amination in the laboratory was found to have a specific gravity of 7.137. With it are associated ferruginous quartz and wherever the mineral has been exposed to secondary action, yellow more or less powdery tungstite occurs. On chemical examination the following result was obtained:

WO_3	74.90
FeO	17.75
MnO	2.75
CaO	1.52
MgO	2.66
SiO_2	1.02
Total	100.60

So far as I am aware no economic use has been made of this material. I had not an opportunity of examining the mode of occurrence personally, the material being given me as coming for the Kootenay Belle mine, though its nature and value appear to have been unknown at the time.

Tungsten and scheelite.—Sheep Creek.—The writer has elsewhere[4] described in detail the occurrence of masses of hydrated oxide of tungsten in the gold quartz veins of the Kootenay Belle mine. The tungstite appears in more or less reniform concretionary masses in the vein associated with wolframite and scheelite, from which it was derived by alteration. In the tungstite specks of native gold may be observed. It was as gold ore that this auriferous tungstite along with the accompanying gold quartz was shipped. I have reason to believe that in the subsequent treatment the tungsten values were not recovered even when they were very much more valuable than the gold contents.

From an analysis of the tungstite-wolframite-scheelite ore in the laboratory the following results were obtained:

	Per Cent.
WO_3	86.20
FeO	1.20
CaO	.54
Fe_2O_3	4.14
Water	7.72
Total	99.81

The tungstite is golden yellow in color and very heavy—pure tungstite 5.517 and of some of the ore specimens nearly as heavy.

St. Mary's River, B. C.—Recently Mr. E. Walter Widdowson, assayer of Nelson, B. C., showed me a very fine specimen of crystallised wolframite from the St. Mary's river north of Cranbrook. I do not know anything of the quantity of this mineral available and am unable to say whether it be an economic deposit or not.

Scheelite from Victoria Mines, Sudbury District, Ontario.—At the Victoria mines of the Mond Nickel Company in 1904 Mr. T. M. Paris, assayer for the company, presented to me a few small fragments which he had determined as scheelite. I do not know anything as to the mode of occurrence, but so far as I know this is the only place in the Sudbury dictrict where tungsten mineral has ben found. The general studies of the genesis of the Sudbury ore deposits lead us to anticipate the occurrence of such minerals as scheelite.

The mineral is quite white and of very vitreous lustre; specific gravity 6.167. On the fragments in my possession no crystal surfaces are visible, but from the continuous cleavage surfaces it is probable that they are crystal fragments.

A chemical analysis showed that the mineral is exceedingly pure.

	Per Cent.
WO_3	79.36
CaO	19.96
Total	99.32

Conclusion.—The ever increasing importance of tungsten in the industries calls for an examination of these various Canadian occurrences with a view to determining their possible economic value. Within the past year the government of the United States has appointed an officer to examine and report on such occurrences within their borders. In Canada we know of tungsten minerals only as specimens and curiosities and as those engaged in developing properties do not know these minerals or their value, such an appointment might be beneficial in many ways.

[1] Molybdenum and Tungsten, by R. A. A. Johnston and C. W. Willmott, 1904.

[2] Summary Report, Geological Survey of Canada, 1907, p. 82.

[3] Report of the Minister of Mines, 1903, p. 138.

[4] Report of the Minister of Mines, 1904.

[5] American Journal of Science, 1908.

A NEW IRON ORE FIELD IN BRITISH COLUMBIA.

By John E. Hardman, S.B. Ma.E., Montreal, Que.

Ottawa Meeting Canadian Mining Institute, March, 1908.

The discovery of large deposits of iron ore near the shore of the Bay of Chaleur, in the province of New Brunswick, in formations belonging to the Pre-Cambrian, or Cambro-Silurian, period comes as a surprise both to geologists and mining men, who hitherto may have regarded New Brunswick as containing less profitable mineral wealth than any of the other provinces. When to this statement is added the further one that, the present facts indicate the probability that this district contains as large, or larger, deposits of merchantable iron ore as have hitherto been found in the Dominion, there will be no excuse needed for presenting to the notice of this Institute a preliminary, and somewhat fragmentary, account of the field.

No geological reconnaissance of this portion of New Brunswick has been made (so far as the publications of the Survey show) since the seasons of 1879 and 1880, when Dr. R. W. Ells examined the district as well as could then be done by canoe traverse of the principal streams which flow into the Bay of Chaleur. The county of Gloucester was then, and in parts is to-day, a wilderness which is traversed in the winter only by