Canada as on the other side, but it is common enough to necessitate the passage of a law to regulate the trade in commercial feeding stuffs by compelling a guarantee of the percentage of protein and fat in each lot sold, and providing efficient Government inspection to see that the guarantee is lived up to. Let us hear the opinion of our readers on this subject. It should be stirred up at once and made a live topic, looking to action by Parliament next session.

THE FARM.

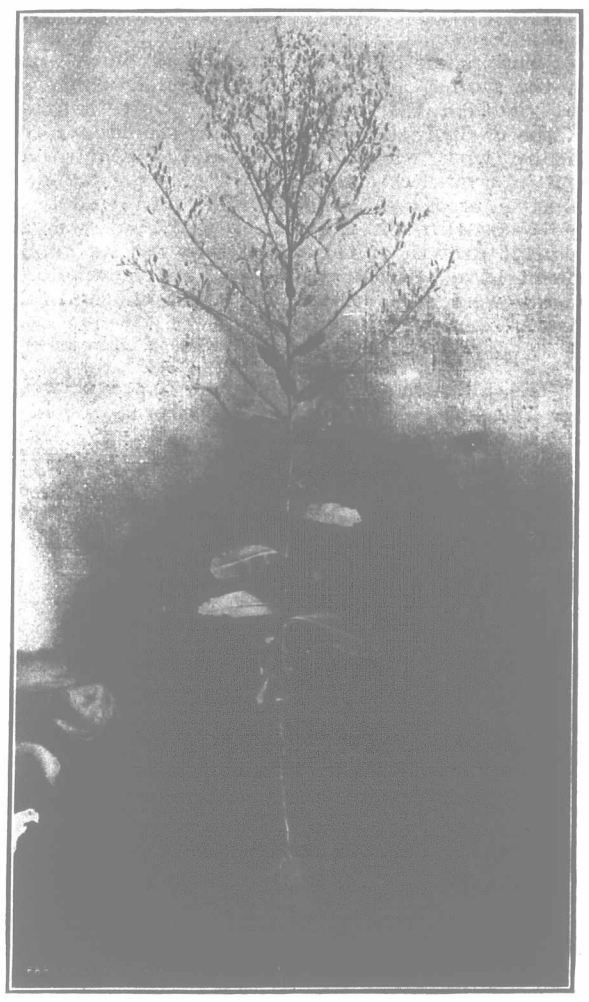
Prickly Lettuce; Railways a Medium for Dissemination of Weeds.

At the conclusion of a five weeks' trip through the rural districts of Western Ontario, during which time I noted carefully the various species of weeds indigenous to different districts, I have no hesitation in designating prickly lettuce as the most aggressive and dangerous weed of recent introduction into Western Ontario. Unlike most of our weeds, it is not becoming established on the farms by being bought and paid for and carefully sown, but it is being spread entirely, I may say, through the medium of railways. The State of Michigan is overrun with this weed, and it has found an entrance into Canada by way of Detroit, and to-day, in every county in Western Ontario, and also many counties in Eastern Ontario, this pernicious weed can be found growing along the railway tracks. Last year Prof. Lochhead remarked to the writer that Prickly Lettuce was likely to become one of the dangerous weeds of Ontario in the near future, and, without doubt, this prophecy has already come to pass. In the counties, especially of Halton, Wentworth, Brant, Norfolk, Elgin, Essex, Kent and Lambton, it is working its way into meadows and pastures, where it is becoming decidedly troublesome. The fact that it appears to be able to seed in sod accounts for its rapid dissemination along railroads, and renders it dangerous in pastures. It is also common in grain fields, and in some instances members of the Canadian Seed-growers' Association who were growing improved grain for seeding purposes, had it rendered unsalable by the presence of this weed. In appearance, Prickly Lettuce is a robust annual, growing from two to five feet high. It is most easily recognized by its thistle-like appearance and curious habit of its leaves. These leaves are very prickly along the mid-rib and also along the margins. They are so twisted at the base as to have the edge of the blade pointing north and south, which has given it the name of Compass Plant. It begins to mature its seeds about the middle of August, and these seeds possess a downy pappus similar to the dandelion, which enables them to be freely disseminated by the wind. An average plant will produce more than 8,000 seeds, and it is estimated that these, when buried, will retain their vitality in the soil for five or six years. It is a mistake, therefore, to plow down seed-maturing plants, and thereby infest the soil with seeds buried at different depths, ready to germinate when brought under favorable conditions. Mature plants should be mowed and burned before plowing. On account of its long, tough taproot, it is not practicable to hand pull, but repeated mowing when coming into bloom will eventually subdue it. Almost any kind of hoed crop, thoroughly cultivated so as to kill the plants which are growing and also induce the seed in the soil to germinate, will be found effective. Where thorough cultivation is impossible, sheep will be found effective in keeping it down. Roadsides, fence-corners and waste ground make a splendid harbor for this weed, and usually afford breeding plots for general distribution of seed.

It is to be regretted that the proper authorities do not take some action with regard to enforcing the Ontario Weed Law, especially with respect to railways. The responsibility of railway companies in keeping down weeds on their property is very plain. To put it in a few words, it states that "Every railway company shall cause all cleared land adjoining their railway to be covered with grass or turf, and cause all thistles and other noxious weeds to be cut down, and kept constantly cut down, or to be rooted out of the same. Notice should be given by the mayor, reeve or chief officer of the municipality of the townships or county in which the land lies. If the railway company does not comply with the requirements of this notice within twenty days, the mayor or other officer may cause all things to be done which the company were lawfully required to do by notice, and the municipality may recover the expenses and charges in so doing."

From the above, we notice that our Legislature has supplied us with stringent legal safeguards which only remain to be supported and enforced by the people directly interested. In many instances, simply calling the attention of the station agent would suffice to have them removed. Parliament has enacted legislation to restrict the dissemination of weeds by seedsmen and farmers, and that law is being vigorously enforced. Why, therefore, should not railways become subservient to the law? Freedom from weeds can only be maintained by destroying the sources of infection, and this is surely a malignant source. If further witness of this, I may cite a case which I noticed a few days since in the beautiful town of Goderich. Directly opposite the G. T. R. station platform, and within ten feet of the rails, I identified thirty-six species of noxious weeds, each species in a fair way to produce thousands of seeds. To give you an idea of the noxious character of this collection, I will give the names of a few species: Couch-grass, perennial sow thistle, wild oats, curled dock, Canada thistle, white cockle, common ragweed, great ragweed, ribgrass, ox-eye daisy, chicory, bladder campion, bindweed and prickly lettuce. Twelve of these are designated in the Canadian Seed Control Act, and are restricted from being sold in commercial seeds. I may say, however, that the presence of so many noxious weeds is no reflection upon Huron County, as I had opportunity of travelling through a considerable part of it, and know that at least a dozen of the weeds found on the land adjoining the station were not indigenous to any section of the county. Fortunately, this is doubtless one of the extreme cases, but a casual observer, travelling through the country, cannot help but note that much of the land adjoining railroads and railway stations is simply a breeding plot for weeds and a menace to the farms adjoining them. Who is to blame for this condition of affairs? Who can offer a solution?

H. H. MILLER.



Prickly Lettuce (Lactuca Scariola).

Save the Hickory.

Canadian and American carriage builders are becoming alarmed at the rapid exhaustion of the supplies of hickory. At Niagara Falls, at a meeting held in July, an organization was formed, composed of representatives of fifteen branches of the industry, which has for its object not only the conservation of existing supplies, but steps looking to an increase in the future. It is stated that the farm-wagon industry of Canada and the United States uses up annually from 150,000,000 to 200,000,000 feet of hard wood, of which about ten per cent. is hickory. The value of hard wood is steadily advancing. Canadian farmers who have any will do well to conserve their woodlots by fencing stock out, and thus providing for reproduction of desirable growths. Every indication points to timber culture as an exceedingly profitable business, especially for rough lands.

It is a great and beautiful thing to be patient if wrongfully accused; to be so strongly girded round with right that you can meet slander by silence, and calumny with a smile.—[Selected.

Corn Harvesting and Silo Filling.

Now, when the grain crop is securely housed, it behooves every stock farmer who uses the silo for feeding purposes to study the condition of his corn crop, note its degree of maturity, and consider the best method of conducting the work of placing it in the silo.

In the first place, we should emphasize the fact that first-class corn ensilage can be obtained only from a crop that is fairly well matured. In such a condition the foremost cobs are sufficiently mature, if properly handled, to be used for seed purposes the following season. In my experience I have never yet found that in this locality the crop has been too ripe when harvested. The great objections to silage as cattle food have been induced through the fact that in too many instances the crop has been placed in the silo altogether too green. I have always had the best results from feeding silage made from corn, the grain on which was quite hard when the crop was being harvested; but, of course, we do not want to see all the greenness out of the stalk.

In the face of the present scarcity of labor, great diversity of opinion prevails as to whether it is more profitable to use the corn binder or cut by hand. I am still a strong advocate of hand-cutting, using a hoe made for the purpose. After expending the necessary labor required in growing a good corn crop, we should endeavor to secure the whole crop, and, by hand-cutting, you can shave it off by the ground, thus securing sufficient additional fodder over any other means of cutting to pay for the cutting itself. This is more particularly so where any lodging has been caused by strong winds, and we find that, to a certain degree, we seldom escape this condition; and, after all, the labor and expense of hand-cutting is not serious. If the crop has been planted in squares 3 feet 4 inches each way, and is standing fairly well, a man can, with comparative ease, cut two acres per day, and in doing so, by cutting two rows at once and dropping them in one row of neat bundles, so that the loader can lift at least two hills at a time, greatly facilitate the speed of handling. The rows are all cut the one way, the cutters walking back each time to the place of beginning.

When horses are plentiful—and they usually are—where the farmers join together in silo-filling, a sufficient number of teams and waggons should be used that every teamster may load his own wagon. This means five, six, or seven teams, according to the distance of drawing. A double row of corn, forty rods long, will make a good load, and, by following this system, there is no extra walking or being in each other's way when loading. The teamster can then load his wagon straight and even, a precaution which greatly facilitates the work of pulling off and feeding the cutting-box.

Without doubt, the best corn-cutting outfit for the average farmer is a portable or traction engine, with silage cutter and blower attachment, such as is manufactured by the various manufacturing companies throughout the country. Threshers and others in this locality have these outfits, with which they follow the business of silo-filling.

By using truck wagons, the sills and bottom of an ordinary 16-foot hay rack is used, which is quite suitable for conveying the corn from the field to cutting-box. Being thus equipped, the force of hands is stationed as follows: Three or four men cutting; five or six with teams; three extra feeding and managing cutting-box; two in the silo, and the engineer. With this force, eight acres per day may be harvested. Unless you require to tramp in the silo, for the purpose of securing additional settlement during the day, I have not found any advantage in the tramping process. Though tramping round the edge may be beneficial, yet when a silo, say 35 feet in depth, is constructed about two inches wider at the bottom to give ease of settlement, I do not find lack of tramping the edges an injury.

Much has been said and written regarding the injurious effect of frost during the time of silo-filling. Although we must not underrate the effect of frost upon immature corn in preventing the crop from maturing properly, yet in the case of a crop sufficiently matured, if it can be placed in the silo during the following four or five days after being nipped, I have found no injurious effects therefrom. In event of the crop not being sufficiently advanced when the decision to harvest has been made, frost is then beneficial, as it will cause the removal of some of the excess of sap which the crop then contains, and thus render the silage sweeter and more palatable. In case the crop is unavoidably allowed to stand after being severely frozen until it becomes altogether too dry, water should be added to the mass during the process of silo-filling. This can be done by placing in position a barrel of water, so that its contents may be drained as quickly as desired into the elevator pipes, thus damping the material in its elevation.

THOS. McMILLAN.

Huron Co., Ont.