

specific manure. In England, especially in the eastern counties, on the light soils, salt is extensively used as a manure to the Mangold crops, and not only increases the yield materially, but also improves the quality of the roots. On light soils it is said it can be used to advantage if not over 300 lbs. per acre is sown, while on heavy soils it proved disadvantageous to use salt. On the whole we doubt if salt will prove of so great a value for manure, as some sanguine persons expect; but as it is now so cheap it would be well to try experiments with it, and report results, as it may turn out that it produces other effects than those looked for by chemical writers, who seem to think it of little value. Dr. Voelker says "the character of the soil had a great deal to do with the utility of the salt applied to it."

As to applying it mixed with ashes, plaster, &c., it is doubtful if that would do any good, for the ashes or plaster are known to be valuable as manures, and it would be well to ascertain first the value of the salt, and its mode of action on the soil, or the plants growing in it, before crediting it with qualities that may be due to other substances that had been mixed with it. Its application as a top dressing is scarcely advisable, unless to old meadows. We should prefer Mr. Johnston's plan of harrowing it into the soil at seed time, when if it did nothing else it would be sure to prevent smut.

In the experiments tried in England, the coarse Liverpool rock salt was used. John Johnston used the refuse salt from the Onondaga salt works.

Perhaps the Goderich salt being so fine and pure, may produce better results than was the case in using an inferior and cheap article. As to how much it will pay to use, we have no data to go on. Let it be tried in quantities of 50 lbs., 100 lbs., and so on up to 300 or 400 lbs. per acre, and results noted. Over 400 lbs. per acre might prove a serious injury rather than a benefit.

We hope that some of the enterprising farmers in Huron County, or elsewhere, will not be hindered by the trifling cost of the material from demonstrating whether it can be used to advantage as a manure, and on what crops.

Stump Machines.

A correspondent from Renfrew enquires which is the best machine for pulling stumps, and where it can be had.

A good deal will depend on the kind of soil, and the timber of which the stumps are the remnants. In our younger days, we found no difficulty in getting out the stumps of maple and beech from a rich limestone soil, with a strong yoke of oxen and a good logging chain, when the timber had been cut down over seven years previously. In those sections where hardwood timber prevails; and the roots spread over near the surface, the common triangular stump puller,

which can be made by any rough carpenter, and the ironwork by the nearest blacksmith, will prove as good as any. This machine consists of three strong poles, about ten feet long each, joined together at the top with an iron cap or clasp, the legs spreading out so as to stand a good distance apart over the stump. From the top hangs a strong iron hook, to which is attached a pulley block, over which the logging chain is passed. The short end of the chain is fastened to a projecting root of the stump, and a team of horses or oxen at the other end to pull it over. The chain acts as a lever, the pulley as a fulcrum, and the other end of the stump as a rest.

For taking out large stumps, such as those of elm, pine, or hemlock, a screw machine is required, and we believe Messrs. Gilbert & Burkholder, of Nelson township, Halton Co., make a good article in that line. We do not know their P.O. address, but think it is Wellington Square.

No doubt other implement makers construct stump extractors, or could do so if they got an order, but as a general thing they are not an article that commands so ready a sale as to induce makers to keep a stock on hand. In sections where pine stumps are abundant, large powerful machines, costing two or three hundred dollars, are employed, and travel from place to place, taking out the stumps at so much each, or per acre, as may be agreed upon, being worked by men who make a special business of it, and keep their own teams and hands to do the work with. Generally, fallow fields, or old pastures, where no crop is in the way, are the scenes of their operations.

Daniel O'Rourke Peas.

To the Editor.

SIR.—An article which I noticed in your paper, headed, "The Pea Weevil," reminded me of one of the apparently good qualities of a new variety of pea (Daniel O'Rourke), which I grew last season for the first time. I sowed ten bushels, and harvested from them 140 bushels by my measure, which by weight is giving me a little over 150 bushels from the ten bushels sowing. I believe that this yield surpassed anything that this county produced, the pea crop being nearly a failure last year. The Daniel O'Rourke, I believe, will yet occupy an important position in the hands of our best farmers. It requires better cultivation than the Golden Vine, as it only produces about two-thirds or three-quarters as much straw. It, however, yields more per acre, is a surer crop, and commands a much higher price in the market than the common pea. It is a quick grower, ripening about twenty days earlier than the Golden Vine, and on this account is less liable to suffer from the effects of drought.

I have not been able to discover any traces or marks of the pea weevil in this variety, but of course it needs longer experience than mine to establish the fact of its immunity from this pest.

WM. R. DEMPSEY.

Albury P.O., County Prince Edward.

How to Use Super-Phosphate.

We have inquiries from several subscribers on this point, and as there are several ways of using this material with different crops, we propose to give an article that will answer all at the same time.

For grain crops, as barley, on which super-phosphate produces a marked benefit, there are two ways in which it may be applied, either sown broadcast like plaster on the soil, at the time of seeding, and harrowed in with the seed, or on the crop after it is up, and before the young plants have become too far advanced—say when they are an inch or two high.

For potatoes, we should apply it in the drills or hills, either at the time of planting the seed, by dropping it along the furrow, or in the hill at that time; or, shortly after the plants are through the ground it may be strewn over them.

For root crops generally, it is best to apply by sowing it along the drills either at seeding time or very soon afterwards, except with turnips, with which crop it is usual to apply part of the super-phosphate, (say two-thirds) in the drills at the time of covering in the manure, and the remainder is reserved to be dusted on the young plants as soon as they appear, in order to quicken the growth and keep off the turnip fly.

For Indian corn, field beans, or squash, it is usually applied in the hill, mixed with an equal bulk of unleached ashes, and given at the rate of a handful of the mixture to each hill, as soon as the plants are an inch or two high.

On grass or clover, sow broadcast, about the first to the middle of May, in the same manner as plaster is usually applied.

For garden crops it is best to apply by incorporating it with the top stratum of the soil by sowing thereon as soon as it is forked or spaded over, intermixing by means of a hand rake when making the beds. Afterwards some more may be given by dusting it over the young vegetables soon after they come up.

As a general rule it will be found that from 100 to 200 lbs per acre will be sufficient for field crops; more is sometimes given to turnips, but as the effects of superphosphates are not permanent in the soil like bone dust or ground bones, it pays better to apply some each year to the crops intended to be benefited, than to put on a large dose at one time. It is soon dissolved by rain, and what is not taken up by the roots of the plants, in their early stages of growth is apt to get washed beyond their reach before the end of the season.

Remove all obstructions to the mowing machine from the meadow before the grass gets sufficient start to hide them from view. A day's work on the meadow now will save a good deal of vexation at haying time.