

### Seeding Wheat Stubbles.

Two years since I sowed forty acres of wheat in one field. The land was good, and had been chopped about five years. The wheat failed, being all eaten by midge, and I only sold about sixty bushels of poor thin stuff, from the whole forty acres. This, I thought, would not pay, and I determined to seed down the next fall on the wheat stubbles, with timothy. After harrowing the stubbles well both ways, I sowed the timothy seed at the rate of about six pounds to the acre. It all came up as well as possible, but was unable to stand the winter following, and some of it died. In April I sowed about six pounds of clover, and put up the fences to keep out cattle, determined to give the young seed every chance. It grew very well, and most of the timothy, that seemed dead in the spring, at harvest was three feet high, and yielded about half a ton to the acre. Labor being very scarce and hay plenty, I kept the forty acres for fall feed, and finer or better I seldom if ever saw. This fully repaid me the cost of seed. Next year I expect to see one of the largest as well as the best fields of hay in Western Canada. I have tried all ways for seeding, and would advise every one to sow timothy and clover in the spring instead of fall, as the frost injures the young plants.

To produce the very best quality of meadow on new land where the first crop of grain, from any cause, cannot be sown and seeded down in the usual manner, there is no better plan than to sow direct on the new land amongst the stumps, and after dragging the land to prepare it for the seed, sow, and harrow in with a bush, dragging it both ways lengthways and across. C.

### A Cheap Fertilizer.

Col. Daniel Needham recently made a speech in the Massachusetts Senate, advocating the passage of a law providing against the sale of adulterated commercial fertilizers by requiring that they shall be analyzed, and each barrel, box, or package be labelled, upon which label shall be printed a statement of the constituent parts of the compound, and the per-centage which each constituent part bears to the whole mass—a law, which, by the way, is demanded for the protection of honest manufacturers, as well as purchasers. During his remarks he said that a most valuable fertilizer could be made by taking four barrels of ground bone, one carboy of sulphuric acid, and one of ashes. He said that the expense of this fertilizer would be only about \$18 a ton, and that he had no doubt the fertilizer thus made would be as valuable as any purchased in the market for \$10 per ton. He stated the expense substantially as follows: Four barrels bone at two dollars and fifty cents per barrel, \$10; one hundred and seventy-five pounds sulphuric acid, \$25; two barrels ashes, \$2.50; total, \$17.75. The process of mixing, he said, was very simple. He would take the ground bone, and after wetting it thoroughly, allow it to heat, which it would do in a short time, then pour on the sulphuric acid, and afterwards mix with the mass two barrels of ashes.

### Upraising of Meadow and Pasture Lands.

The absolute upraising of meadow and pasture lands has often occupied the attention of those whose habits of observation have led them to attend to these matters. This is one great source of the drying up of lands after being cleared, that were quite wet and low previously. I have no doubt some of the readers of this article may question the fact of the upheaving, but if they will watch the gradual disappearance of stones whose heights are familiarly known in low meadows and pasture fields, they will no longer be sceptical on this point. An old friend once pointed out to me a certain stone weighing about three tons, that had gradually decreased its elevation above the ground, from three feet when first measured, to two feet when subsequently examined by me, after an interval of about nine years. He stated the fact as certain and well understood, but at that time it had been unobserved by me. Since then, (now about seven years since), I have often watched the gradual upraising or growth of wet low lands, and have been led to consider the probable cause. The fact once well established, and there is no doubt about it, we can easily apply it to our advantage. We all have noticed a certain piece of low black ash swale that was chopped some years since and left unlogged, on account of its being too wet and soft, and after allowing the natural grasses to accumulate into a tough sward, have often found that same piece of land, formerly so low and soft, now firm and comparatively dry, and it often proves, after being ploughed and worked, the most valuable portion of the farm. This growth or upraising of sod land is quite apparent in any garden, the borders of which are confined by nicely trimmed grass edges. In my own case, for instance, I am compelled to hammer and flatten with a heavy rammer all the edges down, every spring, and pare large portions off each side amounting to many wheelbarrow loads, to keep the turfy edges at all within bounds; they would otherwise get far too high and wide to be neat and slightly. You may perhaps say the stones in question have settled down into the earth; but that idea is absurd, as they generally have lain where they now are since the deluge, and during that time in a soft muddy bed, and yet they are still on the surface, whereas so soon as clearing is done and the land sodded well over, a gradual growth takes place all around, and the stones are partially covered. Some will argue that the contrary is shown to be the case in stony land, which often looks to the superficial observer to be quite free from stones, when after clearing, many appear; but this is due altogether to the rapid decay of the "humus" or vegetable deposit furnished by the leaves before clearing, which, when the source ceases, soon rots and is lost, and the surface up to that period sinks rapidly,

thus exposing the stones formerly hidden, to be again in turn gradually concealed, as the growth of the sod land accumulates around the stone. C.

NOTE.—The elevation of the surface is no doubt due to the growth and accumulation of grass roots, which, in wet land especially, are long and tough.

### Two-furrow Plough.

We clip from a Scotch paper, the *Galloway Free Press*, an account of a trial with a new plough, which seems to promise a considerable saving of time and labour:—"This new patent plough was exhibited at work on the farm of Dinvin, Portpatrick, in presence of a large number of the leading farmers in the Rhins district. The plough was commenced to work on a field of stiff clay land. It was afterwards shifted into meadow land, finishing up with a part of the latter field composed of hard, hilly land. On all these different kinds of soil it performed its work in such a satisfactory manner as to astonish, and draw forth the unqualified admiration of all present. Messrs. Jamieson, Logan, and Hardy, Mull of Galloway, were chosen from among the spectators to test the draught of the plough by the dynamometer, which showed that, while a single-horse plough of the ordinary construction has a draught of 4 cwt., the patent two-furrow draught plough, drawn by three horses, has a draught of 5 to 5½ cwt. The advantages of the two-furrow plough over the ordinary one may be stated as follows:—One man and three horses in heavy soil, or two horses in light soil, will perform more work, and in a more efficient manner, with more ease to themselves, than two men and four horses; the work performed is more regular and even, and in stiff soil the furrow is better set up than can be done with a two-horse plough. Having neither sole nor side plate, the friction is reduced to a minimum—hence the lightness of draught—while at the same time the bottom of the furrow is not glazed as it is by the common plough. By the two levers the furrows can be made either deeper or shallower without stopping; are easily adapted to inequalities on the surface of the land, and for easily throwing the plough over fast stones or projecting rocks. It is well adapted for either tea-stubble or cross ploughing, and a great advantage in ploughing hill land, as a pair of horses can slip up and take the furrows down hill. So satisfied were the farmers present with the decided improvement and superiority of the new patent plough over all other ploughs, we understand a large number of them at once ordered one or more of the new ploughs from Mr. Fleming (of the firm of P. and R. Fleming & Co., Glasgow, the patentee's sole agents for the West of Scotland), who was on the ground, and Mr. McClew himself, on whose land the trial was made, says he is satisfied he can save its price in about seven weeks, in its ability to go over more ground and do superior work.