

in the *Mechanics' Magazine* for 1826 (Vol. V., p. 50), which says—"that of McCormack's is so much the same that the same description ought to do for both." It appears that this production of Northumbrian ingenuity had been sold to the acute Yankees, by whom it has been extensively and profitably utilized. Common, too, constructed machines, one about 1811; and another, by request of the Duke of Northumberland, was sent to the Society of Arts. But though Common may have aided with his practical skill, yet to the humble schoolmaster, Henry Ogile, belongs the chief honour of the invention."

White Schonen Oats and Probstear Barley.

To the Editor.

SIR,—Early last spring I sent you an account of my receiving, from the Agricultural Department at Washington, one pound each of the above named barley and oats, imported from Hamburg. I also stated that I had that day (May 6th) drilled it in on a good piece of ground, and that I would, after harvest, report the result, and send you samples of the grain. Accordingly I have to-day sent you the samples. The seed was drilled in by hand, in drills six inches apart; it came up nicely, and soon covered the ground. On the 17th of August I cut the barley, and on the 9th, the oats. I have now threshed, cleaned and weighed the grain; and have of the barley, two bushels and one pound, which is at the rate of ninety-seven bushels to one bushel seedling (it is the two rowed variety); I have of oats four bushels, which is at the rate of one hundred and thirty six bushels to one bushel seedling.

H. M. THOMAS.

Brooklin, Ont.

NOTE BY ED.—The samples of each grain were good, that of the barley particularly fine, bearing considerable resemblance to the Chevalier barley, though not equal in size and weight of berry to some specimens of that variety which we have seen grown in this country during the past year. Mr Thomas requests us to say that he will not have any of the grain for sale till after another season.

Experiments with Thick and Thin Sown Clover.

To the Editor.

SIR, Your correspondent "C" who advocates such very thin sowing of clover in the December number of the *CANADA FARMER*, has, I think, brought forward a rather unsatisfactory "experimental trial." I, for one should be very glad to be assured that three pounds of clover was sufficient to ensure a heavy yield, as the expense of raising the best of beef-making food would be thus greatly reduced. Let us see what "C's" experiment amounts to. The spring in which "C" made his experiment was one unexceptionably favourable to a good "catch" of grass seeds, and I have no doubt that an agriculturist of "C's" standing would have his fifty acres in

very good order for the reception of the seed; moreover, he sows it with barley, which is generally acknowledged to form the best bed for clover seed. The practical experience of farmers generally is adverse to such thin sowing of clover. I have sown clover, three pounds, and timothy four pounds to the acre, (the clover seed having been raised and threshed on a neighbour's farm where it was certainly not adulterated) on land in such order as to produce a very good crop of barley; but the clover was a failure. Now, this seed was not adulterated, it was sown on land in good order for its reception, and was covered in with the bush-harrow. There is another great objection to sowing clover seed so thin. The plants come up far apart, and if, owing to a very favourable state of soil and season, we have a good crop, the stalk grows very coarsely, and is apt to become dry and brittle after curing and stacking and mowing away. I do not think that any farmer will grudge the extra seed to ensure a sweet, soft, fine-stemmed clover under all changes of season.

"C" wishes a correspondent to enlighten your readers as to a more perfect way of putting in clover seed than that usually practised. As he justly says, "by harrowing grass seed in with the crops we cover it too deeply, and by sowing it on the surface and leaving it exposed, many seeds never sprout and many germinate only to wither away as young plants." I cover clover seed either with a very light set of harrows, or with the bush harrow. If the land be hard and lumpy, which is often the case with the seed bed of fall wheat, then I use the light harrows. I do not approve of the practice of sowing grass seed upon the snow; but in the case of barley or oats, I sow my grass seed as soon as convenient after the seeding of the cereal has been completed, and cover in with a stroke each way of the bush harrow.

I think a distinction in quantity should be made between the amount sown on fall wheat and that sown on barley or oats; because the fall wheat land cannot be in as mellow a condition as that cultivated in spring for the grass seed-bed. I think ten pounds upon fall wheat and six pounds upon barley are about the quantities of good seed per acre that will receive the sanction of the majority of our most successful agriculturists.

C. E. W.

December 23rd, 1869.

NOTE BY ED.—Our own experience is decidedly in favour of a thicker sowing of grass seed than is usual among farmers here, especially when the seed is to be sown on fall wheat. Notwithstanding the humidity of the climate of Britain, and the high state of culture to which its soils are brought, the general practice is to sow grass seeds very much thicker than we do. The object to be gained by thick sowing of grass is not only to secure a good stand without fail, but also to produce grass of a fine and nutritious quality.

Splitting Rails.

Rails do not split as well in winter when the weather is very cold as at other times. They always split best in thawy weather, and most so in early spring when the trees are full of rising sap. Many a hard day's work have we spent over the job of rail-splitting. No timber splits so easily as cedar, and without question it makes the best and most durable of rails. Next comes oak, which is often close grained and hard to split. Maple makes good easy-splitting rails, but they are liable to break from the shortness of the grain and do not last long, nor does beech, which is often stringy and tough and full of sap. Pine rails last still less time. Elm makes good rail timber, but is tough and stringy.

In cutting timber for rails it is best to split them as soon as possible after the tree is cut, as the longer it lies the more it dries out and the harder it is to split, while the sooner the rails are split and dried out after the tree is cut, the longer they will last. If, after being cut, the rails can be laid away to dry in some out-building, where they will not get sodden with rain or snow, they will dry much more quickly and last longer. If the rails are left to dry in the woods or the open air, they will dry better, as well as much more quickly, if stacked upright against a tree or stump, and if they must lie, they should be piled like lumber, each layer cross-wise on the one below it.

Overflowed Land.

Mr. Alexander McDonald, of Beccanour, states that his land is overflowed each spring, and on the subsidence of the water a rich alluvial deposit is left. He is unable to grow good crops of grain, and asks for advice as to the best treatment.

Such land would be better adapted to pasturage (if the deposit is not too great), or the growing of forage crops for soiling stock, than for grain. The reason that grain crops on such land run to straw and lodge so badly, and yet yield but light crops of grain, is doubtless that the soil contains a large amount of vegetable matter, and not enough mineral plant food to give stiffness to the straw or weight to the grain. A good dressing of lime would be likely to prove beneficial. We should be inclined to try the virtues of salt, sown on the land after the water has subsided and the soil is ready for the crop. Sow from one to two barrels per acre, and harrow in a few days before seeding. It one barrel (280 lbs.) per acre proves beneficial, but not sufficiently so, try more. If lime can be had cheaply, try the lime and salt together, say ten or fifteen bushels of lime and one barrel of salt per acre. The refuse salt now to be had at a low price from the salt works in Goderich or Clinton is just as good for that purpose as the best. Wood ashes, either leached or unleached, would also be a good material to apply to such land.