

and the barn went down; another neglected to put water in the boiler at a proper time, and the boiler went up. In the hands of the ignorant, superphosphate will kill plants or seed, or it may be applied at a wrong time, at an improper place or not in proper quantities; and by the ignorant the very best is apt to be condemned as inferior, and most inferior is often lauded as the best.

We wish our subscribers to be the best informed about their agricultural business, therefore we go personally to ascertain and try to give you the benefit of our researches. The rock, or apatite, as it is called, that was lying on the dock was of different qualities; some we were informed was worth only \$6 per ton, and some was worth \$17.50 per ton. A quantity is procured near Kingston. Sometimes the mines or crevices only contain a few tons and are soon exhausted; others have yielded 2,000 tons. There is as yet comparatively little of it used in Canada. Large cargoes of it are shipped to Europe, where they know the value of manure and how to use it. Large quantities have been and are being sent to the Southern States, to New Jersey and several other points. While we are supplying this valuable fertilizer to the world, is it not rather strange that Canada should be impoverishing her soil and scarcely one farmer in a hundred knows anything about its use, its quality, or the profits or losses of its use?

There are many farmers

who may not require it, but there are also many who would find a judicious use of it profitable. Five hundred pounds is said to be the right quantity to use for an acre of land. It is claimed that the result in increased production of hay, grain and roots is astonishing, and repays the cost of the superphosphate, besides adding largely to the permanent value of the land. In the hands of the ignorant it may become like the steam threshing machine alluded to; we have heard of seed and crop being destroyed. Every real farmer should understand something about the use and value of all kinds of manures, whether he requires any or not.

THE FARMER'S BANK.

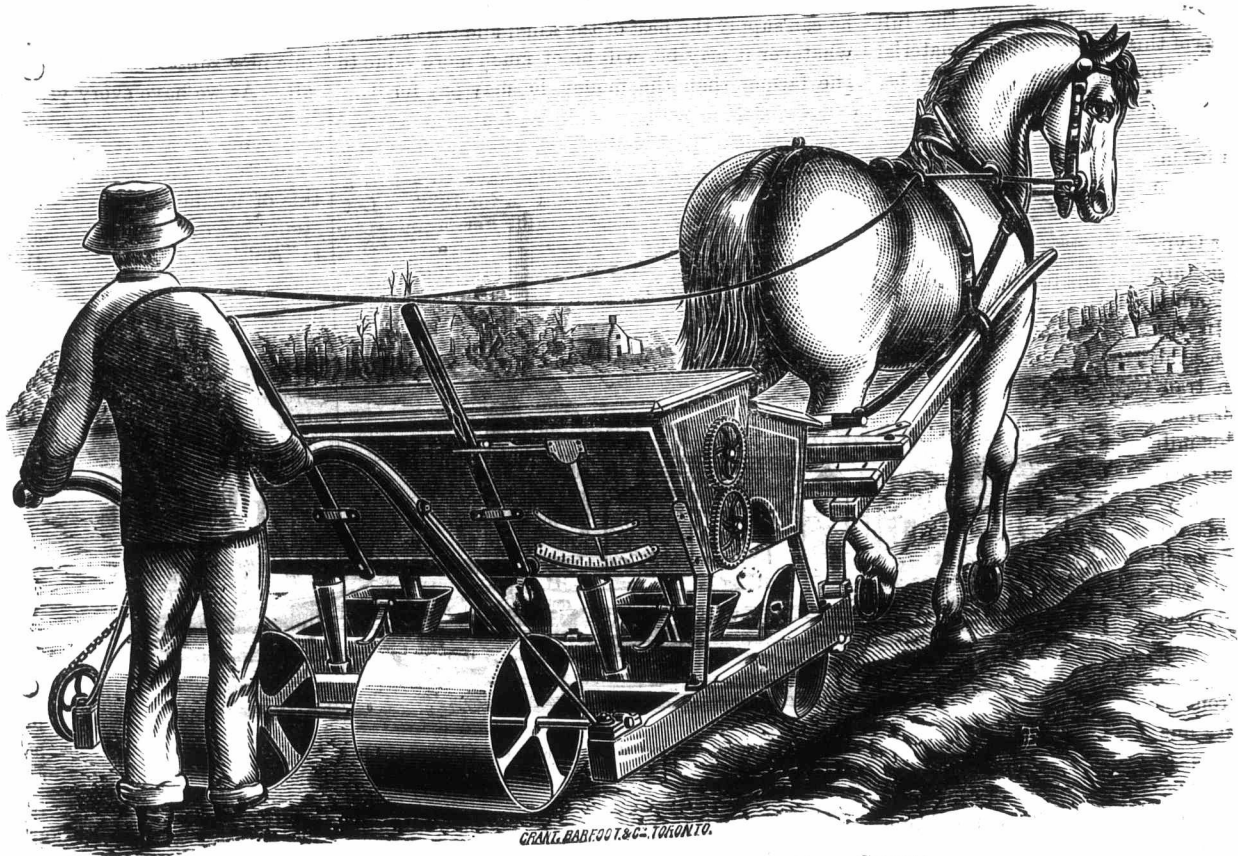
By far the safest and most profitable bank the farmer can have is his fertile fields. Inexhaustible land is not in existence. The most fertile soil will cease to yield profitable returns unless the fertility is maintained by some return to the soil. Many good farmers add yearly something to the fertility of their farms, but the majority of

American farmers are gradually and surely exhausting their farms. Thousands of farms are now so reduced that the occupants have been obliged to abandon them. Barn-yard manure is the best and cheapest procurable, but there are localities where a sufficient quantity of it cannot be had, nor any other substitute obtained without resorting to artificial manures. We know of no manure that can be moved on to the land as cheaply as superphosphate. We should be sorry to hear of any of our subscribers injuring their pockets by going headlong into large expenditures for this fertilizer without first trying a small quantity in different ways and marking the results. If he finds he can use it profitably, then, and not till then, should large orders be given. So much pleased is the Legislature of Quebec Province with the use and value of this fertilizer that an order for a very large quantity has been given to a firm in France. We understand that thousands of tons are to be given away to the French Canadians. It may be asked: Are the French

phur mines near Brockville, and have very large and costly works, where they make the sulphuric acid—the material that converts the rock to plant food. In this vicinity the farmers are using superphosphate more extensively than in any other part of the Dominion. The beneficial results are gradually becoming known there, and the consequence is an increased demand. One thing which proved detrimental to the use of superphosphate was that its strength was such that it was not solely confined to the destruction of grubs and insects and the promotion of the growth of the plant, but when it came in direct contact with the seed the vitality of the seed would be destroyed. To obviate this, mechanical skill is called into play. J. W. Mann & Co., very energetic manufacturers, possessed of good mechanical and business faculties, have invented a fertilizer and seed sower combined, which answers the purpose admirably, and saves the seed from destruction. This machine first deposits and covers the seed, and then deposits the superphosphate over

the seed and covers it. In this manner it is found to act like a charm, although the superphosphate may kill the seed if it comes in direct contact with it.

It does not destroy the plant when growing, but protects it from many insect pests and furnishes the actual food to make not only the plant leaf but also to fill the grain in the ear, thereby enriching the farmer. This is a highly valuable aid, but to the ignorant it may act the



MANN'S NEW COMBINED FERTILIZER AND SEED SOWER

Canadian farmers more enlightened in its use than the farmers of other parts of this Dominion? Have you had experience? We should like to have the first valuable hints on its use from a practical *habitant*. Another point is this: Canadian superphosphate, we understand, ranks quite as high in fertilizing qualities as the foreign superphosphate. Yet this large order must be sent to France! Question—Why?

On the Rideau River, nearly half way between Kingston and Ottawa, there are large expanses of water—we may call them lakes. They are dotted with immense numbers of beautiful islands. Many consider the scenery here to surpass that of the Thousand Islands. In this vicinity large quantities of the apatite is mined, but we understand that the best quality is procured from north of Ottawa. The only works at which the real, genuine superphosphate is manufactured are situated in Brockville. They are carried on under the name of "The Brockville Chemical and Superphosphate Works." This company owns extensive sul-

phur mines near Brockville, and have very large and costly works, where they make the sulphuric acid—the material that converts the rock to plant food. In this vicinity the farmers are using superphosphate more extensively than in any other part of the Dominion. The beneficial results are gradually becoming known there, and the consequence is an increased demand. One thing which proved detrimental to the use of superphosphate was that its strength was such that it was not solely confined to the destruction of grubs and insects and the promotion of the growth of the plant, but when it came in direct contact with the seed the vitality of the seed would be destroyed. To obviate this, mechanical skill is called into play. J. W. Mann & Co., very energetic manufacturers, possessed of good mechanical and business faculties, have invented a fertilizer and seed sower combined, which answers the purpose admirably, and saves the seed from destruction. This machine first deposits and covers the seed, and then deposits the superphosphate over

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It does not destroy the plant when growing, but protects it from many insect pests and furnishes the actual food to make not only the plant leaf but also to fill the grain in the ear, thereby enriching the farmer. This is a highly valuable aid, but to the ignorant it may act the same as a steam engine. We deem this of so much importance that we give you an illustration of the Seed Drill and Fertilizer.

The concave iron roller carried on a shaft in front shapes the drill, and will adjust to suit the ridges, varying in width from 18 to 32 inches. Turnip, carrot, beet and mangold seeds can be sown perfectly even and in any quantity per acre; any kind of fertilizers can be sown at the same time if desired; any boy that can drive a horse can work it, as it requires no guiding when at work. The handles are merely to steady the driver, if he does not wish to ride on the machine. They guarantee the efficient working of their fertilizers and drills, and allow good farmers to try them before purchasing.

They also make drills of larger capacity and of high reputation, so much so that many of their drills have been bought by Americans across the lines, and as they are only on the opposite side of the St. Lawrence, such has been the demand for their drills that they are contemplating erecting another shop on the American side.