

shows us that in dealing with seeds, we cannot be too careful of observing their natural history; for if our hoeing, for instance, be delayed until these first seeds are ripened, the very process may cause the sowing of enough seeds to insure a future crop of the pest. Hence, then, the whole facts connected with the seeds lead to the conclusions that, when practicable, weeding should be done as early as possible, even before the weeds may be in flower; and if delayed until the seeds be ripe, measures should be taken for the complete destruction of weeds, which is best done, where practicable, by fire."

Canada thistles are now coming into flower, and though some few may have taken the pains necessary for their destruction, still, from the abundance of these plants in the fields and the road-sides, we judge this to be the exception and not the rule. There is yet time to prevent the spread of this pernicious weed, but no time to lose.

TOP-DRESSING IN AUTUMN.

The more we think of it, the more we are convinced that top-dressing is one of the most direct and effectual ways by which grass lands can be made to keep up their original fertility; and from our own experience and the writings of practical farmers we are also convinced that autumn is the best season in the whole year for applying a top-dressing of stable or barn-yard manure to grass lands. We have before spoken of close mowing as a reason why grass fields "run out" so quickly after having been newly seeded down, and this is doubtless one cause; but another reason is, that the roots of the grass lack nourishment, and with, out having it the plant dies out. It is as reasonable to suppose that roots of any other plant can get along as well without manure as the roots of grass, but we know that the latter seldom receives it, except when applied to a field at the time it is seeded down. The usual practice among our farmers is to break up a field or pasture—as often without spreading any dressing on the surface as with—and plant it with potatoes. Then manure is spread on, the field is plowed, planted with corn and manured in the hill. The next season is sowed to oats or barley and seeded down. Allowing the ground to have been in no very excellent condition before being broken, it is safe to say that the crops taken from it have exhausted nearly all the manure applied; and yet it is expected to produce a fair crop of hay for five or six years, without any dressing, until it is again broken up. How land, without this treatment, can be expected to produce even a fair yield of grass, is one of the unaccountable things in our agriculture. But with the application of four cords of manure per acre, once in three years, a good crop of hay can be harvested each year, for almost an indefinite period.

Allowing then, that it is a good policy, and one of the most economical farm practices to top-dress mowing fields, and if there were no particular difference as to the season when it was done, the fall would at once be suggested as the best time. There are many

reasons why the fall presents advantages over spring for top-dressing. The first is that it is undoubtedly the best time. In the spring, although it may be dissolved and washed down by spring rains, yet if it should be dry the dressing would remain in lumps upon the surface, affording no nourishment for grass roots, and acting as a hindrance in mowing, especially if done with a scythe. If applied in the fall, it will all be dissolved and carried into the soil, the roots having the direct benefit of the whole amount applied, and be in readiness to start with new strength and vigor on the approach of spring. Besides, there is more leisure for doing it in the fall than the spring. There is a great hurry with farm operations in spring time—particularly if the farmer is a little "behind time"—and such a job would rarely be accomplished in time to do much good to a grass-field the same season. Again, in the spring, fields are not suitable for the passing of heavy teams, the soil is too moist and yielding and lots would be greatly cut up and damaged by teams passing over them. This can be done in fall with little or no disadvantage of this sort. But one reason why farmers do not apply dressing to their grass-fields in the fall, is because they do not have it. On this account it is put on in the spring if at all. But a proper attention to the matter will secure to most farmers a sufficient amount of dressing in the fall, to apply several acres of their grass-lands which most need the application. The use of muck in the yards and stalls during summer and autumn, and the yarding or stabling of cattle at night, together with composts, or even the use of a special fertilizer for the purpose, will, if applied to grass lands in the fall, ensure a good yield of hay, and keep the hay field in good condition.

THE BENEFIT OF TRENCHING.

So much has already been written on the advantages resulting from trenching, deep plowing, and other cognate means of raising and bringing into action the latent powers of the subsoil, that it would be superfluous to say a single word in commendation of the practice. We are aware, however, that there is still considerable difference of opinion regarding the ultimate benefit derived from the practice on different kinds of soil. In this, as in other matters, the intelligent agriculturalist will be guided more by the peculiar circumstances of the soil than by any general rules. It is only by studying carefully the nature of the ground he cultivates, and its peculiar wants that he will be able to turn its capabilities to the best advantage. When this is intelligently done, there will be little fear of a successful result. As illustrative of the value of deep trenching, we shall briefly state our experience of trenching a plot of ground about a quarter of an acre in extent.

For a number of years, potatoes had been grown successively upon the plot, and, as it had got little or no manure, the ground was much worn out. Last year, we endeavoured to take out another crop of potatoes off it, but with very indifferent success. Owing to particular circumstances the crop was somewhat