

ing, and also from that nitrogen which stands at their disposal in humus soils and moorlands.

The knowledge that the immeasurably great and inexhaustible store of nitrogen of the air can be rendered accessible, either directly or indirectly, to all farm plants, and the knowledge that phosphoric acid and potash are, as it were, the entrapppers for the atmospheric nitrogen, phosphoric acid and potash being the means of opening for us the storehouse of nitrogen of the air and of moorlands. It is such knowledge which has gained for the potassium salt deposits of Stassfurt, for the calcareous and soluble Thomas phosphate, and for the products of the superphosphate factories an importance which we could not even anticipate; and if it be true that the store of combined nitrogen existing in form of Chili saltpetre, in the west of South America, will cease to exist within a conceivable period, then we ought to look with true consolation.

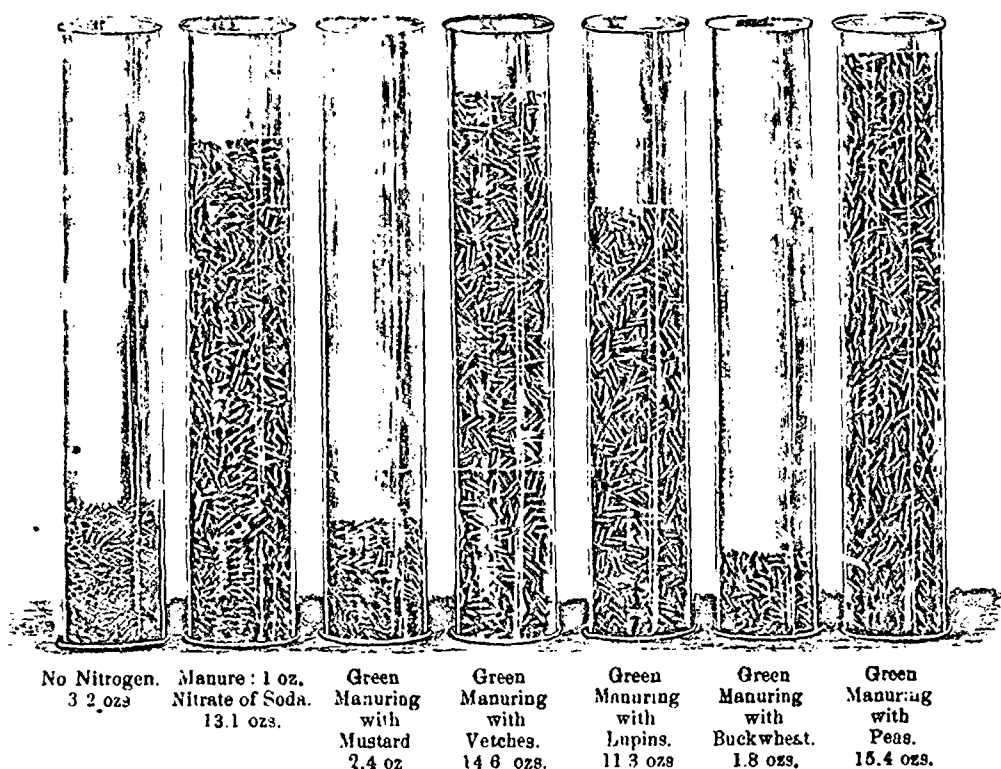
## POTATOES.

From all I hear, I am inclined to think a great breadth of land will be planted this year in potatoes. As it is some time since I wrote extensively on this plant and its cultivation, it will not seem, I trust, to be going over old ground again superfluously if I give some general ideas as to the preparation of the land and the selection of seed likely to answer on the various soils of the province.

*Soils*—The potato is not a tuber adapted to heavy clay soils: sandy loams; black, peaty land, if limed, suit it better. Good crops of fair quality may be grown on heavyish loams, if large dressings of strawy farmyard dung be used, accompanied, or, rather, followed by constant cultivation, both with horse- and hand-hoe, until the haulm is too far advanced to allow the passage of the implements without damaging it.

According to the modern German theorists, nitrogen is of

TABLE V.—GREEN MANURING EXPERIMENTS WITH OATS.—YIELD OF THE CROP.



ation on the still inconceivably large potash deposits, and on the phosphate mines, and on the phosphate lying in phosphoriferous iron ore which is placed at our disposal in form of Thomas slag; for with the help of these we can open up the inexhaustibly rich storehouse of nitrogen of the air and the rich stocks of nitrogen of moorlands.

With this I terminate my remarks on the question:—How is nitrogen to be obtained as cheaply as possible?

(To be continued.)

## Nitrate of Soda

The price of nitrate of soda this year, Mr. Evans, McGill Street, Montreal, tells me he cannot put lower than three dollars a 100 lbs., in bags of 300 lbs. each. A. H. J. F.

no service to this crop: according to the English practical farmers, it largely increases the yield of tubers, though, as one would naturally expect, heavy dressings of nitrate of soda, or of sulphate of ammonie, tend to increase the effects of the disease if it attacks the crop at all. For my part, I would always aim at ten tons an acre, and run the risk of the disease and its effects.

Potash, as I have often had occasion to observe, is comparatively useless unless it be applied to the land the previous autumn; in which case there is a great chance of its being washed away by the spring-thaws. For, potash takes a long time in the ground to become fit for plants to feed on, and as our spring-work rarely begins before the end of April, or the first week in May, it stands to reason that potash, if applied then, cannot be available soon enough to benefit the potatoes. Besides, if land is freely manured, and anything like a regular rotation of cropping is pursued, on all except the utterly worn