

THE CANADA FARMER

VOL. I. No. 5.

TORONTO, CANADA, MAY 15, 1869.

NEW SERIES.

The Field.

Sowing Grain and Grass.

The advantages of the practice of drilling in seed grain, over broadcast sowing, are becoming more manifest each year, and were grain drills made less costly and cumbersome, but few farmers would be content to be without one. Experience has shown that if grain can be planted and covered at a depth of from one to two inches, not only is much less seed required per acre, but each kernel being covered at a uniform depth, the plants all come up so nearly together that they are equal in strength and powers of development, and the crop will consequently be more even in quality, and contain much fewer abortive heads, or heads of small grains, than if the crop had been sown broadcast, and covered in with the harrow, which naturally buries some seeds altogether too deep, while it leaves others almost on the surface. To enable a grain drill to be used at all, the land must be in a good state of cultivation, and this of itself is one reason why the crop grown is more certain of succeeding; for if the soil be not well pulverized, much of the seed cannot be covered by the drill, and therefore it could not be used.

Most farmers who use grain drills confine their usefulness mainly to the sowing of winter wheat, for which they are more especially made and adapted; but we think it would be well to try drilling in some of the spring grain crops, where the machine in use can be made practicable for that purpose. We should like to know of experiments being made in drilling in peas, barley, spring wheat, or even oats, to show whether enough is gained hereby to compensate for the extra cost and loss of time. Mr. Mechi states that he obtained 48 bushels of wheat per acre from a seeding of one peck, dibbled in, and the crop afterwards cultivated by hand hoeing; but he does not advocate thin seeding except on very rich soil, and then only with those

cereals that have a natural tendency to tiller out, and form large stools of stalks from a single root.

But drilling also has its disadvantages, not the least of which is that most of the grain drills now in use are only practically adapted to the sowing of one kind of grain to advantage. Again, the process is rather a slow one, which may be a matter of small moment in getting in fall wheat, for which purpose they are most generally constructed and used. But, in our short and uncertain period of spring work, it becomes important to get the land sown quickly and at the right time, as a difference of even a day or two in getting in barley or spring wheat may make a material difference in the yield of the crop; and while two or three hands can be employed in sowing the grain broadcast, the teams can be at work covering it in, thus getting in a much greater breadth in a day than could be done with the use of a grain drill, as at present constructed.

Our implement makers have generally adopted English models in constructing grain drills, rather than set their invention to work to make one that will be of lighter draught and cover a greater breadth of land at a time, while at the same time it could by some simple mechanism be adapted to various grains; and be less expensive than those made after English models.

Broadcast sowing by machinery has been tried in the States, and there "Cahoon's Broadcast Seed Sower," a machine of very simple and cheap construction, adapted for both grain and grass seeds, is much used, and enables the voriest tyro in farming matters to get in his crops of grain with expeditious precision. Such a machine, or one on the same principle, might be got up by our Canadian implement makers very profitably, as it can be used on all soils and under any circumstances, suiting the quantity sown to the requirements of the crop.

In sowing broadcast, so much allowance must be made for seed that, being left uncovered by the harrow, or being so lightly covered as to be washed out by the first rain,

is eaten by birds, fails altogether to grow, or comes up so much later than the rest of the crop that is properly covered as to be overshadowed and left behind in growth by the stronger plants that have got the start of it, that we think those who give a liberal seeding will be most certain to have a fair crop in favourable seasons.

In sowing grass seed it is well to be liberal, especially with clover. A difference of a few pounds of seed per acre often makes a difference of one half in the yield of the crop. Our own experience is that everything is gained and nothing lost in being liberal with grass seed, or, in fact, seed of any kind sown broadcast. We believe one bushel of clover seed per acre is not too much to sow to ensure a good stand, and we have known of two bushels being sown on rich land that was wanted to produce a crop of clover the same year and a heavy yield the next, no other crop, of course, being allowed to grow and choke out the clover the season of sowing.

In sowing broadcast by hand, we have always been able to calculate with tolerable exactness the proportions of seed required to sow a given breadth, by measuring the land both ways in yards, multiplying the length by the breadth in yards, which will give the number of square yards, and dividing the number of pounds of seed required to be sown by the square yards in the plot, which will give the exact proportion of seed required to cover each square yard of surface. The larger the amount of seed needed to the acre, the greater the proportion will be to the yard; and if the lands are ploughed each of an equal breadth, it is easy to calculate how to spread the whole amount of seed equally, by giving the necessary amount to each land, and a trial on one land breadth will show how heavy or light the cast should be to cover each with the exact proportion of seed. When permanent pasture is designed, it is well to get as many varieties of grasses as can be obtained to mix together, and also conform more to the English practice of sowing at least 40 to 50 lbs of seed per acre, which will be sure to result in a much heavier yield of feed for stock.