

dition. Every farmer should have under cultivation more or less of these crops, which now become an absolute necessity in any system of farm improvement. The relation between stock, grain and roots is every day becoming more apparent and important; constituting as it does, in connection with thorough culture and drainage, the soul of modern husbandry.

Salt and Lime.

Since writing the remarks on salt in reference to the enquiry of a correspondent on another page, we observe from an American exchange that that article is sometimes profitably applied to the States to field crops, particularly old mowing or pasture lots, where the grass is, as it is termed, "running out." The quantity sown and cast in its crude states, varies considerably, from three or four to as much as twenty bushels per acre. It is said to be effectual in killing worms and insects, when applied in the doses; that is at the rate of twelve or sixteen bushels to the acre. Thus applied it will kill weeds on garden walks, and on asparagus beds, and the asparagus itself will be benefitted. The care however is necessary in applying it to growing crops, for if used in too large quantities it will injure or destroy them. We remember many years ago seeing a strong solution of salt applied to pasture land, in England, which apparently destroyed the vegetation through the summer, the surface appearing perfectly barren as in a severe drought, but the rains of autumn awakened up the grass, which soon put on its usual green livery and grew luxuriantly; both cattle and sheep preferred that part of the field, which had been salted, to any other for a year or two afterwards. In Upper Canada, which is considerably removed from the direct influence of oceanic influence, it is reasonable to think that the action of salt will be found more powerful than in situations lying contiguous to the sea.

We notice in a recent report of an English Agricultural Society, that one of the members had been in the habit of dressing land intended to be sown with wheat in the fall, with a manure made of a ton of lime to half a ton of salt, mixed together some weeks before it was used. He had applied it after summer fallow

for a long period with marked and invariable success. Whenever he was afraid of a crop of wheat going down, he always applied this dressing, which had always secured a good crop of clover; generally ploughed the land, and then applied the manure to the surface. The lime and salt should be mixed some time before they are used, for the more completely they amalgamate the better. The mixture stiffens the straw, and prevents it going down by heavy rains, while it increases the quantity and improves the quality of the grain.

Preparation of a new Artificial Manure.

We find in a recent number of the "*Journal de la Societe Centrale d'Agriculture de Belgique*," the details of manufacturing a very powerful artificial fertiliser, from which we condense the following facts for the benefit of our readers. The experiment was made on the property of M. De Bryas of Saint Florent, in Belgium, and the result is said to have far exceeded his expectations. He threw into a pit containing about 2000 hectoliters, and which communicated with another pit capable of holding 500 hectoliters, a dozen of dead animals, horses, oxen, &c.; two or three thousand oilcakes, a quantity of concentrated sulphuric acid, and 400 kilogrammes of vitriol of iron. This having been well mixed up, and then allowed to lie, formed so powerful a manure, that by using 300 hectoliters of it to manure a hectare of land, a very rich crop has been produced, although it had not been manured for three years.

Subsequent experiments appear to demonstrate that this artificial manure will extend over a surface eight or nine times greater than the same quantity of ordinary stable manure would; and the effects produced on vegetation are far more important. In all large cities the amount of fertilising matter that can readily be obtained from dead horses, and other animal substances, is considerable, which is too often allowed to run to waste and occasion much annoyance and positive mischief, instead of, as it should do, go to the increase of garden and field crops.

One of the tunnels on the Baltimore and Ohio railroad is lined throughout with cast iron, and lighted with gas.