

Artificial Manure.

Having heard of some most satisfactory results from the use of superphosphate, and being anxious to give more information about it, we paid a visit to Mr. Abbot's farm, near Brockville. Mr. Abbot is a real hard-working, industrious, saving man; he will not lay out a cent unless he feels sure of getting a good return for his money.

He purchases his superphosphate as other farmers do. He is highly satisfied with the beneficial results he has had. He commenced by trying a little; now he uses it extensively. He says he sees the most marked effect on poor land. Part of his farm is poor, hard and sour clay soil, and part is loamy clay.

We first visited a field of rye; the rye was cut and standing in the stook. Part of the field had been dressed with superphosphate at the rate of 500 lbs. per acre, and part had not been dressed; the part of the field on which the superphosphate had been used produced straw 12 inches longer and a grain of much better and heavier quality than the part which had none applied on it. We next visited a barley field, one part of which had received a dressing of superphosphate, and on this the barley showed a much more luxuriant growth than the part on which it had not been applied.

Oats and peas both looked more luxuriant where it had been used, but what appeared to us the most astonishing was a field of hay, part of which had been cut; on part of this field superphosphate had been used five years ago, and part had not been dressed with it. There was fully one-third more hay on the portion dressed with superphosphate. In another field the hay had been carried; in this field the aftermath was much closer and the stems of the cut grass much thicker on the part where the superphosphate had been used.

We saw potatoes raised from one dressing of superphosphate much larger than any we had seen this season. They were clean and smooth on the exterior, while some that were raised with barn-yard manure were badly scabbed on the exterior and not near as large. He weighed the potatoes from parts of the rows, and had 50 per cent. greater produce where the superphosphate was used.

Mr. A. considers the superphosphate will increase many of his crops one-third. We have heard of several other highly beneficial results.—It is a well known fact that superphosphate will aid us in restoring or giving fertility to much of our poor or worn out lands.

It is claimed for the superphosphate that we can enrich our land at a cheaper rate by its use than the cost of hauling our manure from our barns. We in the old settled parts of the country are under no dread of having to move our barns away from the manure heap, as formerly; we want all the manure of all kinds we can procure. Mr. Abbot informed us that he did not see so great an improvement on his crops on his rich or manured land as on his poor land. We would advise each one of our readers who has poor land that he wishes to enrich, to try one pound. Experiments should only be tried on a small scale either in seeds, manures or anything else.

We would suggest that you should practice a little chemical agriculture in this way this autumn: when you sow your wheat, apply one pound of superphosphate and two pounds of plaster mixed; put it on eight yards of land; sow it broadcast, and drag it in after the wheat is sown. To give it a fair trial you should leave a part of a ridge unmanured, and only sow part of the land with the superphosphate and plaster, and leave the other part of the land without any manure; also, a part of a ridge dress with barn-yard manure.

Then notice the difference in the crops—one with barn-yard, one with superphosphate, and one without any manure. The poorer the land the greater may be the results. If your own land is already rich enough, just apply a pound on some neighbor's field that you know needs manure and who has no spirit or energy to expend \$1 for the ADVOCATE or 20 cts. for a trial on chemical agriculture. The result of the one pound trial may be that you will be enabled to add that poor, worn out, dilapidated farm that is an eye-sore to you, to your own estate, and make its surface smile again with such crops as it never had yet produced, and such as will pay a handsome interest for the money invested. Mr. Abbot procures his superphosphate at the Brockville Chemical Works, which are located about five miles from his farm. We paid a visit to the Works, and shall speak of them in some future number. We suggested to Mr. Cowan, the manager, that he should give a pound of it to any farmer wishing to try it. He at once consented to do so if the parties would pay the postage on it. There are two kinds of superphosphate made, one ammoniated and the other not; the latter is the cheapest. Mr. Abbot uses the cheapest kind, and finds it answers his purpose.

Send to Mr. A. Cowan, Chemical Works, Brockville, Ont., or to this office, 20 cts. for postage on the superphosphate; you will have it freely given you; or call, without money, and take it and try it.

Visit to Scarboro' Township.

Having given you a few brief remarks about our trip to Europe and to the States, further accounts of which must be treated on in future numbers, we determined to see what our Canadian seedsmen are about. We therefore went to Scarboro' to see the seed farm of Mr. Simpson Rennie. This farm is situated about two miles from Milliken's Corners, a station on the Nipissing R. R., about 16 miles from Toronto. The land is of excellent quality in this vicinity, being rich, loamy clay. The farmers vie with each other in cultivating their farms; no poor farmer need go to settle there; he would be ashamed out of the neighborhood. The bad ones already there are gradually clearing out, leaving the place to those who have more energy, spirit and ability. In this section are the best plowmen; one does not see many crooked furrows on these farms.

Mr. S. Rennie is brother to Mr. William Rennie, of Toronto, and raises seeds for him. From what we saw, we would class him among the best farmers in Canada; his land, fences and buildings were all in good order, and his entire farm is thoroughly underdrained with tiles; Mr. Rennie is a no-kid-gloved farmer, but the real, practical worker. We found him in his barley field cutting barley; when we entered the field it showed quite a great contrast to any field we had seen. The barley was all so closely cut to the ground that it would be hard to find a stubble, except in a furrow, that would come up to the ankle.

The ground was smooth enough for a cricket ground. Quite a pattern of work, we found Mr. Rennie on the reaper. He had a first-class span of horses; his reaper was the New Kirby, manufactured by Mr. Harris, of Brantford. Mr. Rennie's aim is to have the best implement of any kind, and few farmers so thoroughly understand the reaper as he does. He knows the advantages of each kind and its disadvantages; the cutting and dropping the grain must be cleanly done, without waste of grain or power. He would not have some of the reapers made as a present; in fact, we saw what is generally known as a first-class reaper lying in his driving shed, discarded. But to have the best and do the best work is his aim. His barley was a very fine crop; he has it bound and set up as wheat. In plowing he carries off

Provincial prizes. In his carriage house we noticed his buggy, with extra back attachments, extra work and even a carpet-padded step.

Go on, Rennie! The farmers or Government have a task to teach you practical agriculture.

Mr. Rennie took us to see his crops of Fife and Egyptian spring wheat, which both looked well. The Fife was clean and pure; the Egyptian was well headed, but slightly mixed; it was his first year of sowing it, and he will make it pure. He had no fall wheat. His oats were Black Tartar—clean and an excellent crop. Some of his hands were cutting, or, rather, pulling peas; they were the Tom Thumb variety; these are raised for supplying the American seedsmen, as well as the Canadian trade. Mr. W. Rennie has several kinds of peas grown for him on other farms in this vicinity. The men were cutting the peas with the hand pea harvester. On enquiring, we learned they had tried the scythe, but the Tom Thumb being so short, the scythe wasted and shelled the peas, and left pods and vines on the ground; the hand pea harvester took them off clean. We enquired why he had not the harvester for attaching to his reaper, but he did not consider it yet complete.

Mr. Rennie is trying several kinds of potatoes, turnips, carrots, &c., on his farm. We saw many of the vegetables and roots which are growing for the Exhibition. You will hear of the awards. Many of you would like to hear how they are raised, but we must not weary you this time; we promise in a future number to give you a little information about that part of the business. Perhaps Rennie may be as mad as a hatter if we do, but we promise it to you, and you may rival him in years to come in gaining prizes.

When in this neighborhood we visited the farms of Mr. Hood and Mr. Gibson. Perhaps for a series of years Mr. Gibson can show practical results from thorough cultivation, draining, &c., equal to any other farmer we have yet visited. His farm deserves special attention, but we must not dwell too long on this subject this time.

Report of the Commissioner of Agriculture for the Province of Ontario, for the Year 1874.

We have, only within a few days, received the Report of the Commissioner of Agriculture for this province. Had we been in possession of an authoritative report, such as this is, some months ago, we would have made more use of its contents than we do to-day. The analyses of the crop returns (Appendix 9), of which we give a brief summary, are in the main confirmatory of the report published some months since in the ADVOCATE.

Statistical reports, such as crop returns, are really valuable when disseminated as soon as possible, when obtained by the Agricultural Bureau; as on them farmers and commercial men desire to base many of their operations for the ensuing year. This is understood and acted upon in other countries.

From the Report we give the estimated average of grain per acre, made up from returns of Electoral Division Societies to the Bureau of Agriculture, for the years 1871, 1872, 1873 and 1874, as follows:

	1874.	1873.	1872.	1871.
Fall Wheat	18½ bush.	22 bush.	18 bush.	27½ bush.
Spring Wheat	16½ do	15½ do	19 do	17½ do
Oats	38½ do	39½ do	33 do	37½ do
Rye	17½ do	19½ do	17 do	19½ do
Barley	30½ do	37½ do	38 do	30 do
Peas	24½ do	26½ do	21 do	24½ do

This Report of the estimated average of grain is not very encouraging; the average of grain in each of the four years given is low. The highest average of wheat reported in any year (fall and spring included) is little over 22½ bushels. That

year (1871) was especially fine of fall wheat. The average whose Report is now before bushels. The Canadian farmer much to contend with in winter, spring and summer, overcoming such obstacles is the agriculturist, and the can be, at least, partially re-

The analysis given can not than an approximation to only returns from forty-three whereas we should have leaving nearly one-half from ports; and the returns are expect something more definite of uncertainty from the B.

The returns are as follows:

Fall Wheat—Hastings V ton N., 30 bush. Three di seventeen divisions 20 each in the average. The light has brought the average Spring Wheat.—The high bushels per acre, from Fro N. Waterloo respectively, ton, 24 bushels.

Barley.—We have ret bushels from seven division sions the return is of each from twenty a yield is rep but less than 40 bushels.

Potatoes.—There are yield from thirty-four divi under 100 bushels, of fift six of 150. S. Huron and and N. Wellington 200 bu

Turnips, Mangolds and the yield was various, pr trast in different counties being of mangolds 1000 b carrots, 700; of turnips 600 bushels.

A great advantage to turns is that farmers may tion of the country to be able returns as those from great difference must pro that most probably not c not find the more south heaviest crops. Of the t yielding an average of 1 we not attribute the low to the farming? Many agriculture engage in it, earlier years in some oth

Something may yet be of the past season. The "noteworthy that the l "drier portions of fields "less from spring frosts, "tions, where the soil w "wetter, the crop was g "not a few instances ab the lower portion of field frost is owing in a great taining the water that sl by draining. Whether be injured more by frost draised than on dry soil. to injury in time of seve good in times of excessiv and on such land, manu wasted. One of the fir towards good farming is that lies stagnant in or moisture of the soil is suffering most from frost as that it is not the only