

water to drive large export saw-mills. Probably steam-power will always be found safest for large saw-mills.

With respect to the use of the British Columbian rivers for "logging" purposes, the lumberman must bear in mind the physical structure of the North American continent, according to which the long and gentle slopes descend from the spine of the continent—the Rocky range—towards the Atlantic Ocean, and the short and rapid slopes towards the Pacific Ocean. This gives a character to the rivers west of the Rocky range. The rivers generally are interrupted by rapids; they often flow compressed between gloomy rocky walls; they rise and fall with great rapidity. The aridity of the country east from the Cascade range in British Columbia diminishes the volume of the East Cascade rivers very much—the Fraser in fact being, as already said, the only one strong enough to get through the Cascade range to the sea.

That the Fraser River, if valuable timber grows near its upper waters, may be, by the adoption of "slides" and other improvements, made available for water carriage of logs from the East Cascade region to the seaboard for export purposes, I do not doubt, but the difficulty and expense will postpone this undertaking until the supplies of timber in the West Cascade region, both in English and American territory, are considerably exhausted. The saw-miller who proposes to cut for export must look at present for a saw-mill location and a logging ground in the West Cascade region.

The only timber exported in cargoes is that of the *Douglas fir*, commonly called "pine." It is a tough, strong wood, well adapted for beams, but good also for planks and deals. It makes excellent masts and yards, and is used for shipbuilding and housebuilding. It grows to the height of 150 to 200 feet, and attains a thickness of 5 to 8 feet at the butt. It carries its thickness well up. Dressed masts of 36 inches in diameter, at one-third from butt, and with proper proportions for the required length, have been supplied from the Douglas fir forests. This British Columbian wood is known in Australia, New Zealand, and Great Britain, as "Oregon pine," though Oregon does not export it to these markets. A good growing demand for British Columbian Douglas fir timber and square timber exists in South America, Australia, and China, and a few cargoes of spars are sent annually to England.

This Douglas fir (or "Oregon pine," or "Oregon pine") predominates in the forests of the West Cascade region, but not in the arid parts of the East Cascade region. It is plentiful in Washington Territory (United States). The Douglas fir is also found in some of the Rocky Mountain valleys, on the Blue Mountains of Oregon, and here and there eastward as far as the head waters of the Platte. At present the principal seats of its manufacture for export are the coast of British Columbia, and in Puget Sound (United States). The Douglas fir does not grow in any quantity north of Millbank Sound, in lat. 52°.

The principal existing mills are in the New Westminster district, and probably that neighbourhood will continue to be the chief seat of the export of Douglas fir. The Nasse-Skena district looks like a good saw-milling country on the map, but the Douglas fir, as just said, is not found so far north. The inlets on the mainland, or some of the outlying islands between Millbank Sound and the New Westminster district, probably offer locations for export saw-mills, but it is not known, however, at present, that these places can be