

Montreal,

Dec 11th 1875

My dear Sir,

I at last send you the results obtained by Mr. Hoffmann & myself from an examination of the *Limulus* and other specimens which you handed me some time ago.

I. - The test of the *Limulus* measured 5.25 inches across at the widest part & weighed, after washing & drying at 100°C , 26.5 grammes. It contained only 1.845 per cent of ash, 1.57 per cent of which consisted of tricalcic phosphate. The tricalcic phosphate therefore constitutes only 0.026 per cent of the weight of the entire carapace.

II. - The test of *Asaphus notans* from the Island of Anticosti was found to be

almost pure carbonate of lime, and contained only 0.04 per cent of phosphoric oxide (P_2O_5), or 0.12 p. c. of tricalcic phosphate.

III. - The rock from the Lower Potsdam at St. Simon holding numerous fragments of trilobites contained 0.165 p. c. of phosphoric oxide, equal to 0.499 p. c. of calcic phosphate.

IV. - Hyolithes from St. Simon. One specimen after separating as carefully as possible from the surrounding rock gave 0.691 p. c. of phosphoric oxide, equal to 2.09 p. c. of calcic phosphate. The other was only examined qualitatively, but found to contain calcic phosphate, though only in small proportion.

V. - The "phosphatic nodules" from Kamouraska, after being freed as far as possible from the limestone in which they were imbedded,

same 18.382 p.c. of phosphoric oxide,
or 53.65 p.c. of tricalcic phosphate.

If you would like any more
determinations made I shall be
happy to do them & shall try not to
be so long about it as I have this
time.

Sincerely yours

J. J. Harrington.

Principal Dawson
McJill College.

