charcoal, mixed with potatoes when storing, provided they were sound and dry when putting up, would tend to preserve them from the rot.

SIR,-In a late number of your valuable Gazette, you describe the plan by which a respectable gentleman saved a pit of potatoes from rotting, which was by means of peat charcoal sprinkled among the tubers in the pit; while two-thirds of other two pits of the same sort, lifted at the same time, and treated in the same way, excepting the charcoal not being used, were rotten. As to the good effects of charcoal from wood, in preventing discase among potatoes, I can bear ample testimony; and I think this a matter which should not be lost sight of. For two years, I have had a large border cropped with Early These Frame and Prince Regent potatoes. were planted with charred brushwood, and I believe not two dozen diseased tubers were found amongst them; while those planted without charcoal were very much diseased, especially where dung was made us of. had a border of potatoes planted with soot as manure, which grew very luxuriant, but was very much diseased. In planting with the charcoal, no dung was used. The sets were planted in drills across the border, two feet apart, and eight inches in the drill, with a large handful of charcoal laid carefully above each set; then covered with the mould in digging, to the depth of four inches. It is a generally ascertained fact, that damp is a promoter of the potato disease, proceeding from a cold, retentive soil, or from a cold, still, damp atmosphere ; and, as charcoal has a great affinity for damp, being placed above the set, the collar of the stem, which is commonly attacked by the disease before it descends to the tubers, has to pass through the charcoal, and hence the superabundant moisture is absorbed by the charcoal, and afterwards, in dry, clear weather, sucked up by the spongioles of the fibrous roots, in due proportions. I had a quantity of potatoes last year pitted in the ordinary way; there was very little disease among them when put up. When the pit was opened for a supply, about a month hence, a fourth part was found to be quite rotten, and many tainted. The bad were all picked out, and the good laid on a thick bedding of coal cinders, and along the centre, a row of large flower pots, filled with dry, slaked lime, covered over with slates. This had the desired effect in drying the potatoes, and preventing any further decay. Lime is a first-rate absorbent of moisture. Around the flower-pots the potatoes were as if they had been dried on a kiln. Boarded floors, raised a little above the ground surface, so as to allow a strata of air to pass below, and up through the tubers, have been recommended, as also a row of drain tiles along the centre of the pit. Admitting air from

both ends, which pass upwards through the potatoes, and thence to the exterior, by vents of straw, vents along the centre of the ridge of the pit, charred faggots of wood or charred peat, forming, as it were, a drain along the centre of the pit, among or below the potatoes, and left open at both ends, with a series of straw, vents, 1 think would be of great service.

TO THE COMMITTEE OF THE AGRICULTURAL MUSEUM, ROYAL DUBLIN SOCIETY.

GENTLEMEN,-During the last twelve months there have been various and contradictory opinions published as to the advantages that would result to the Irish farmers from cultivating the sugar beet; and in the course of last spring, 1 was requested by several farming friends to try some experiments, and ascertain, as far as I could, the relative merits, as an agricultural crop, of the sugar beet and the commonly grown varieties of mangel wurzel. I have done so with all the care I could; but extended my experiments to several other roots crops; and as I will exhibit these roots at your show of farm produce, I consider that it is to you I should address a statement of the results I have obtained.

The land upon which I grew the different root crops which I shall exhibit, is an alluvial deposit of a darkish colour, varying from six to twelve inches deep, resting, in some places, on a subsoil of waxy, blue clay, in other parts on sand, and again on yellow clay and gravel, worked together so as to be perfectly impervious to water. The whole field (nine acres, Irish) produced a crop of oats last year; and immediately after the oat crop was removed, about three acres were ploughed, harrowed, and the weeds picked off, again cross-ploughed and harrowed, and the weeds picked off perfectly clean; the ground was then marked into ridges seven feet from centre to centre, and about thirty tons of good dung per acre laid on, which was ploughed in. This ground was sown, in spring last, with carrots and parsnips; that part of it intended for mangelwurzel was merely ploughed in November, harrowed in March, and the weeds picked off, cross-ploughed and harrowed, and again the weeds picked off, then marked into ridges the same width as before stated, and ploughed, when about forty tons of dung per acre were laid on, and covered with the spade and shovel from the furrow. The carrot ground was merely turned over and harrowed in March, and the furrows dug and shovelled on the ridges.

The parsnip were dibbled in the first week in March in rows, across the raised beds, eighteen inches asunder, and nine inches asunder in the rows. The carrots were sown first week in April, in rows fifteen inches asunder and eight inches asunder in