

Q. They would be more valuable immediately than waiting for a long exhaustive report?—Certainly.

Q. Have you ever been west of the Rocky Mountains?—I have been to Colorado, but I have not been as far as the Rocky Mountains on Canadian territory.

Q. Have you any personal knowledge of the mineral wealth of British Columbia?—No; except in making assays of ores which were sent to me by various parties.

Q. What samples of ore have you had?—Copper, gold, coal and iron ore, from British Columbia. Amongst others, I may mention that I have made analyses of iron ore from Texada, for Mr. DeCosmos.

Q. Has no ore been brought to your notice from the Howe mine, at Jarvis Inlet, British Columbia?—Very frequently they do not tell me the exact location, for fear I might give information to enable parties to “jump” the land.

Q. Then you really do not know that there is valuable ore in British Columbia?—Judging from the character of the rocks, as already known, I should say that there must be many valuable mineral deposits in British Columbia.

Q. But you have no personal knowledge as to particular districts in which these deposits are?—No.

Q. Have you seen any very valuable copper ore, and if so, what percentage has it been?—I could hardly tell that.

Q. Is it a high grade or low grade ore?—High grade ores. A copper ore holding 3 per cent. is considered good. The Cornwall ore, in England, when brought to bank rarely exceeds 2 per cent., but by dressing, the richness is, of course, brought up to about 20 or more per cent. The copper ore from the Bruce mines averaged, before the mines were closed, no more than $1\frac{1}{2}$ per cent., but were brought up by dressing to 21 per cent., before being shipped to Swansea.

Q. Then, you have not seen any of the high grade copper ore from British Columbia, averaging 65 to 70 per cent.?—No.

Q. Is it not usual in copper deposits to find large deposits of silver underneath?—It is very unusual.

Q. But copper is sometimes found in veins with very valuable metal?—Yes; there is, of course, no reason why it should not be so; but it is unusual for silver to be found with copper, in large quantities.

Q. But the native copper of Lake Superior is associated with small quantities of native silver. In valuable copper ore, are not gold and silver very important factors?—Not as a rule. Nearly all copper pyrites holds a little gold, but as a rule, it would hardly pay to take it up.

• Q. You have already stated that you have no personal knowledge of British Columbia. Have you any knowledge, from hearsay, of the economic value of the coal deposits of Vancouver Island?—There is no doubt that they must be very great. There have been some very good reports published in former years on the coal deposits of Vancouver Island. At any rate, these reports served to impress people with the value of these deposits, from a mineral point of view. I have examined some of the samples, and they are really nearly as good as the bituminous Ohio coal.

Q. And how do they compare with the old country coals?—As a rule, it is somewhat inferior to the Walkend or Milford Haven coal, but still it is very good coal.

By Mr. Dawson :

Q. The coals of the North-West and of Vancouver Island are in a very different geological horizon to the carboniferous coals that come from Europe?—Yes.

Q. In fact, it is quite a new discovery to get good coal so high up in the series?—Yes, when first made. The old term, carboniferous formation or period, refers to the fact that workable beds of coal were supposed to be limited practically to that geological horizon.

Q. So that this coal of the North-West, which may be designated true coal, belongs to a much more recent formation, and is in a different horizon, geologically speaking, from what it was supposed at one time true coal could exist?—Yes; except ordinary lignite, which has been known for years to occur in the Cretaceous and Tertiary formations.