

Ontario and Quebec, but those mentioned are more especially known to me. Some of these deposits are of great extent, practically inexhaustible, and of great richness and purity.

Q. Of what percentage?—It is not so much the percentage of an ore that the smelter looks to as its purity. They run from 60 to 65 per cent. and are, as a rule, practically free from sulphur, phosphates and titanium, &c.

Q. Have these deposits attracted a great deal of attention from the public during the last few years?—Yes; especially from the capitalists of the United States.

Q. Are you aware that almost all those large deposits have been secured by American capitalists?—A great number of them, probably all that I have visited, a very few being in the hands of Canadians.

Q. Could you give us some idea as to the amount of capital invested there or the number of people working at those mines?—The greater number of them are not worked. Some gentlemen connected with the mines there are trying to get aid from the Government for a railway. The Wollaston mine, which I examined, is largely worked, and some 200 men or more are working there.

Q. Do you think much public attention has been called to these rich deposits by the Geological Survey of Canada?—Decidedly not.

Q. Do you not think it is a field in which the force and energies of the Survey should have been directed?—I think so; in fact, all these deposits have been found by explorers, who go in and report upon them. As regards the officers of the Survey, most of whom are well-known to me, there cannot be any doubt, in my opinion, of their scientific ability. Dr. Selwyn, the Director, is undoubtedly a very able geologist, but of course I know nothing of his method of arranging matters with his staff, or of the internal arrangement of the Survey. Dr. Bell, Dr. Dawson, Mr. Whiteaves, Mr. Hoffmann, and Mr. Fletcher, the latter being an old student of mine, are undoubtedly the best men that could be found for their positions. The more subordinate members of the staff, with the exception of Mr. Tyrrell, also a student of mine, are personally unknown to me, but I have no doubt that they are equally efficient.

Q. The material, then, which the Government have within their reach for the construction of a Geological Survey, you think is ample and of the very best quality?—Yes; of course they could always get specialists for special work.

Q. Then you think that any failure to obtain practical results in the Survey would be rather in the system than in the *personnel*?—Quite so.

By Mr. Baker :

Q. You think the necessary geological material is there, if properly distributed and administered?—Yes; there is the machinery, if properly handled.

By Mr. Cameron :

Q. Do you consider the publication of geological maps important in connection with the reports?—I consider the publication of these maps exceedingly important, but I think that smaller maps of a convenient size—index maps, if they please to call them so—should be published at once, accompanied by a plain report, explanatory of the map itself, and giving lists of economic minerals, with their analyses, current values, and other points of value in connection with them, and if these reports could be accompanied by a few plates, showing commonly occurring distinctive fossils, their value would be greatly enhanced. Some of these maps might be issued with very little delay; others would necessarily require a longer time for their preparation, but I think in every case a certain limit of time should be fixed and at its expiration the best results that could be collected within that limit should be given at once to the public. In the United States small volumes are frequently issued containing matters of this kind, and at a very low price. Some of these lithograph views and photographs in the Canadian reports are more suited to a work like "Picturesque Canada" than to a geological report.

Q. How often are they published?—Only from time to time. A man came to me the other day and asked me about maganese. I told him that the principal deposits were in New Brunswick, and he said: "Where can I find a good, plain description of those; with maps?" I could not tell him where to find them. They have now issued