

At Sault Ste. Marie, a water power canal fed from Lake Superior supplies the largest pulp mill yet erected in Ontario, and a similar work at the Lake of the Woods (which lake is 1,000 feet above tide) gives power to the largest flour mill in the Dominion. The waters of the Winnipeg river (the outlet of the Lake of the Woods) descend about 300 feet, unused, into Winnipeg Lake, adjoining Lake Manitoba, from whence the water system extends to the Saskatchewan, and thence via Athabasca, the Great Slave and the Great Bear Lakes, to the Arctic circle.

No reference has been made to the long established water power in the older districts, on the Saguenay, or those between Montreal and Quebec, and upon the Ottawa, nor to the more recent and extensive pulp and paper establishments;—it being the object of this paper to draw attention to the continuity and broad distribution of water power across the continent, on Canadian territory, and to the unnumbered natural reservoirs of water at elevations which impart to them latent powers for the future development of this country.

British Columbia has not been included in this field, because its occupied portion is separated by our great prairie region from the lake system of Eastern Canada, which system is deflected toward the northwest at the Lake of the Woods. This province is by no means deficient in water power, although it has been little used as yet where mines are on high levels, and because steam could be more readily applied. On the other hand, it is the only province in which hydraulic mining is in operation; and where gold is found in quantity sufficient to warrant the great outlay of capital necessary in connection with that system.

In the Kootenay, water wheels, with or without electrical transmission, are necessary for water power, in order to mine, pump, and crush the gold bearing rocks; but in the Cariboo district, water power is applied in the simplest form, without wheels or wires, by direct pressure from a nozzle, as is done in Ottawa from a fire hydrant.

While the mountains south of the Canadian Pacific Railway are rich in metallic veins, the region north of this railway extending into the Arctic Circle, appears to be a veritable land of Havilah, a continuous "Placer" gold field, in which much of the precious metal is to be obtained by hydraulic mining, wherever that is practicable.

This gold field, over a thousand miles in extent between the Fraser and Yukon Rivers, and of unascertained width, has been exploited at Cariboo, (from whence fifty million dollars has been taken), at Cassiar and Omenica, and recently at Atlin, all in British Columbia;—as well as in the far famed Klondike, in the Yukon district, said to be the richest gold field in the world.

Water, in whatever way it is used, is necessary to the recovery of this gold, but in many places water power alone will profitably unearth it