Coleridge*.