

How to make Superphosphate.

W. Taylor wishes to know how to dissolve bones for manure.

The usual way with manufacturers of superphosphate is to burn the bones till they are calcined and brittle, grind them to powder, and then add sufficient sulphuric acid to dissolve the mass. This, however, while it greatly cheapens the cost of producing superphosphate, lessens its value more than one-half, as the juice and gelatine in and on the bones, which form an essential part of their manurial value, are driven off by burning, and nothing but the mineral elements remain. Bone dust is the ground bones without the sulphuric acid added, and would be equally, if not more valuable than superphosphate, if they were very finely ground without being first burned.

A home-made article of greater value than much of the commercial superphosphate may be made by breaking up the bones as small as can be conveniently done. When broken, place them in an old box or barrel, add to them half their weight of sulphuric acid, and cover up to prevent the fumes escaping during the process of dissolving. Stir daily for two or three weeks after. When the whole mass has become soft, and the bones dissolved, which takes some time, add sufficient dry muck, sawdust, burnt clay, or other absorbent, to render the mass friable and dry enough to be easily applied to the land, which is generally done by drilling it in with the seed when sown; or, if applied to grass or grain crops, by sowing broadcast like plaster. One hundred pounds of the home-made article will go as far as, and prove of more value than two hundred pounds of what can be ordinarily bought from the manufacturers. Bones may also be rotted, as it were, by covering them with a heavy coat of unseasoned wood ashes, and sprinkling water or urine over the heap; or, still better, putting them into a hole in the ground and keeping them soaked with the drainings from the barn yard.

Gas Lime.

"Grantham" enquires the value of gas lime, or the refuse from gas works, as a manure, and if it would be suitable as a top-dressing for wheat, or grass lands, and as a manure for turnips; also what quantity per acre should be applied. Gas lime, when obtained fresh from the gas works, is strongly alkaline, and is also caustic, so that its application is destructive to vegetable life. If composted with other manures it destroys their value. It contains properties that are poison to vegetables, but after being exposed to the action of the atmosphere for some time, its properties become in a measure entirely changed, and it may then be used as a top dressing to grass lands, on which it is said to produce a good effect, as,

in addition to lime, it also contains a large proportion of gypsum. In England it has been applied to grass lands at the rate of four tons per acre, put on in winter, or before the spring rains come on, and is said to have given great vigour to grass in old pastures, while on hay it increased the crop both that season and the next.

Applied at the rate of eight tons per acre it was found to entirely destroy and prevent all vegetation for three years successively. It might be used to advantage in this way on land badly infested with Canada thistles, or other weeds that are difficult to extirpate. It would, we imagine, be very unsafe to use it as a top-dressing for wheat, or as a manure for turnips, unless, indeed, it had been so long exposed to the air as to lose all its caustic and deleterious qualities; and all the good qualities it contains can, we think, be obtained to more advantage, and at less risk and expense, in ordinary lime and gypsum. It is said to contain some other substances that, on exposure to atmospheric influence, become valuable as plant food. But what these substances are we cannot discover, and should be very cautious in applying gas lime in any form to our field crops.

Salt for Crops.

"A Constant Reader" sends the following queries, which, before offering any reply, we submit to our readers, that those who have used salt on their crops may state the results of their experience:—

- 1st. What variety of soil is most benefited by an application of salt?
- 2nd. What quantity of salt is it most profitable to apply to an acre?
- 3rd. What variety of crop is most benefited by salt?
- 4th. What is the best time to apply salt to land?
- 5th. Ought it to be applied alone, or ought it to be mixed with, say, plaster or ashes?

The *American Farmer's Magazine* says the question with regard to timber is no longer how to get rid of it, but how to get enough to supply our wants. It thinks the motto should be, "Preserve the forests, and set out young trees."

A correspondent of the *Journal of Agriculture* says he finds his clay loam ground increased more in productiveness by the use of eight bushels of salt to one bushel of plaster to the acre, than from the application of animal manure. Others have been equally benefited by the application. Perhaps a judicious mixture of both would secure the best results.

Mr. Dempsey, of Abury, county of Prince Edward, states that from ten bushels' sowing of Dan O'Rourke peas, he harvested, last season, one hundred and forty bushels. This

is the first that he ever grew of them, and he feels safe in recommending them to every farmer. From 36 bushels' sowing of Golden Vines, he only harvested 70 bushels. Last season was not very favourable for peas, and many crops were not harvested in that season.

COLOR OF EARLY ROSE POTATO.—The colour of the Early Rose Potato is a dull blush or rose-colour, not "bluish," as printed in your recent issue. The printer has been equally unfortunate in our friend Mr. Simmers' catalogue of seeds, who has it of a "dull black" colour. Similar mistakes occur in many other published descriptions of this potato which have come under notice. J. F. C.

L'Original.

CHINESE YAM.—We have received several letters of enquiry recently respecting this esculent. It appears that a communication on the subject, in the last volume of the *CANADA FARMER*, has been copied into a work entitled "How to Make Farming Pay;" but we judge from the tenor of the enquiries addressed to us that neither the name of the writer nor the editorial note appended to the communication has been given in the extract. We distinctly disclaimed any endorsement of the extravagant laudation in which the writer indulged, and we would now add, as a further caution, that we have since learned that this champion of the Chinese Yam is also a vendor of patent medicines!

POTATO SETS.—A correspondent in the *Country Gentleman*, in an article on potato culture, has the following sensible remarks: "I have noticed several articles in your columns lately in regard to size of seed. The question appears to be, shall we plant large, small, cut or uncut seed. There is almost always too much seed planted—too many eyes to the hill. We might as well expect to raise large ears of corn with ten or twelve stalks to the hill, as large potatoes with the same amount of vines in a hill. I have tried every way of seeding, and with me the best is to select large, smooth, well developed tubers, discarding deep-eyed and prongy specimens, for I believe in potatoes, as well as in other things, "like begets like." This is best done at digging time. Put them away by themselves. I have found it best to bury (for if put in cellar the temptation to use them is great), and not open until planting time. I then know that I am all right as to seed. Cut them to one eye in a piece, and put but one piece in the hill; plant in drills three feet apart, and hills eighteen inches apart in the drills, and at digging time you will find but few small potatoes. On no account plant the very small potatoes. Cook them and feed to the hogs. I believe that the main cause of potatoes running out is planting small or medium seed, and continuing it year after year.