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Canada's Inland Waters

Large Lakes of the Middle West Which are only now Being Appreciated

Comparatively few persons have any adequate appreciation of the extent and value of the great inland water resources of portions of Canada. In this connection a few brief statements, respecting the lake of the Woods watershed will be of interest.

The area of the lake of the Woods is 1,485 square miles. The area of Rainy lake is 345 square miles. Lake Winnipeg has an area of some 9,400 square miles, which is about 2,000 square miles larger than lake Ontario.

The area of the lake of the Woods watershed, 26,750 square miles, is only about five per cent less than the area of the province of New Brunswick.

What is known as the Lake of the Woods Investigation is being conducted by the International Joint Commission, under the Boundary Waters Treaty, of 1909, between Great Britain and the United States. The chief purpose of the investigation is to secure the most advantageous use of the waters of the lake of the Woods and of the waters flowing into and from that lake on each side of the boundary for domestic, sanitary, navigation, transportation, fishing, power and irrigation purposes; and also to secure the most advantageous use of the shores and harbours of the lakes and the waters flowing into and from the lake.

To indicate the volume of water corresponding even to one foot of depth on some of these lakes, on the lake of the Woods a depth of one foot is equivalent to 41.4 billion cubic feet, while the corresponding volume for one foot of depth on Rainy lake is 9.6 billion cubic feet. Thus, a depth of one foot on the lake of the Woods would supply 1,313 cubic feet per second for one year, while one foot depth on Rainy lake would supply 305 cubic feet per second for the same period.

Storing the runoff in lake of the Woods, Rainy and other lakes can thus exert a marked beneficial influence upon water powers receiving supply from this watershed. The International Joint Commission, in making its recommendations respecting a proposed regulation of the lake of the Woods, will consider the advantage which would result to power interests, and also take into account any disadvantages that may result to riparian owners living in Minnesota or elsewhere, whose lands, bordering on the lake, may, under certain regulations of levels, be subjected to damage by flooding.—A.V.W.

Many houses are burned by sparks igniting clothes or kindling placed near the stove to dry.

Canada Pays the Penalty

Carelessness of Our People the Cause of One of the Heaviest Drains Upon Our Resources

An analysis of the fire losses in Canada during 1914, as compiled by the Monetary Times, discloses some interesting conditions. This statement substantiates and verifies the charge that carelessness is the cause of seventy-five per cent of Canada's fire loss.

It would naturally be expected that the greater number of fires would be in factories using power or fires for manufacturing processes, and where accumulations of shavings and other waste are exposed to fire from friction, spontaneous combustion, or other causes.

Such is not the case. By far the greater number of fires were in buildings in which none of these risks occur. Factories contributed only 59 fires; various mills only 12; laundries, 5; engine houses, 1; machine shops, 3; sawmills, 12; foundries, 2; while power-houses, blacksmith shops, canneries and others had a clean record.

Against this and constituting a record which should be a disgrace to any country, were 676 fires in dwellings, 138 barns and stables, 384 stores, 46 hotels, 44 business sections and blocks, 26 warehouses, 18 offices, 11 schools and colleges and 29 sheds.

Some of the causes of the fires were: Electrical defects, 55; lamps and lanterns, 20; defective and overheated stoves, furnaces and chimneys, 113; sparks from chimneys, 41; candles, etc., 6; ashes, 8; matches, 69; cigar and cigarette stubs, 15; defective gas appliances, 21; oil stoves upset and exploded, 13; spontaneous combustion, 18.

All of the foregoing causes may be overcome by the exercise of only ordinary precautions. Not one of them needs to be repeated during the current year. Canada cannot afford to burn up her resources as she has been doing. As in Great Britain, there is need of husbanding all our available assets for the great national work in hand, and it behooves Canadians to make every effort to reduce in a large degree the fires resulting from causes entirely under control.

RESULTS OF SAFETY WORK

A large United States industry gives the following analysis of accidents in its plant for the first half of 1915. Safety work has been systematically carried out since January, 1915, only, and excellent results have been secured.

	Per Cent.
Carelessness of injured	71
Miscellaneous	24
Carelessness of others	3
Lack of mechanical guards	2

In the same period there were 1,168 days' time lost, as a result of accidents, compared with 3,164 days lost in the corresponding six months of 1914.

One of the chief essentials of "Safety first" is "thinking first."

Technical Training for Fishermen

China and Japan Making Advances in this Important Industry.

At a recent meeting of the Committee on Fisheries of the Commission of Conservation, Dr. J. W. Robertson, C.M.G., gave an interesting address on "Technical Training for Fishermen," deploring the fact that we have no schools in Canada for training fishermen, and giving instances of what European countries are doing. Not only to Europe may we turn for examples, but to Asia as well. Japan has given very great attention to instruction respecting her fisheries, and her neighbour, China, is also rapidly coming to the front, as is shown in a recent China edition of the Manchester Guardian, which says:—

"Much has been done by the Chinese Ministry of Agriculture and Commerce to encourage fishery on the high seas. On April 28, 1914, regulations to promote the fishing industry on the high seas were issued. A sum of $50,000 was set aside in that year, and this has been made an annual appropriation for the encouragement of the industry. Fishing vessels must be inspected before they can engage in this business. Not a few fishing boats have since been rewarded for meritorious service, and it is expected that more money will be devoted to this purpose.

"The first fishery school was established at Woosung in 1904, by the Kiang-Chi Fishery Co. The Provinces of Chi-li and Mukden followed successively, and the curriculum in these schools was modeled after that of the Woosung school. Besides these schools, there have also been established fishery training schools for the practical improvement of fishing methods. In the third year of the Republic (1914) the Ministry of Agriculture and Commerce started to establish training schools along the coast. Several have already been established in the Provinces of Chi-li, Chekiang, Fengtien, Fukien, and Kwangtung. In the Province of Chekiang alone three training schools have been established."