

## Fires on Railways

Government Railways Should be Under Regulations of Railway Commission

"The requirements of the Board of Railway Commissioners have been well observed on the whole, and the loss to our forests for which the railways can be held responsible is but a small fraction of the total fire loss," stated Sir Clifford Sifton at the Ninth Annual Meeting of the Commission of "Conservation." "This, as compared with the situation ten years ago," he continued, "is an improvement of the first magnitude. I should here explain that we secured the adoption of legislation by which the Board of Railway Commissioners was authorized to impose fire protection measures upon the railways, and we then assisted the Board in drafting the regulations. When these were adopted, the Board appointed our chief forester as its chief inspector in the enforcement of fire protection regulations for all the privately-owned railways of Canada. The jurisdiction of the Railway Commission now extends to approximately 85 per cent of the railway mileage of Canada.

"There are still 4,087 miles of Dominion Government railways and 350 miles of provincially chartered railways in Alberta not subject to regulation and inspection by the Railway Commission, and the fire prevention service applicable to these two classes is not comparable to that applied under the Board of Railway Commissioners. The Minister of Railways has, so far, declined to take the progressive and effective step of adopting the regulations of the Board of Railway Commissioners in full and putting their enforcement in charge of our chief forester, unquestionably the best qualified man in Canada for the work. We trust this will soon be done. The situation at the present time, is, therefore, that the Parliament of Canada, in its zeal for the public good, requires all privately-owned railways, such as the Canadian Pacific railway, the Canadian Northern railway and the Grand Trunk railway, to submit to the regulations which are imposed for the public good by the Board of Railway Commissioners, but they will not allow the Intercolonial railway, which they themselves own and manage, to be put under those regulations. The result is that on the Government's own railway the fire protective service is the worst that we have in Canada. Urgent necessity exists for dealing with the northern railways in Alberta, and it is to be hoped that the government of that province will fall in line with the progressive spirit which has been adopted throughout the remaining portions of Canada."

## FORESTRY FORETHOUGHT

Taking no thought for the morrow has been characteristic of Canada's forestry policy in the past. In the early days, the forest was looked upon as an impediment to development, and great areas were ruthlessly destroyed by fire to make room for farms. Then for many years the lumber industry cut and culled the choicest timber without a thought as to the reproduction of the crop. Gradually, however, it was realized that only scientific cutting, combined with careful replanting, could prevent the exhaustion of the country's timber and pulpwood resources.

This realization was followed by a generation of debate concerning the methods of forest management that should be adopted. In spite of that, however, it was possible for Dr. C. D. Howe, one of Canada's leading forestry experts, to

of Quebec. Quebec has, however, the most important pulpwood area in Canada. The transportation facilities of the province, both natural and artificial, are excellent for the delivery of pulpwood and pulpwood products on the important markets in America and England.

Much additional information as to the amount, distribution and accessibility of these pulpwood areas should be ascertained. Then, measurements of each tree in typical areas set apart for that purpose, should be made from time to time to ascertain the natural annual increase in diameter under normal conditions in the forest. This information would make possible a close estimate of the probable duration of the supply.

But, unless there is a replacement of the trees removed, it is obvious that the supply can only last for one generation of trees. In a study of a limited area in the St.

## FIRE WASTE AND HOW TO PREVENT IT

**CURTAINMENT** of fire waste is one of Canada's greatest problems.

**OVER \$25,000,000** in property values were burned last year.

**NEGLECT** of simple precautions was responsible for three-quarters of this loss.

**STOVE pipes**, should not pass through wooden partitions.

**ELECTRIC** wiring should be installed by competent men and should be regularly inspected.

**RUBBISH** should not be permitted to accumulate in attics and basements.

**VIGILANCE** in regard to these seemingly trivial matters will eliminate one-half of our fires.

**ABOLISH** the "strike anywhere" match and hundreds of children's lives will be saved.

**TRAINED** fire departments may extinguish fires, but they are helpless to prevent them.

**INSURANCE** partially indemnifies individual losses, but cannot restore the property destroyed.

**ONLY** individual carefulness can materially reduce Canada's fire waste.

**Now** is the time for action. Will YOU do your part?

say recently that: 'We are woefully ignorant of many of the fundamental facts, absolutely essential to the first tottering steps in the management of the timber resources of the country.'

There is urgent need for a definite stock-taking of the commercial timber and pulpwood now available. Mathematical accuracy is not essential, but sufficient cruising and gathering of data should be completed to permit of reliable estimates being made. Such work has already been done by the Commission of Conservation in British Columbia. Similar work will be done in Ontario, as soon as the funds are available and the necessary organization has been completed. Then, too, the provincial government of New Brunswick is engaged in making such a survey. As yet, however, only a partial mechanical stock-taking has been made of the available pulpwood supplies

Maurice valley. Dr. Howe found that balsam and hardwoods predominate in the new growths, and that spruce and pine are being steadily and surely depleted. By practising scientific forestry, and by discovering means for utilizing the hardwood forests profitably, much may be done to correct this defect. However, to improve upon nature, it is necessary to know how nature acts and reacts upon the thing we wish to improve. Thus far, no determined and sustained efforts have been made in Canada to get such data in regard to forests. It will be essential to discard the trust-to-luck-and-to-nature policy and substitute therefor a policy based on knowledge obtained by scientific studies of conditions.

Slightly over 79 per cent of the municipalities of Canada own and operate their own water supply systems.

## Coal Supplies and Imports of Canada

Development Since 1874. Need Decreasing Imports

The coal supplies of Canada are second only to those of the United States in quantity, and compare favourably with those of other great coal-mining countries in quality, quantity and accessibility for mining purposes. The known coal beds in Canada underlain by worked coal beds is estimated by Mr. D. Dowling at 111,168 square miles containing over 1,300,000 million tons of coal. For convenience classifying, the coal-fields may be divided into four main divisions, follows:

(1) The Eastern Division, comprising the bituminous coal-fields Nova Scotia and New Brunswick.

(2) The Central or Interior Division, comprising the lignites of Manitoba and Saskatchewan, the lignites, sub-bituminous, bituminous and semi-anthracite coal-fields of Alberta, as well as the bituminous coal-fields of the Rocky mountains in southeastern British Columbia.

(3) The Pacific Coast Division comprising the bituminous fields Vancouver island, the bituminous and semi-anthracite fuels of Queen Charlotte island and the interior British Columbia, and the lignite of Yukon.

(4) The Northern Division, comprising the lignites and low-grade bituminous coal of the Arctic Mackenzie basin.

The coal-mining industry of Canada has developed at a very rapid rate. In 1874, the earliest year for which there is a reliable record, the production was 1,063,742 tons. In 1916, it amounted to about 10,500,000 tons. But in spite of this striking development, imports have increased faster than production. In 1916, they exceeded 17,000,000 tons, or over 53 per cent of the total consumption for that year.

When it is remembered that Central Canada is dependent on the United States for supplies of coal, the desirability of changing these conditions becomes apparent, both from a mining and a national standpoint.—W.J.D.

I believe, if we considered the ultimate object of cultivating land we would put more energy as well as wisdom into our attempts. The ultimate object is not merely to amass money from the crop now, but to ministering to civilization just as sincerely as a man does who sacrifices himself to win this war. Civilization may not perish.—Dr. J. W. Robertson.

It was estimated in 1907, after a full inquiry, that the annual average loss caused in Great Britain by each rat was \$1.80, in France \$1.40 and in Denmark, \$1.20.