

Encouraged by the free entry of raw materials into the United States, an important trade developed, especially in Ontario, in the exportation of saw logs to be sawn into lumber in American mills. The provincial Government prohibited the exportation of this material when cut on Crown lands about 1900 and effectively checked this economic loss. Similar legislation has since been passed by the Dominion and the different provincial governments and has been extended to pulpwood and other raw or unmanufactured forest products.

The lumber industry which began in Quebec and New Brunswick and extended into Upper Canada has since moved gradually through "Old" Ontario along the Upper Ottawa and its tributaries, around Georgian bay, into "New" or northern Ontario and through the Lake of the Woods and Rainy River districts. It is still an important industry in these regions. Lumbering to the north of the prairies where the timber was never particularly large nor abundant has progressed with the settlement of the district, but the production does not usually exceed the local demand. In 1908 British Columbia provided less than a fifth of Canada's lumber production, but in 1928 this proportion had increased to 53 p.c., showing the rapid westward movement of the centre of production. British Columbia has added several new tree species to the lumber market and at present possesses the heaviest stands and the largest individual trees in Canada.

Remarkable developments in the manufacture of pulp and paper in the twentieth century have caused a second wave of forest exploitation to sweep over Eastern Canada, and have given rise to an industry which has already surpassed the manufacture of lumber and is to-day the most important manufacturing industry in Canada and the source of the greatest single item in our exports next to wheat.

### Subsection 1.—Woods Operations.

Differences throughout Canada in forest conditions give rise to differences in logging methods. Generally speaking, throughout Eastern Canada the climate is such that the cutting and hauling of logs can be carried on most economically during the fall and winter months. The trees are felled and the logs hauled to the nearest stream or lake, where they are piled on the ice or sloping banks. The presence of connected systems of lakes and streams makes it possible in most cases to float the logs from the forest to the mill at a minimum cost during the annual spring freshets. The logging industry east of the Rocky mountains is therefore almost entirely seasonal. In many cases lumbermen co-operate in river-driving operations, and improvement companies, financed by the logging operators, build river improvements to facilitate the passage of the floating logs, the logs being finally sorted and delivered to their respective owners. In British Columbia the scarcity of drivable streams and the greater average size of the logs give rise to entirely different logging methods. Logs are assembled by different cable systems operated by donkey engines and are transported to the mills or to water chiefly by logging railways and in some cases by motor trucks. These operations are more or less independent of frost, snow or freshet, and are carried on in most cases throughout the entire year.

In Eastern Canada logging operations are usually carried on by the mill-owners or licensees of timbered lands, often through the medium of contractors, sub-contractors and jobbers. In the better settled parts of the country a considerable quantity of lumber is sawn by custom sawmills or small mills purchasing logs from the farmers. Unmanufactured pulpwood, poles, ties and other forest products have a market value, but saw-logs, being as a rule the property of the mill-owner, are