

Is Salt of any Value as a Fertilizer?

In another column will be found an article under the above heading, from the pen of one of our regular contributors, Mr. Julyan, of Sarawak. It is a question of great importance to agriculturists, and as such has engaged the attention of agricultural writers in every country where the tillage of the soil has been considered as a science and not merely as a business to occupy the hands only, and not the minds of men. We have had inquiries from subscribers on the subject from time to time.

Much has been written and many arguments advanced for and against the efficacy of salt as a fertilizer, and many as well as Mr. J. entertain grave doubts on the subject. We might easily increase the list of authorities cited by him against its fertilizing efficacy, for many have answered the query in the negative. But if other authorities of at least as high standing hold opinions directly contrary, what then?

For hundreds of years have the farmers of England considered salt a fertilizer. This is itself a strong testimony in the affirmative. In 1658 Sir Hugh Platt speaks of salt as a fertilizer. Pretty early testimony this from an English agriculturist! At a later period—one hundred and fifty years ago—Dr. Brownrigg maintained that the whole kingdom might be enriched by the application of common salt to the soil. From the time of Dr. Brownrigg to the present day salt has been recommended as a fertilizer.

It were easy to multiply authorities, but we must confine our remarks within circumscribed limits. We would, however, not be doing justice to the subject were we to omit the enumeration of the uses of salt by Mr. C. W. Johnson, in the Farmers' Cyclopaedia. An abridged statement of them follows:

1. Salt in small proportions promotes the decomposition of animal and vegetable substances; and, when properly used, enables land which has been deteriorated by one crop to bear another with advantage.
2. It destroys vermin and kills weeds, thus converting them into manure.
3. It is a direct constituent or food of some plants, and it has been ascertained that if salt be applied to a soil, the vegetables afterwards growing on that land will contain an increased proportion of salt.
4. Salt acts on vegetable substances as a stimulant. It was proved by actual experiment that a large proportion of salt dissolved in water caused plants placed in it to die, though at first they seemed to flourish more than in simple water, and that those placed in a solution of only moderate strength continued to live after those in the simple water had died.
5. Salt preserves vegetables from injury by sudden transitions in the temperature of the atmosphere. Thus salted soils do not freeze so readily as those without salt; salt preserves crops of turnips, &c., from injury by the frost.
6. Salt renders earth more capable of absorbing the moisture of the atmosphere, a property of great importance, since those soils which absorb moisture freely from the atmosphere are always most valuable to the cultivator.

We entirely agree with Mr. Johnson in his plain statement of facts so patent to all observant agriculturists, and in the proofs adduced by him. But it is well to enquire what has been the experience of practical farmers on this subject; not that the writers whose testimonies we have adduced are mere theorists, but because we are always desirous to know what have been the results of experiments of men who have themselves applied the fertilizer and closely observed its effects during the

growth of the plants to which it had been applied, and carefully noted the results in the yield. From such farmers we have had the opportunity of learning the results of their experience in this matter, and their authority is corroborative of my own experience. Mr. F., a well-known agriculturist of Dover Township, applied to a field of wheat a dressing of salt, and the crop was much heavier than his other wheat crops on land of equal quality, and the grain was superior. Mr. H. A., one of the most practical, observant members of the Middlesex Agricultural Society, has had like results from the use of salt as a fertilizer. With both the wheat to which the salt had been applied was less liable to be lodged, the straw was stiffer, and the grain of a superior quality. Mr. T. E., who had many years' experience in England, found salt a good fertilizer, and his opinion is that here its value would be greater than there, this province being so remote from the sea. The members of Forest City Grange have been considering the bringing from the salt district of Huron salt for agricultural purposes.

We have compressed our remarks on this subject within as narrow a space as possible; we desire to be brief and succinct. Judging from such authorities as we have selected from a host, and from the experience of good farmers, we can have no doubt that salt is of value as a fertilizer. It is true its application to land has sometimes resulted in disappointment. Sanguine men have made large trials of it on their farms, indiscriminately. An instance of such disappointment is not of sufficient force to overthrow the testimony borne to its beneficial results.

Is salt of any value for the destruction of vermin? we intend to make the subject of an article in a future number of the *Advocate*.

The Horse Hoe—Thorough Cultivation versus Weeds.

The average yield of the wheat fields of England is almost thirty bushels per acre. In not a few instances the yield is fifty bushels, sometimes still higher. The average yield in Canada is ten bushels lower than in England. In the United States the average is under thirteen bushels. This difference may be in part attributed to the climate, but only in part. To the soil it is not attributable. What, then, is the cause of this short-coming of the produce of the wheat fields of America? In England the farmer aims at thorough cultivation. In America the farmer's great aim is to go over a great number of acres, and that at little expense. In the former the crop is cereals, not weeds; in the latter weeds are permitted to occupy the most fertile fields, and thrive on the plant-food of the grown crops.

Keep at work the hoe and cultivator—we said in a late number of the *Advocate*. This is a rule with the farmers there, when the principles of farming are understood and acted on. A member of the Ixworth Farmers' Club (E.) says: "Some people thought the time had come when they ought to be able to go over their fields after they had been hoeing, and not see a weed upon them, and he did not see why it should not be the case. 'If the work was done well the men ought not to leave a weed behind, and if they did they ought not to be paid.' When shall we here wage such exterminating warfare with weeds!"

THE HORSE HOE.

For thorough cultivation, whether the crop be roots or cereals, no agricultural implement has proved of greater utility to the farmer than the horse hoe, and this implement has been so improved by the united ingenuity of farmers and mechanics, that it is now considered as good as can be desired for the thorough pulverization of the soil

and eradication of weeds. A practical English agriculturist says: "By means of this horse hoe I 'make a clean deep fallow among the growing crops, and oblige the plants to send down their roots into the ground subsoil, thus rendering it more open, and reserving the surface for the completion of the latter growth. We make 'tire strangers of all noxious weeds, admit the ameliorating influence of the atmosphere, the sunny warmth and the moist, refreshing mid-night dews. It is the unobstructed growth of weeds, favored by dense vegetation, that so exhausts the soil, while the absence of light and 'air causes the earth to be poor and sour.'"

The hoeing between drills is a natural consequence of the sowing or planting of crops in drills; hoeing being an essential element to drill culture, and wherever drill husbandry has been the rule in farming, the horse hoe has been nearly coeval with the drill. Hand hoeing was found too tedious, too expensive to be long practised. Hand-hoeing an acre of grain crops will be two days' work for a good farm laborer, and then the work is not so thorough as it is when done by a good horse hoe. A good laborer, with the aid of a boy, a horse, and a good, light, steel horse hoe, such as are now used in England, can hoe from seven to nine acres a day, and that in a thorough, workmanlike style, at the expense of about fifty cents per acre.

THE ORIGIN OF THE DRILLING OF WHEAT, AND THE HORSE HOE.

In 1871 the drilling of wheat was introduced into England by a gentleman farmer of Berkshire, and every succeeding season has given additional proof of its advantages. Mr. Jethro Trull, to whom England is indebted for its introduction, spared no time or expense in the improvement of the drill, and to him is due also the credit of the invention of the horse hoe—both implements that have done more for the agriculture of Britain and the supplying her teeming population with food, the growth of her own soil, than it has been possible for any subsequent agricultural implements to effect.

The advantages of hoeing between crops in their early growth, well known as they are, cannot be too highly appreciated. In the climate of Canada, of which a leading characteristic is drought, the effect may be very great. To every observant farmer its immediate advantage is apparent. The stirring of the soil in the driest weather seems to give to the growing plants somewhat of the refreshment of a gentle summer shower. The newly stirred earth attracts a refreshing moisture from the atmosphere. We know not the law of nature by which this great good is effected, but that such is the result of our labor—this we know. And the soil, even if hard or stiff, is made mellow by the operation, and the plant food by this means is, being set free from the stubborn clods, more readily absorbed by the tender rootlets. Another, and not the least advantage is the entire destruction of weeds. They used to exclude the health-giving air and heat from the young plants, which, now that the hoeing has killed the weeds, have the entire possession of the soil.

So well convinced by the experience of many years are English farmers of the advantages of hoeing, that they consider every thorough hoeing to add to their wheat crop one bushel per acre, and the grain of better quality from the free admission of the air and light and heat to the growing and maturing crop.

Hoeing should be early—as early as possible; the sooner it is done the better. It gives an early stimulus to the growth, supplies available plant food early, and prevents the growth of weeds; whereas a late hoeing might disturb and injure the tender rootlets. Every farmer and farm laborer

is aware of the fact being an advantage, the soil is pulverized, be improved by hoeing people hold a different I speak from experience crops from potatoes must always be taken feeding organs of the have earth drawn to

Oil Meal

The query "What from a selected article Calves," in the last those who are unacquainted with the needed information experience in rearing them when matured doubt familiar with article of commerce. same seed as linseed it, and, in some districts Oil meal is oil cake of feeding purposes; linseed meal, ground, and a young stock, and a beast.

After the oil so well been extracted from sold for feeding purposes and is called oil cake use, is broken into fine It is considered by some other food for fattening the markets of Liverpool of commerce in England position oil cake commerce. For all the foreign countries the

When commencing quart of the meal in the evening is as much and after some time creased, but not to We have fed it dust and also, after having with bran mash. ter way.

There is no other ing cattle. It imparts mellow feeling to the value; and, much more cake is more tender better quality than food. Well do the loin appreciate the on oil cake.

Oil cake is also horses. It retains properties of the soil to promote and occasionally with the and is a preventative in any measure taken not strengthen or work. Its property up the condition. young stock.

The richness of putting on of flesh the cattle so fed. farmers lay a much other farm-yard the richer the food able the manure a

Linseed might be used here than it wise. In my o