

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN
THE DOMINION.

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Agents for "The Farmer's Advocate and Home Journal,"
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a condition that at certain seasons of the year they are in an almost impassable state.

Automobile owners are to pay a share towards the revenue, as stated in our last week's article, and this will produce about \$400,000 annually. This is a big item, and taxing automobiles according to horse-power has been advocated through these columns time and again. It is right and just, a necessary and advisable move, and the Commission are to be congratulated upon so ably handling the matter.

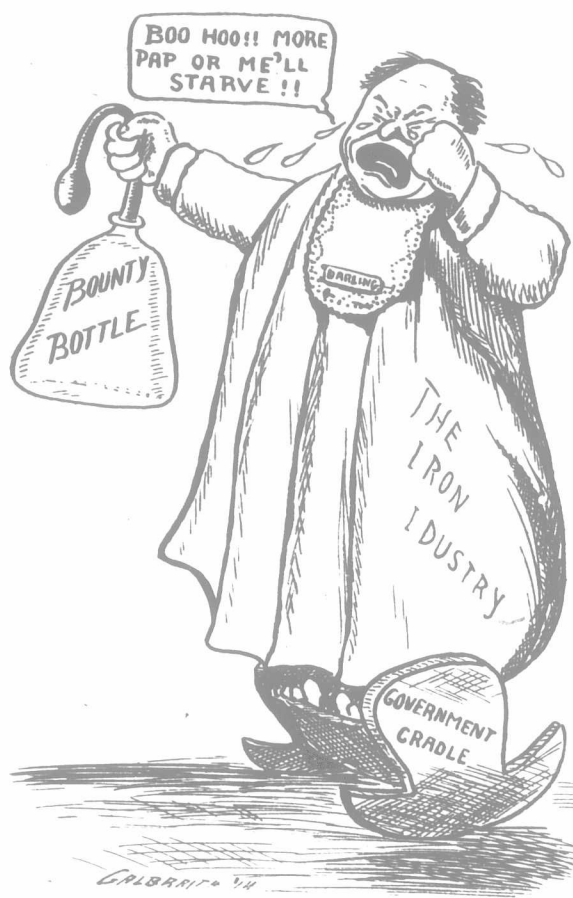
The developing of a special highways department under a Minister of the Crown should put the work on a permanent basis. The roads of the Province have been carefully classified, as indicated in last week's issue, and as previously stated the bringing of 42,500 miles up to a fair standing, and fitting 7,500 miles of country roads to bear the severe demands made upon them is no small task. Special attention is to be given to main township roads, and it is proposed that the aid should not be given to townships until the county has assumed the system of market roads, the reason given being that alternate plans might seriously interfere with the installation of a proper system of country roads.

The report showed that the capital investment in agriculture in Ontario alone was, at the time of the last census, \$1,283,000,000, whereas the capital invested in manufactures and industries of the Dominion was \$1,247,500,000, or \$35,508,000 less. Think what a good system of roads means to an industry with such gigantic proportions as the agricultural industry of this country. Think also of the magnitude of the

undertaking of bringing all the roads in the country up to a high standard. Good roads are of immense economic importance to the farmers of Ontario.

It is interesting to note also in this connection the radius of the area from which the various cities of any size in the Province draw the main portion of their food supply. Toronto being the largest city draws from a radius of 35 miles, Ottawa 16, Hamilton 11, London 8, Brantford 5½, Kingston a little over 7½, and so on down to a little less than four for such cities as Woodstock and Chatham. This would seem to indicate that the best market roads must run for this distance in all directions from the cities named.

The Commission went into the matter very fully and their investigation has been complete and the report is a lengthy one, containing the most valuable available information. The people of Ontario have been agitating for some time for better roads, and they expect action. It will not do to delay this very much longer. Of course, as the report points out nothing very definite can be done before the season of 1915, but the Legislature must get to work, and whether they stick closely to the details in the report or not something must be done. It is not enough to investigate and report. The people want and need better roads. The report from the best findings tells how to get them. It should not be placed back on the shelf, but kept right to the fore until the scheme is in actual operation, the good roads are made, and a thorough system inaugurated to maintain them in the very best condition. We feel sure that a start has been made in the right direction, and that the legislators believe the matter of sufficient importance to warrant their pushing it to a successful conclusion. The investigation has been thorough, let the action be just as thorough. It means many millions to the Province. The outlay is small compared to the value of good roads.



The Poor Child.

Nature's Diary.

The major of the marshes has returned; the blackbird with the red epaulets is in his reedy home once again. The red-winged blackbird is certainly the presiding spirit of the marsh; in fact he seems to own the marsh, so vigorously does he protest against any human intrusion upon his domain. The male of this species is a conspicuous bird, and very easy to recognize. With the female it is quite another matter, for she is an obscure brownish-streaked bird.

The red-wing differs from most of our birds in its marriage customs, as it practices polygamy, and a colony of these birds in a marsh may consist of but one male with his three or four mates. The males arrive from the south in ad-

vance of the females, sometimes even three weeks in advance.

The nest of this species is usually placed over the water, supported on the stems and leaves of cat-tails. It is constructed of reeds and grasses, and is lined with fine grass. The eggs are pale blue, streaked and spotted with black.

The diet of the red-wing consists of seventy-three per cent. vegetable food, and twenty-seven per cent. animal food. The animal food amounts to only a little over one per cent. in January, but gradually rises to over eighty-eight per cent. in June, after which it decreases again to less than one per cent. in November. In the spring and early summer most of the animal food consists of caterpillars and beetles; in July and August it is made up mainly of grasshoppers. In certain localities this species has been reported to feed largely upon grain, but throughout the country at large its vegetable food consists mostly of weed seed, so that by its preference for this latter article of diet and its consumption of injurious insects it should gain the farmer's approval. The red-wing breeds in Canada from Nova Scotia to Saskatchewan, and winters from Virginia and Illinois southwards.

In our spring woods there appears a little flower of such a dainty and fragile appearance that one would be inclined to think it would hardly dare venture above the soil so early in the season. It is called the bloodroot, because of the red fluid which issues from the root-stock if it is injured. This red juice shows through the transparent stems of the leaves and stalks of the flowers, giving them a clear orange appearance. This juice was used by the Indians as war paint. The bloodroot plays, to a certain extent, the part played by the snowdrop in the Old Country—it is a white blossom which appears early in the spring.

When this plant appears above the ground the leaf is wrapped in a cylinder about the bud. As the flower opens the leaf expands, and is strikingly handsome in form. Later in the season the leaf becomes large, often measuring six inches across, and has a petiole ten inches in length. On the outside of the bud are two sepals, which fall away as the flower opens. There are usually eight petals, though there may be twelve. As a rule every other petal is longer than its neighbors, which makes the flower more square than circular in outline. There are numerous stamens, often twenty-four. The two-lobed stigma opens to receive pollen before the pollen of its own flower is ripe, thus ensuring cross-pollination. The blossoms open wide on sunny mornings, in the afternoon the petals rise up and the flower closes at night. It also remains closed on dark days. The root-stock is large and fleshy, and in it is stored the food which enables the flower to blossom early, before any food has been made by the new leaves. The root-stock is fringed with numerous stout and rather short roots. The bloodroot is one of the flowers which must be admired in its native haunts, for the petals fall so readily that the flower will not stand transportation from the woods to the house.

The alders are now hanging out their "lamb's-tails." These attractive objects are the staminate catkins, and as they elongate they become yellow, and the pollen falls from them at the slightest jar. The pistillate flowers of the alders are small, ovoid and red. The alders are adapted to pollination by the wind, as the pollen is blown from the hanging staminate catkins on the stigmas of the pistillate flowers. After fertilization the pistillate flowers develop into little woody cones.

THE HORSE.

The Brood Mare.

Femininity is as necessary in the brood mare as masculinity is in the stallion. The hard, dignified, determined expression of the sire should be changed to one of maternal mildness and softness in the dam. The lofty crest and muscular development so desirable in the male are altogether uncalled for in the female where we look for a conformation indicative of refinement of character. In the draft breeds particularly, the owner delights in a short, strong-coupled back but a successful brood mare may carry this conformation to the extremes. She is nature's receptacle intended to receive and develop the creation of the male of her race and in so doing it is necessary that she have a greater length of loin and deeper extension of rib, in order to maintain the foetus, and more successfully bring it into the world. The hard, brazen, masculine expression of the mare is evidence of undeveloped maternal organs so necessary in a good foal producer. Observation will substantiate the remark that barren mares are more masculine than feminine, for a lack of sex characteristics indicates a lack of procreative power. Castrating foals while young causes them to assume more of the appearance of the female while unsexing mares by removing the ovaries causes a development of the coarser traits. In selecting a brood mare it is of paramount importance