

capitals, the value of taxable urban property was \$1,923,000,000 in 1914,—let us say a round two billion dollars, nearly or quite half of which is due to "land values."

Now it is different with urban lands from what it is with farm lands, in respect to clearing, fencing and draining. City lands are valuable for building sites and for practically no other purposes. Therefore the same deduction does not have to be made in the case of urban lands as must be made in the case of farm lands. We may, therefore, put the "land values" of Ontario urban municipalities as a round billion dollars (1,000 millions).

But we must add to these values, already partly taxed for municipal purposes, the value of various public franchises (steam and electric railways, light, gas, power, telephone and telegraph companies); the value of mineral rights and lands, which are enormous in Ontario, and, further, the value of timber limits, water privileges, quarries, etc.

No reliable estimates of such "land values" are available. I shall, however, make the following provisional estimates:

The capitalization of Canadian steam railways in 1914 was approximately \$1,500,000,000, about one-third the capitalization of agriculture in 1911. Dividing this railway capitalization on the basis of mileage, Ontario claims \$570,000,000 of it. What proportion of this is the value of the franchise? We have allowed that the "land value" of Ontario farm lands is over one-quarter of the total value of assessed farm property. Railway franchises are surely as valuable as agricultural to say nothing of the various subsidies and grants which Canadian railways have had. We shall therefore allow \$150,000,000 dollars "land value" to Ontario steam railways.

The capitalization of electric railways is about one-tenth that of Canadian steam railways. On this basis we must allow \$15,000,000 "land value" to Ontario electric railways.

I have not been able to secure information concerning light, gas, power, telegraph and telephone companies, but feel safe in placing the value of all such public franchises (including railways) in Ontario at \$250,000,000.

The value of mineral rights and lands is very difficult to estimate. The Provincial Treasurer, in his last Budget Speech, included in his statement of assets some \$75,000,000 for mining lands, etc. What proportion of the discovered mineral resources are now in private hands I have been unable to ascertain, but there is evidently a very large percentage. Judging from the estimates recently made in the press that 90 per cent. of the public resources of British Columbia have been alienated, and from common knowledge of the value and present ownership of part of Ontario's rich mineral deposits, it would be conservative to place the value of Ontario mineral lands at \$200,000,000.

The Provincial Treasurer estimates the timber resources of the Province at about \$350,000,000. I presume that a large proportion of this is still in the possession of the Crown, and therefore not now taxable. We should be safe, however, in assuming a taxable timber value of at least \$100,000,000. Add to this a further \$50,000,000 for quarries, water privileges, etc., and the situation stands thus:

Ontario "Land Values."

Farm Lands.....	\$ 400,000,000
City and town lands.....	1,000,000,000
Public Franchises.....	250,000,000
Mineral rights and lands.....	200,000,000
Timber limits, water privileges.....	150,000,000
Total "Land Value".....	\$2,000,000,000

Now it was shown in Study IX. that the total tariff tax amounts to about \$350 per annum per rural family, one-quarter of which (about \$90) goes into the Federal Treasury. In 1911 there were, in Ontario, 226,000 farm occupiers. There cannot be appreciably more at the present. Assuming the same number the farmers of Ontario are contributing \$20,000,000 to the Federal treasury through custom's duties, and about \$60,000,000 to the tariff beneficiaries. Out of a total customs revenue of \$92,000,000 the whole of Ontario is certainly contributing less than \$40,000,000. However, let us assume that this is Ontario's share, and let us find out how much of it the Ontario farmers would pay if a direct tax on "land values" were substituted for the indirect tariff tax. The proportion of total "land values" which is allotted to farm lands is one fifth (see Table). Therefore under this system Ontario farmers would pay one-fifth of \$40,000,000, or \$8,000,000. The situation therefore stands thus:

- (1). Under the direct tax on "land values" Ontario farmers pay \$8,000,000, all of which goes into the Federal treasury, whereas
- (2). Under the indirect tariff tax Ontario farmers pay \$80,000,000, \$60,000,000 of which goes into the pockets of tariff beneficiaries.

The first question is therefore answered, now for the second question: Will a direct tax on "Land Values" supply sufficient revenue? So far as the farmers are concerned Canada could raise \$900,000,000 a year, instead of \$90,000,000, by the direct tax without hitting them any harder than they are hit now by the indirect tax.

Let us, however, take the country as a whole. Ontario "land values," already estimated, figure out to approximately \$800 per capita. Assuming this figure throughout the Dominion we have total "land values"

of \$6,000,000,000, (six billion dollars), which, at 4 per cent. (one per cent. for municipal and 3 per cent. for provincial and federal) will yield a revenue of \$240,000,000. This answers the second question.

Brant Co., Ont.

W. C. GOOD

Nature's Diary.

A. R. KLUGH, M. A.

The Trillium season is now at its height, and the woods of Eastern Canada are now decked with these beautiful blossoms which convert the forest floor into a star-spangled carpet.

The trilliums have three leaves, three sepals and three petals, hence the name which is derived from "triplum," meaning three. All the species are perennial, the underground portion being a fleshy corm.



Wood Thrush.

The Large White Trillium (Trillium grandiflorum) is a stately plant which ranges from Western Quebec to Georgian Bay. The petals which are snowy white when young and at maturity turn pink in old age, and when in this condition lead many people to regard such plants as belonging to a different species. A good deal of variation is exhibited by this species, as some plants have petals with a green stripe down the centre, and I have found some plants in which the petals were entirely green. Still more remarkable was a plant of this species which I found, in which not only were the petals green but the stamens were represented by little green leaves, and inside the ovary, instead of ovules, were tiny leaves folded up tightly.



Large White Trillium.
(T. grandiflorum.)

A very pretty species which is common in the Maritime Provinces and Eastern Quebec, and is recorded from some localities in Ontario, is the Painted Trillium (Trillium undulatum). In this species the petals are smaller than in T. grandiflorum, pointed and wavy and white with crimson stripes towards the base.

The Nodding Trillium (Trillium cernuum) is found from Newfoundland to Western Ontario. In this species the flower-stalk is recurved so as to bring the small, white flower under the leaves.

In the Purple Trillium (Trillium erectum) the petals are nearly always of a dark-brown-purple color, though occasionally they are white, in which case the species may be known by its broadly rhombic leaves and reddish fruit. The flowers of the other Trilliums have no scent, but those of this species have a decidedly disagreeable odor, and while the other species

are pollinated by bees and butterflies, this species is visited by beetles and flies, attracted undoubtedly by the rather rank smell.

The range of the Purple Trillium is from Nova Scotia to the Western shores of Lake Superior. This species comes into bloom a little earlier than the Large, White Trillium.

One of the most beautiful songsters among our birds is the Wood Thrush. Its song is not sent forth with the strength of the bold and vigorous lay of the Robin, or the loud and intermittent carol of the Brown Thrush. Its tones are tender, solemn and serene. They seem to harmonize with the sound of the forest, the whispering breeze, the purling water, or the falling of rain drops in the summer woods. As with most birds there is a good deal of difference in the excellence of individual performers. At evening, the bird usually mounts to the higher branches of the taller trees, often upon the edge of the woods, where nothing intervenes to confine his music. There, sitting erect, he emits his wonderful notes in the most leisurely fashion, and apparently with little effort. "Ah-ah-olee" he sings and rests, "Ah-ah-olee" and another pause, and thus he unhurriedly utters the beautiful phrases of his intermittent song, the notes being powerful, rich, and metallic, with the vibratory tones of a bell. The song rises and falls, swells and dies away, until the darkness of night having fallen, the musician ceases. The call-note of this species is a sharp "Quit-quit," and sometimes a softer cluck.

The Wood Thrush arrives in Ontario about the middle of May, and, like some of the other Thrushes, it does not make its presence known by its song for some few days. Then for a few days it sings a sort of a "ghost song"—a very faint rendition of its full song, and finally it bursts into full song.

The nest of this species is usually placed in a small tree from six to ten feet from the ground. In the fork of an upright limb or where the main stem of a sapling divides is the site often chosen. Dead leaves, and twigs form the bottom and sides of the nest, which is then plastered with mud and finally lined with fine rootlets. The eggs are usually four in number and are greenish-blue in color, just a shade lighter than those of the Robin.

The main food of the Wood Thrush consists of insects, and when feeding, this species hops about on the ground. It also eats many kinds of wild berries.

The Wood Thrush leaves Ontario in September, and winters in Mexico and Central America.

THE HORSE.

Lameness in Horses—XXI.

Quittor.

A condition known as "Quittor" consists in a fistulous wound on the coronet, usually upon the quarters or heels. A tube or pipe extends from this opening downwards to a greater or less distance, often extending to the sole, in other cases a variable distance down the wall to the seat of irritation. It is generally caused by treads, punctures, pricks, in shoeing, suppurating corns, or other injuries that cause a supuration within the foot or in the structures of the coronet. Pus is formed at the seat of irritation. If an opening be not made through the horny boundary to allow its escape, it will increase in quantity and burrow upwards between the sensitive and insensitive substances until it reaches the coronet, through which it will break. If existing for any considerable time a false tissue of a fibrous nature surrounding the passage forms, practically forming a tube or pipe extending from the seat of irritation to the external opening. One or more of these sinuses form. In most cases the sinus is practically straight, but in others it is more or less curved.

Symptoms.—The symptoms are readily recognized. There will be more or less lameness. In some cases the lameness is very marked, the horse being unwilling to put the foot to the ground, while in others it is slight. There is a swelling and hardening of a portion of the coronet, in which one or more small orifices are seen, discharging either a thin, limpid secretion, or a thick and sometimes somewhat curdled pus. From the external orifices sinuses are found, leading generally downwards beneath the coronary substance, lateral cartilage and into the foot.

A quittor differs from a wound, or a recent abscess in the coronet, by the condition of the parts which have taken on a peculiarly well-marked, unhealthy action, by the character of the surrounding swelling, which is hard to the touch, and by the presence of one or more sinuses.

Treatment will depend upon the cause. If it be a suppurating corn, puncture, prick, bruise or other cause that sets up an irritation followed by the formation of pus, between the sensitive and insensitive soles, a free opening must be made through the sole to allow escape of pus. The seat of tenderness in the sole can usually be readily located by tapping gently with a hammer, or pressing with a pincers. When the seat of trouble is tapped or pinched the animal will evince pain. After the pus has been liberated treatment should be the same as recommended in a former article for punctures. In addition to this, local treatment of the coronet should be given. If the condition is of recent occurrence all that is required is to keep the opening clean and dress two or three times daily with an antiseptic, as a 5 per cent. solution of carbolic acid or one of the coal-tar antiseptics, but if the condition has been in existence for some time, it is wise to inject the