

and they say 'this is the worst weed we could have, we will therefore prevent it from establishing itself', and it requires little persuasion to induce every one to attack it. Now I repeat, no weed is so bad but a farmer can get it out of his land if he will understand its nature first and fight it steadily and persistently.

## CLASSIFICATION OF PLANTS.

Plants can be classified very simply under the three heads of annuals or one year plants, biennials or two year plants and perennials or many year plants. With one year plants any method by which the young seedlings are destroyed before producing seed is enough to clear the land. With two year plants the same thing is true, only that the farmer has a longer time to do his work because these plants blossom only the second year and then die. Perennials flower only the second year but the roots live for many years.

By Mr. Burnett:

Q. Does not the sow thistle spring from root and seed?

A. Yes, both. It belongs to the last named order, perennials. Having made a certain amount of growth the first year the flower is produced the second year and then the roots, instead of dying as in the case of two year plants, keep on growing year after year and spread from the root as in the case of the Canada thistle, Perennial Sow thistle, and many others, and these are by far the worst weeds we have to fight against. For the purpose of knowing how to destroy perennial plants they must be classified as those that root near the surface of the ground, like the Ox-eye daisy, and those which go down deeply. The shallow rooted perennials are easily dealt with when you can plough the land. Of course when they take possession of upland or rocky pasture land where it is hard to plough, we must adopt other means of destroying them. Shallow rooted plants in agricultural land are got rid of by ploughing in the hot weather when the roots are thrown up and left lying on the surface where they quickly die for want of water under the withering heat of the sun. With deep rooted plants we have to consider that like all plants and animals, they have to feed. They feed through the roots and leaves. If we know that it is necessary for all plants to feed, any method by which we can prevent their feeding and starve them out is an effectual means of getting rid of them. These are all the elements of botany that the farmer need understand to fight weeds successfully.

## VALUE OF DIFFUSING INFORMATION.

This has been made very patent lately in Manitoba. The provincial government during the last three or four years arranged to have several meetings held and lectures delivered at which all the prevalent weeds were described and the best methods for destroying the different species explained in the various districts visited. In addition a conspicuous and complete exhibit of the weeds of the province has been shown at the Winnipeg summer exhibition for the past two years.

The arrangements for the meetings referred to were as follows:—Competent speakers including the energetic chief clerk of the Department of Agriculture Mr. Hugh McKellar went to districts where farmers' meetings had been advertised, all of which were well attended by farmers who were invited to bring specimens of the weeds troubling them, and other weeds likely to be introduced were taken there. The actual weeds were shown to the farmers, their characters explained and the methods of eradication made plain. The North-west Territories last season adopted the same plan. The government previously published and distributed a bulletin on noxious weeds in which all the different weeds of the district were described. The farmers were invited to attend meetings and a series of twenty meetings were held last Summer; although the meetings were held in July, when the farmers have a good deal to do, the interest was so keen that all of the meetings were crowded. The