

winter than in the spring. Third, they are apt to receive more attention during winter, because the farmer is about the barn more, and can provide for their wants better than in summer, when he is necessarily busy about the farm. Fourth, they are ready to turn out as soon as the grass will give a good bite, and they will be strong and healthy, and better prepared to withstand the cold of winter than late ones. Lastly, they are ready to market six months or a year earlier than the late ones. They should have new milk at least two weeks, and then skim milk may be given once a day for another week, when it can be substituted entirely for new milk, but it should not be given to them in such quantities as to cause them to scour. After they are five weeks old, a little linseed oilmeal may be put into their milk, increasing the quantity from time to time, and when they are eight weeks old, if milk is scarce, they can be fed wholly on it, put into a little warm water. At this time they will relish a few roots, and they will do them good. I have fed a calf this winter on beef scraps, a single handful, dissolved in warm water, night and morning, and he did as well on it as he did on skim-milk. Calves should lie loose, in a warm airy place, have plenty of litter, and plenty of good fine or aftermath hay to eat, and occasionally a shovelful of dirt to lick. Calves raised in this way cannot fail to be good ones, especially if a good breed.

### Salt for Mangel Wurzel.

An old and talented correspondent of the *Mark Lane Express* strongly recommends salt, from his own experience, as a very valuable manure. He found that a liberal application of it to the ground in autumn, intended for spring cropping, acted beneficially in a mechanical manner in bringing the soil into a mellow friable state, while the roots or seeds of the most troublesome weeds were either destroyed, or their vital energy very much impaired. The slug and wireworm (the latter is often very injurious here in Canada) were also either killed, or very much diminished thereby. A large sprinkling of salt was sown broadcast on the surface in the autumn after the land had been deeply plowed, and exposed to atmospheric action during winter, and then plowing was given in the spring and a suitable tilth obtained, the mangels sown vegetated, grew apace, and produced a heavier crop than under ordinary treatment. There was no difficulty in keeping the land clean, as very few weeds made their appearance. The writer found a smaller amount of salt added in spring increased still more the amount of the crop. And he found that other roots and also grasses, and the cereals, were considerably improved by its application.

Salt thus appears to be a safe and economical manure, provided it be not applied directly to the cereals or grasses in too large a quantity,

for in that case it will, for a time at least, materially injure them, if not ultimately destroy them. No soils naturally have too much salt, except those directly injured by springs. One of its most valuable properties is to attract moisture. For this reason it may be sown when the soil is perfectly dry,—a condition so fatal to many manures, and will absorb moisture from the atmosphere, and convey it to the root of the plant. Its principal office is to keep every thing in the soil in a soluble state and consequently in a state fit for the nourishment of vegetable life. Its benefit is not alone experienced by the root crop, but by the grain crop which follows, for its presence checks the redundancy of straw, and enables that straw to strengthen itself by absorbing from the soil the silica, of which, in certain combinations, it is solvent. The coarse material of salt works is what is generally used in agriculture, and may be procured we presume at a low rate of charge for Syracuse, or other places where the pure article is properly prepared for market.

## Agricultural Intelligence.

### A Canadian Drill Plough in England

A late English exchange thus notices an implement introduced from Canada:—"The Sovereign drill plow, like the reaping machine, is a gift from the New World to the Old, and the invention of Mr. L. Sovereign, of Canada. Its powers were lately tried and five furrows were made at one time by a single plough drawn by two horses, which at the same time sowed barley and clover, turning the flowers clean to the seeds so as to cover them safely from frost. This implement, which weighs no more than 1,000 lbs, is as rough and ready as a bush harrow, and, like all colonial machines, has no mechanism and it that a common tool-box will not suffice for repair. It consists of five ploughshares of cast steel, light and strong, placed transversely in a frame of five longitudinal beams. This frame is suspended on three wheels, two on one side and the other running in the furrow. The ordinary line of draught in ploughs is thus made, and the friction of the weight carried at the revolution of the wheels. Two horses are fixed on the frame, one for larger seeds (like beans to wheat,) the other for grass seed. The distribution is regulated by very simple mechanism—the mere turning of a screw by the driver acts by a wedge on a plate, which defines the given quantity to an acre; while a copper plate to each conductor closes or opens it according to the number of rows requisite to be sown. The advantageous simplicity of this arrangement will be evident to every practical man. A pair of light harrows were fixed behind, and thus completed the three processes of ploughing, sowing,