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The Truth as to the Timber Situation.

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Mr. Chairman, and Gentlemen,—I know that I am perfectly out of place because the prescription of centuries calls for an after dinner speaker to be jocular and entertaining, and not instructive. I am afraid it will be my part to be the other way.

Last year when I had the honor of addressing your Club, I took occasion to explain my conception of patriotism—the patriotism which any new comer can put at once into practice most efficiently. It does not consist in vociferous shouting for the flag and praise of country, but on the contrary, it consists in a quiet analysis of its conditions with a view to their improvement,—not faultfinding, but finding and facing the truth, and doing the best to secure improvement, where improvement is needed. And so I have set to work to find out the truth as regards those conditions of my new environment which interest me most.

The truth!—"What is the truth?" the doubting Pilate asked.

You who have during the last political campaign read either Tory or Grit papers, or still more if you read both, must have wondered which was the truth.

If it is difficult to find out the truth about conditions of the few men who are to govern you and who live amongst you, that is still more difficult to find out the truth about the conditions of a vast country which a man's life time would hardly suffice to inspect in all its parts. Here, too, we must rely upon what others tell us—we must weigh and sift the evidence—we must recognize that different observers have different eyes, different points of view, have motives and temperaments, which lead them to interpret what they see differently, and finally we must have judgment as to the probabilities of the truthfulness of a statement.

From these remarks you may gather that what I am going to tell you is not the "gospel truth," but rather my impressions of what the truth may be, as gathered from statements of others and from personal observation, with the judgment of

the probabilities which comes from a certain familiarity with forest growth and its dependence on climate and soil.

Temperature, humidity, light and soil make trees grow and a student of tree growth, with a knowledge of the character of these conditions in a given region, can predict what kind of forest growth is likely to be found, without visiting the place, for he knows there are forest types which repeat themselves whenever the growth conditions are repeated.

The first truth I want to impress on you is that, contrary to the teachings of school geographies, Canada is not rich in timber. It is relatively to its size, and compared, *e.g.*, with the United States, poorly supplied with that commodity, if by using the word "timber," we have in mind trees which can be cut into logs and be advantageously sawed into lumber or otherwise shaped for use in the arts. Canada is no doubt a *woodland* country, tree growth of some kind covers perhaps more than 50 per cent of her territory, but, if commercially valuable forest growth is considered, *i.e.*, land covered with or capable of producing timber of saw mill size, located in sufficient quantity, and accessible for commercial exploitation, not 10 per cent. will be found of that description. Only certain species of trees produce such saw material, and that only under favorable conditions—a large number of kinds are mere weeds, perhaps good for fuel and minor uses, but not developing to saw mill size. Vast areas of Canada's domain are occupied by such growth, within which in patches the good timber appears where the depth of soil favors it. There are not anywhere in Canada extensive continuous bodies of good timber; it is scattered through the poorer timber, and this makes it so difficult to estimate its amount.

Now I shall invite you to a geography lesson. Here is your forest domain (pointing to map) and I have succeeded by investigating it, from what other people have told me and what I have seen myself, in differentiating in forest types the forest country of Canada, and I have located the two timber, real timber, areas of Canada, one in the East and the other in the West. If, theoretically speaking, we could divide Canada into two types, broad types, they would be the Atlantic firs and the Pacific firs. That from the Atlantic shore up to the Rocky mountains and up North to the Behring Sea and Alaska is made up of the species that grow in the United States and the eastern part of the continent. But the Rocky mountains make a change in the kind of timber that make up the forests and this we call the Pacific forest. Now let us take the Pacific

forest, because we know least about it, and it is easier to talk about. This we can again divide into two parts, north and south, so that four different types can be recognized. It is the action of moisture that makes the change of type. You must understand that the rainfall of the country, the humidity, depends on the moisture borne by the winds from the Pacific Ocean. As those winds strike the western slope of the Rocky mountains, and are made to rise up the mountains they drop some moisture on the west side and arrive dryer on the east side. So when they again reach a higher altitude there is again rainfall, and the clouds arrive dryer on the more easterly side. The western slopes will be humid and the eastern slopes dry. In the middle of the country we find, between the Rocky mountains and the coast, an area of arid country just the same as in the United States so you will understand that there is not any continuous body of timber to be found here of the same kind of type. In British Columbia it has been estimated that there are only thirty millions of acres of timber lands. All the rest is covered with tree weeds, that miserable Jack Pine. At the present time the sawmill rule on the coast is not to put in logs of less than fourteen inches in diameter and thirty-two feet in length, and no tree less than twenty-six inches in diameter is cut as a rule. In the area in British Columbia, which by the way the Government has been very successful in giving away, it is estimated that there are three hundred billion feet. That seems big, and as there is only one million feet capacity of mills there we have a supply for three hundred years. But compare it with the consumption of such a large country as the United States. The cut in the United States is forty billion feet a year so you can see that on that basis there is not ten years' supply to be found in this area.

Now let us go to the East. We ought to be able to give very much time to this subject in order to explain the geological conditions and the climatic conditions that determine the growth of the forest. We can recognize at least three regions. In one part we find a growth similar to that of Maine and New Hampshire. The white pine exists in small quantities. It has been cut out, and spruce is now supreme in this province. In the greater part of the eastern forest the white pine has been cut off and hemlock is now being cut. It is like taking the skim milk after the cream has been removed. There is a large quantity of pulpwood both spruce and balsam. Balsam is much more valuable for pulp than spruce, but unfortunately it does not float well, makes what the lumbermen call sinkers,

and the railways will have to be developed before it becomes commercially valuable.

I have here a map prepared by Mr. R. E. Young of the Railway Branch at Ottawa, which has not yet been published, showing what we know of the explored part of the northwestern country. Now really what has been seen is what can be seen from a canoe. There is no width at all that can be demonstrated on this map. Therefore we do not want to regard this as being all solid but simply take into account that some man has seen something. The question is whether he was a pessimist or an optimist. In some reports trees of from six to twenty-four inches are spoken of. That man was a timber looker. Twelve, fourteen, twenty-four inches. That man saw giants. But we know that under certain conditions things must be so and so and from our knowledge we can draw our conclusions. The rich heart of Canada, the prairie land wants a lot of wood. They have no stones to build their homes. They need everything that you can conswerve for them, and the timber in this northern country should be preserved for the settlers that are to come. To sum up :

Northwestern country, prepared by Mr. R. E. Young of the railway branch, showing the parts of the country explored and the character of the forest found by the explorers.

The Eastern forest has in the last 100 years been slowly robbed of its best values, and while the governments have, from the sale of timber, secured a certain amount of revenue which has made other taxation unnecessary, the golden goose is now nearly killed, and other sources of revenue will soon have to be found.

The worst feature of this mismanagement of a most valuable property, that might have, with reasonable care, produced forever, is, that after the timber is taken off, fires are allowed to run through the slash, when the young growth, the hope of the future, is destroyed.

The situation may then be summed up in the following statements :

1. The area throughout the whole of Canada which at any time contained commercial saw timber is relatively to the size of the country small. It is comprised in two widely separated regions, namely, on the Pacific Coast within 75,000 square miles and on the Atlantic Coast south of the Height of Land within 240,000 square miles, or altogether 200 million acres, while the more woodland area may cover over one billion acres.

2. The actual area of commercial saw timber is not known but probably does not exceed 50 million acres in British Columbia with a stand which may be reasonably estimated at 300 billion feet, and a like amount of merchantable timber may possibly still be found in the Eastern Provinces.

3. This estimated stand of 600 billion feet of saw timber represents not more than 15 to 20 years' present requirements of coniferous material for the United States although it might supply Great Britain for four times that period.

4. A large amount of pulpwood remains but is not all available under present conditions of transportation and development. This is undoubtedly the most valuable portion of the Eastern forests, and it is to be hoped, that a wiser management than has been had in disposing of the timber, may be inaugurated for this part.

5. The wood growth throughout the vast Western and Northern territories is not of general commercial value and should be reserved for use of the settlers and miners who have begun or shall eventually bring civilization to this country.

6. Forest fires are destroying mainly the young growth of the cut over lands, and thus prevent recuperation of these lands for future wood crops.

Every patriotic citizen should realize the deplorable mismanagement of this most valuable resource and personally exercise himself to secure improvement. And the first duty is to stop the fires.