

lowish and very poor. And as for the turnips, (and they were well worked,) not one grew bigger than a good sized potato. Can they not be used advantageously?

Is bone dust equally good for carrots and turnips and mangels? Kindly say where the dust can be had, and at what price?

Your kind attention will oblige,

Yours respectfully,

ROBT. MACAULAY.

HAMILTON, January 1862.

REMARKS.

The ashes of plants differ materially in their composition, not only as regards the various species, but also the same variety of plants will yield ingredients, in different proportions, according to the nature of the soil, the mode of culture, and the character of the season. The manuring power of ashes, therefore, cannot be estimated by any fixed standard. Wood ashes always contain a considerable amount of carbonate of potash, lime, &c., and are consequently very beneficial to such plants as require large quantities of these alkalies, such as Indian corn, turnips, beans, and potatoes. *Leached ashes* have lost much of the principal alkaline salts, and have been deprived of the greatest part of their most important soluble ingredients; still they must not be regarded as an unimportant fertilizer, as the lime and other mineral matter which they contain is always more or less beneficial to the soil. Unless the land is well worked and contains sufficient *organic* matter, we should not consider ashes, whether leached or unleached, as alone adequate to the production of a good crop of wheat, turnips, or corn.

Leached ashes we should recommend, as a general rule, to be used as a compost, or with other materials abounding in the organic elements; that is, containing vegetable and animal matter.

Coal ashes rank much lower in the scale of fertilizers than those derived from wood. Their chief value as a manure consists in the quantity of earthy salts they contain. Especially sulphate of lime, and more or less of the phosphate of magnesia. After all, their mechanical action on certain soils is, perhaps, more beneficial than their chemical, particularly on very heavy, adhesive soils, destitute of lime. In such soils coarse coal-ashes, when applied in considerable quantity, and thoroughly incorporated with the

soil, by deep ploughing or digging, tend very much to lighten it, by permanently opening up its pores, and thereby affording free admission of air, heat, and moisture. On very light soils, which are naturally too loose and porous, the action of coal ashes may prove positively injurious, by giving greater intensity to these qualities. This may have been the case with our correspondent, who does not state whether his soil is stiff or light, nor its condition in relation to organic matter. We should certainly not recommend the application of coal ashes to light, hungry soils, except, perhaps, as a top dressing for grass or clover.

Bone dust may be relied on as an excellent manure for turnips, carrots, mangels, &c., and it possesses great value as a dressing for most of the cereal crops, particularly old pastures. The most reliable and economical way, perhaps, of using it, is in a compost with other things,—such as farm-yard dung, shes, rotten leaves, scouring of ditches, &c. It would be well if a bone mill was erected in the vicinity of all our principal towns and cities, as the quantity of manuring matter lost from this neglected source alone is beyond all calculation. Mr. Lamb, of Toronto, has had a bone-mill in operation for several years, and many of his customers, we happen to know, have been well satisfied with the result of their trials. Mr. Lamb's prices are 50 cents per bushel, crushed coarsely; and 60 cents for half inch and dust. He allows 15 per cent discount on all orders of not less than \$100. We will shortly take up the consideration of the matters involved in our correspondent's communication more in detail.

The Agriculturist.—Correspondents Wanted.

EDITOR OF THE CANADIAN AGRICULTURIST.
—Dear Sir,—I have just received the last number of the *Canadian Agriculturist* for 1861, and I must say that I am highly gratified with its improvement, especially for the last year, therefore I do not hesitate to say that it stands not No. 2 to any of the American Agricultural papers that we get from our neighbours. But there is one feature lacking, namely, a greater amount of correspondence, which I frequently hear you complain of. If this could be obtained it would add much to the popularity of your valuable paper. I think the cause of this must be the high postage. Men do not like to give