

*Tumbling Weeds.* We have in Canada a weed called "tumbling weed, one of the pig weeds, which does very little harm. At the end of the season the dried up plant bearing its ripe seed separates from the ground and "tumbles," or is rolled along over the prairie by the wind and that is how it gets its name.

*By Mr. Featherston :*

Q. It is a kind of soft grass?—A. It is rather a soft thing in its earlier stages, but it gets very hard when it is ripe. It does very little harm because it develops late in the year and the farmers in this part of the country are not troubled by it at all. When the farmers in the North-west were warned about the weed, which I have spoken of, which I have called "tumbling mustard" but which was also called "tumbling weed," they said "Oh, it is only tumbling weed, that won't do any harm." I was talking to a farmer about it in the west, and I spoke of it as "tumbling mustard." He said, "Oh, well, if it is a mustard we have got to see to it." This showed me how much there was in a name, and I have called it mustard ever since. Three years ago, I sent to Mr. McKay, our superintendent at Indian Head, for a large seeding specimen, and we found by actual count that there were over half a million seeds borne by that single plant. The seeds are held sufficiently tight in the pods when the plant is blown across the prairie for the seeds to be dropped only a few at a time. I have no doubt that a dry plant of this tumbling mustard could be blown a hundred or a hundred and fifty miles over the snow and leave a trail of seed behind it all the way. It has spread now, as I saw myself, more than twenty miles from the railway in one direction.

*By Mr. Pridham :*

Q. It is an early plant, is it not; it comes early in the season?—A. Yes, it comes early in the season, like the other mustards.

*By Mr. McGregor :*

Q. Would not ploughing and summer fallowing have overcome it?—A. Yes, it would if they had attended to it at once.

Q. When this little old-fashioned mustard gets in, it is very hard to remove, but by ploughing and summer fallowing it can be removed largely?—A. It is the great extent of the farms and the comparatively small number of settlers in that part of the Dominion which is the difficulty, also the vast area of prairie over which the tumblers can be blown without meeting any obstruction. Wherever there is a badger hole, or an unevenness of the ground, the seeds are left there, and if they get to a cultivated spot the plants spring up vigorously. I saw it at Fort Qu'Appelle and other places north of that. By this habit of blowing and tumbling across the prairie, it has a great means of spreading.

*Hare's ear Mustard.* There is also another weed in the west, the Hare's-ear mustard, which is going to be one of the worst pests they have had in the North-west, unless they at once set to work to get rid of it. It is not a tumbler, but is very troublesome in binding grain, and also chokes out grain crops. I procured, from the Keewatin Milling Company, of Rat Portage—a very large company—which receives grain from many districts, about thirty or forty samples of seeds from as many different localities, and made a critical examination of them. Only in one of these samples did I find a few grains of the tumbling mustard. The reason was this: The seeds were so small that the ordinary methods of cleaning were effective, but with regard to the Hare's-ear mustard, the seeds are larger and not so easily cleaned. The small seeds of tumbling mustards, however, would not appear among the small grain and larger weed seeds, but would be left with the dust and rubbish where the grain was threshed.

There was one point with regard to weeds, which I found was not sufficiently recognized in Manitoba and the North-west. There is no doubt what a marvellous country we have there for the production of grain crops. We should have the mag-