

fibres cannot be detected by the microscope. Some pieces have a strong resemblance to charcoal in structure, color and lustre." In 1845, Sir John Richardson thus speaks of the Arctic slope of Central Canada in a communication published in the *Journal of the Geographical Society*. "These countries, explored by the expeditions of Sir John Franklin and Captain Back, are rich in minerals; inexhaustible coal fields skirt the Rocky Mountains through twelve degrees of latitude; beds of coal crop out to the surface on various parts of the Arctic coast, and the Mackenzie River flows through a well-wooded tract, skirted by metaliferous ranges of mountains, and offers no obstruction to steam navigation for upwards of 1,200 miles."

The Geographical Survey of Canada, now in progress under the direction of Mr. Selwyn, has reduced the imperfect testimony of travellers to a scientific certainty. In two successive reports Dr. G. M. Dawson has embodied valuable information in regard to the coal deposits of Vancouver Island, which extend to Bellingham Bay, Washington Territory, and quite recently, of Queen Charlotte's Island, which is also developed in the Aleutian Islands and probably on the mainland of Alaska. The coal in the latter localities is anthracite, while the deposits at Nanaimo, on the eastern coast of Vancouver and at Bellingham Bay, Washington Territory, are a superior quality of bituminous. San Francisco and California finding the Mt. Diablo deposit insufficient and inferior in quality, rely almost exclusively upon the mines at Nanaimo and Bellingham.

This paper should not close without some reference to recent intimations from Dr. Bell in regard to the geological indications north and east of the Laurentian chain. South and west we have ascended the geological horizon, until we have recognized more extensive formations of coal than the continent of Europe has disclosed; and all analogy would suggest similar formations with corresponding developments in the opposite directions. Such discoveries we now hear to be in reserve for us, when Dr. Bell's reports shall be fully published. The whole vicinity of Hudsons' and James' Bay consists, in all probability, of extensive districts of silurian and devonian origin and characteristics, and if so, they will, like the equivalent regions of Northern Europe, be found rich in coal and iron, with sufficient capacity for agriculture to bring the new North East of the continent into the circle of the world's activities.