Q. I would like you to express your opinion as to the value of mineral statistics, to the public ?—I consider that that would be the most valuable work which the Survey could undertake in the interest of the public. If the Survey is merely to show the appearance of rocks, &c., it may be possibly interesting to scientists, but certainly not to the general public.

Q. You think, then, it should have a practical side as well as a scientific ?-Yes. By the Chairman :

Q. What practical benefit do you think the public is obtaining at present from the large expenditure of \$92,000 annually for the Survey ?—I could not say. As far as I have already stated, I consider that we are receiving no benefit. It may be of scientific value, but I cannot see that it is of any value to business men and capitalists.

Q. You have referred to the asbestos mines of the Eastern Townships, and that there is no information in the Department regarding them. Is it not a fact that this is an exceedingly interesting discovery and has attracted a great deal of attention in the last few years?—Yes; more especially in the last few years.

Q. Do you not think that it was a question of such geological interest that it should have attracted the attention of the Survey?—I should imagine so. In that case, as in the others, I was obliged to go to private parties to obtain the information I desired.

## HOUSE OF COMMONS, OTTAWA, 28th March, 1884.

The Select Committee on Geological Surveys met this afternoon, Mr. HALL in the Chair. WILLIAM MCINTOSH, Esq. of Buckingham, P.Q., was called and examined.

## By the Chairman ;

Q. You have been connected for some time with the phosphate interests in the Ottawa Valley, have you not?—I have been connected with the phosphate industry for three years in the vicinity of Kingston, and for three years in the vicinity of Ottawa.

Q. How long is it since the phosphate deposits in Canada have been worked for their commercial value?—They have been worked for the last twelve years, to my knowledge; of course, they were discovered some time before that.

Q. Will you give to the Committee an idea of the extent and value of the phosphate deposits in Canada?—Phosphate is found in the County of Frontenac, in Ontario, in a great many of the townships there, including Bedford, Loughboro, Storrington, Sherbrooke, &c. Phosphate is also found on the line of the Kingston and Pembroke Railway, and although the deposits are not so great as those in the Province of Quebec, they are equal in quality, where found in large beds, but they are more on the surface.

Q. About what percentage do they range from ?—In Ontario, for the last four years they do not average over 76 or 77 per cent.

Q. How extensive are the works in that district in developing these interests? Has a good deal of attention been paid to it?—Large works were carried on by the firm of Scheiff & Fleursham, of London, Eng., which were the most extensive. They went to the depth of about 150 feet. That is, at North Burgess, back of Perth. I was connected with those works.

Q. What was done with that phosphate?—It was shipped to England in its raw or crude state. The quality and quantity when they quit work at that depth was equal to what it was on the surface. There were other extensive works caried on there under the supervision of Mr. Davis. I think Capt. Adams and Messrs. Gillespie, Moffatt & Co., of Montreal were connected with it.

Q. What was done with that phosphate ?-That was also shipped to a foreign market.

Q. Are these works still being carried on ?- No, not so extensively.

Q. Approximately, how many hands were employed in the development of the phosphate interests in that section of country, when you were there?—Probably