sive indeed. One area of true and lignite coals of the best quality extends along the base of the Rocky Mountains, from the 49th parallel to Peace River, a distance of 500 miles, with an average width of about 100 miles, giving a total area of 50,000 square miles. An additional area, stretching eastward as far as the Souris River and Turtle Mountains, yielding lignites only, may be estimated at 15,000 square miles. These fields have hardly been touched as yet.

Owing to the scarcity of timber these coal fields are of greatest importance in connection with the future settlement of the North-West. The quantity of coal underlying each square mile in some of the best known localities is as follows: Main seam, in vicinity of Lethbridge ("coal banks"), Belly river, coal underlying one square mile, 5,500,000 tons; Grassy Island, Bow river, continuation of main seam, 5,000,000 tons; Horse Shoe Bend, Bow river, 4,900,000 tons; Blackfoot Crossing, workable seam as exposed, 9,000,000 tons; Stair, near Medicine Hat, 5,000,000 tons. Taking the minimum thickness of the Lethbridge main seam at different points along an outcrop of 66 miles, and assuming a workable width of but one mile, the coal in this seam alone would amount to 330,000,000 tons.

In connection with these figures it may be explained that on account of the fact that coal occurs in regular and well-defined beds, interstratified or sandwiched in with the sandstones and shales which accompany it, knowing the dip of the strata and the thickness of the coal seam, it is quite possible by a simple trigonometrical calculation to arrive at the amount of coal under any area and available for use, provided the influence of faults or dislocations can be eliminated. This is not the case with deposits of gold, silver, or other ores, which, being much more irregular in shape and uncertain in thickness, make it impossible to arrive at such results with anything like the same degree of accuracy. In the North-West Territory, as we go west from Manitoba, the coals, which at first are of the nature of brown coal or lignite, gradually change in character to true bituminous coals, and in the Rocky Mountains change into anthracite or hard coal. These latter deposits are extensively worked in the Banff district, and form in fact the only workable deposits of anthracite known to exist in the Dominion. On the Pacific coast in Vancouver Island, there are large and extensively worked deposits of bituminous coal, which constitute the only deposits of first-class coal on the west coast of America, and are on that account of especial value. In output these mines of Vancouver Island rank next to those of Nova Scotia, a large proportion of the coal raised being sent to San Francisco. The following table shows the amount of coal produced by the several provinces last year, as well as the amount exported and imported:

	Long Tons.
Production of Nova Scotia, year ending 30th Sept., 1894	2,200,235
" British Columbia, " 31st Dec, 1894	1,012,953
" Manitoba, " 31st Dec, 1894	10,000
" North-West Territories (estimated)	225,000
" New Brunswick (estimated)	6,000
Total coal production of Canada	3,454,188
Imported (chiefly from the United States)	3,038,586
Exported (chiefly to the United States)	995,998
Leaving as the consumption of the Dominion	5,496,776

The southern portion of our Dominion is thus well supplied with mineral fuel both in the east and west, as well as in its west central portion, but it is a fact, and a most unfortunate one, that in the east central portion, which is the most thickly populated part of the Dominion, no coal is found, and what is still more unfortunate, it is certain, from the age of the rocks underlying this portion of the Dominion, coal never will be found here—a fact which will always necessitate the carrying of coal long distances to reach our principal centres of population.

Iron ores occur in many parts of the Dominion, but they have been worked as yet on but a limited scale, and at but a few points. In many cases the great distance of these deposits from supplies of coal prevents their being worked, but the chief difficulty in the way of the development of our iron deposits lies in the extremely low price of iron during recent years, which permits only those deposits which are most favorably situated to be worked with profit.

Nova Scotia is the province where the conditions are most favorable for the manufacture of iron at present, for there great deposits of excellent iron ore occur in close association with extensive coal deposits and ample supplies of flux, and in consequence a large proportion of the iron smelted in the Dominion comes from the Nova Scotian furnaces.

In the Province of Quebec, also, there are deposits of bog iron ore, which are smelted in small charcoal furnaces at Radnor Forges and Drummondville. Other extensive deposits are known in Ontario, Manitoba and British Columbia; but, with the exception of some of the British Columbia deposits, none are being worked at present. The new furnace which is being blown in at Hamilton, Ont., will, however, necessitate the opening up of some of the Ontario deposits.

The amount of iron ore mined in the Dominion in 1894 was 109,991 tons, valued at $226,611, and of this 108,871 tons was converted into 49,967 tons of pig iron, valued at the furnaces at $646,447, an amount not nearly sufficient to supply the needs of the Dominion. We see, therefore, that although the Dominion possesses great deposits of iron ore and of fuel, it does not as yet supply, or, in fact, nearly supply, all the iron which it consumes. The Canadian pig iron output has, however, increased very rapidly in recent years, and it seems highly probable that before many years have elapsed Canadian pig iron will entirely supplant that now imported from the United States. An interesting point in this connection is the recent discovery by A. P. Low, of the Geological Survey, of enormous deposits of iron ore in the interior of Labrador. These are similar in character and associations to the great iron ore deposits in the Michigan district, and are very extensive, the ore occurring literally in mountains. These deposits, although quite unavailable at present, will probably in course of time, as other and more accessible deposits approach extinction, be profitably worked, and this remote, bleak, and forbidding part of our Dominion will thus be turned to some account.

Gold, which in value ranks third among the products of our mines, comes, like coal, chiefly from the extremities of our land, Nova Scotia and British Columbia being the chief producers of this precious metal. In the intervening portion of the Dominion, however, many other gold fields are known to exist, which may, when opened up, rival or even surpass these older districts. Among these are the auriferous gravels of the Chaudiere District of the Province of Quebec, which occur like similar gravels in California and elsewhere, not only in the beds of the present rivers, but in the old deserted and buried channels occupied by the rivers of former geological times which have long since ceased to flow.