

**MANURING OF SEEDS BY STEEPING IN SALINE SOLUTIONS.**—The attention of Scotch agriculturists was first directed to this subject by Professor Johnson's paper in the January number of the *Journal of Agriculture*, and by a notice of Mr. Campbell's experiments in the *Transactions of the Highland Society*, appended to the same number. These statements, particularly the latter, produce considerable sensation; and many farmers purchased small quantities of the salt and applied them as directed, for the purpose of effecting their way towards a more extensive use of the steeps.

Feeling considerable interest in anything that promises to add to the resources of the cultivator of the soil we have visited a good many of the localities where steeped seeds were sown, and shall continue to visit them at intervals during the summer, keeping a record of the progress and appearance of the experimental plots. It is only after harvest, when the actual weights have been arrived at, that we can speak with certainty concerning these important trials; yet occasional notices of the appearance of these experiments will prove interesting to our readers, and, we trust, influence others at a distance to send us statements on the same subject.

Up to the present time, we have been unable to perceive the slightest difference between the appearance in colour, vigour, or advancement of the braid from steeped seeds, and that from unsteeped seed. The weather which for a month has been unusually cold and dry, will no doubt amount for this. The braid from steeped seeds is decidedly thinner in plant. This may be owing to some of the seeds not having vegetated; but we would rather attribute it to the circumstance that a smaller allowance of seed per acre was sown, to afford room for growth and tillering.

Without anticipating the results of these experiments we shall now notice some mistaken notions and exaggerated expectations that are abroad, and which, he the result as it may, cannot too speedily be checked and rectified. It is a general expectation with many that these steeps are to render all manure unnecessary. Mr Campbell says—"The discovery of a process by which the cereal and other granineous seeds might be obtained in extraordinary abundance, without the use of manures, is certainly a great desideratum. Now this desideratum, however strange it may appear, I have good grounds for considering I have attained." And again in his circular he says—"In this discovery is actually realized the boast of science, which some years ago prophetically asserted, that the time would soon come when one might carry in his pocket matter sufficient to manure an acre of land." Nothing can be more fallacious or unwarranted that the conclusion, that a small quantity of a saline solution absorbed by a seed can substitute, or come in the place of, manure. If the steep does anything at all, it is to enable the plant to draw more largely on the air and on the soil. So far as it draws more largely on the air, there is manifest profit and advantage. The air is common property—the air cannot be exhausted, but it is not so with the soil; and just by as much as the steeping enables the seed to draw more largely from the soil, by so much is the soil impoverished, and rendered less fit to minister to any succeeding crop. Should it turn out that the saline steeps give to the plants, greater development and feeding powers, it will be a great point gained; a power, however, that will require to be used cautiously, and with discrimination. By steeping, a saving of seed will be effected, and a larger crop secured from land in good condition, or that has great resources; but the farmer must not dream of the same thing on poor land, far less the continuance of successive good crops with the use of no manure but the steeps. In favourable circumstances, then, it may not be altogether chimerical

to talk of carrying in one's pocket the salt necessary to steep seeds for an acre of land, but to those sanguine persons who would combine a continuance of the practice with the use of no other manure, we would give the old caution, "take care lest the pocket that carried out the manure prove capacious enough to carry back the crop."

When next we notice the progress of these experiments, we shall show, by tabular statements, how large a quantity of inorganic matter, which can come from no source but the soil, is carried off in crops, and lost to the land, unless restored or replaced in the shape of manure.—*Scottish Farmer.*

Weight of a bushel of the following manures:—

Agricultural Salt,.....	lbs. lbs.	Rape Dust,.....	lbs
Bone Dust,.....	75 to 80	Saltpetre,.....	50
Guanu,.....	42 to 43	Soda Ash,.....	80
Gypsum,.....	65	Sulphate of Ammonia,.....	60
Muriate of Ammonia,.....	80 to 84	Do. of Soda,.....	60 to 70
Do. of Lime,.....	65 to 70	Urite of the London Ma- nure Company,.....	50
Nitrate of Soda,.....	80		
Do. of Salt,.....	75		
Garden Mould, a cubic yard	Weight,.....		cwt. qrs. lbs
New Dung,.....	10		3 25
Compost Dung, Muds and Lime once turned over in nine months,.....	9		3 10
Water,.....	14		0 5
	15		0 3

*Cuthbert Johnston's Fertilizer.*

Plants planted at certain distances, contained by a square perch of land, (30 $\frac{1}{4}$  square yards:—)

Inches asunder	No. of Plants.	Inches asunder	No. of Plants
4 by 4	2450	8 by 8	612
5 by 4	1950	10 by 8	490
6 by 4	1623	10 by 10	392
6 by 6	1069	12 by 12	272
8 by 6	816	15 by 10	261

We have often of late had heavy showers without any marked indication from the barometer of what was coming. "What can be come over my glass," said a simple village swain, it has no effect on the weather at a' now!"

In youth we are, unless some very peculiar circumstances control us, friendly, affable, and magnanimous; an indubitable evidence that *the man is good*. The *inner* man, like the negro, is born white, and it is only in course of life that it is coloured black.

Gold is 0.06 percent. dearer in London than in Paris; and 0.69 percent. dearer in Hamburgh than in London.

A festival in honour of Burns took place near Alloway Kirk on the 1st of August, under the auspices of the Earl of Eglinton.

*M. Arago says the atmospheric pressure principle* may be so applied as to ensure safe transit at the rate of six leagues a minute.

Four things are required in a wife—virtue in her heart, modesty in her face, gentleness in her lips, and industry in her hands.

A man who gives his children a habit of industry provides for them better than by giving them a stock of money.

You may sooner expect a favour from him who has done you one already, than from him to whom you have done it.