

jaspers, Labrador feldspar, and porphyries of fine texture,—the latter in a variety of colors, susceptible of high polish, and said to rival the porphyries of the old world.

Petroleum.—Springs of Petroleum, or mineral oil, occur in several localities in the south-western part of Canada, and a large portion of that region is under-laid by the oil-bearing rock; while at the north-eastern extremity of the Province, natural springs yielding small amounts of petroleum, are found scattered over a considerable portion of the Gaspé region.

THE WATER POWER OF CANADA.

Sir Wm. E. Logan and other Canadian geologists are agreed that common fossil coal is not to be found in this Province; the complements in Canada of the British "black country" will, however, be those manufacturing regions which, it is believed, will grow up ere many years elapse, in the vicinity of the water-powers that abound throughout the Valleys of the St. Lawrence, Ottawa, and other rivers, from the coasts of Labrador and Gaspé to the Rocky Mountains.

Let the reader examine the map of Canada and he will see that there are at least sixty rivers flowing from the north into the St. Lawrence River, between its mouth and the City of Montreal,—several of them of considerable magnitude. Within similar limits on the south shore there are eighty or more rivers and streams draining all the Canadian territory between the boundary-lines of New Brunswick and the United States. With a few exceptions, these cannot be navigated, descending as they do from the high lands in the interior, through rapids where the water-power can be utilized. This is the case on the south shore, between River du Loup and Montreal, a distance of about 265 miles,—the intervening streams affording abundant scope for the cheap development of manufacturing industry. Sherbrooke, Richmond, and other places might be instanced; a fraction of the water-power at the first-mentioned place being at present in use, while extensive arrangements are projected at the second;—indeed, it has been predicted of that part of the Eastern Townships that it will be the Lancashire of Canada. The Grand Trunk Railway traverses the region.

Reference was made in the "Report on the Trade and Commerce of Montreal for 1864," to the water-power (equal to 8,143 h. p.,) supplied by the Lachine Canal,—that portion of it already in use amounting to 5,124 h. p., affording direct employment to nearly 10,000 persons, and indirectly to some thousands more. The entire fall in the St. Lawrence River in the vicinity of Montreal is about 43 feet within two miles; and it has been computed that this would provide a motor equal to 4,500,000 h. p., of which the projected hydraulic-dock scheme would use about 51,000 h. p.*

*Calculations, endorsed by British engineers, have been made, from which it appears that the quantity of coal necessary to generate steam enough to work up to the proposed capacity of the hydraulic docks above mentioned would be 3,287 tons per day, or 1,199,755 tons per annum; and that this prodigious consumpt would require the