

D. Bell

Geological Survey,

5 PARK AVENUE,

OTTAWA.

6th July, 1886.

Dear Sir William,

I have your favour
of 2nd inst. In order that you
may form an opinion of the four
papers which Dr. Mathews has
sent me I will give you an idea
of their contents:

(I.) "On the Fishes of Hudson's Bay."

This comprises an account of the species
heretofore recognized by Richardson &c. with the
addition of some which had not been
previously found; complete anatomy of
the more important species from
couple dissections; Dr. Mathews' notes on
the haunts, comparative abundance or
rarity of species, uses &c.; habits and full
life-history of some species including breeding.
This paper is illustrated by several well-executed
drawings by the author.

(II.) "Notes on the Determination and Causation of Sex."

This paper deals with the subject both in reference
to man and the lower animals. Various

supported causes are discussed and compared. Results of experiments to prove or disprove them. Observations of natives on lower animals and on themselves in relation to this subject. Opinions of ancient philosophers considered. Physiological and pathological considerations. Greater and less maturity of the ovum when impregnated. Influence of external circumstances. Causes attributable to food-supply, to similarity or to certain great differences in the parents. Relative nervous or physical vigor of the parents. Relative age of male to female parent. The determining parent known by the preponderating characteristics of offspring or by some marked peculiarity. The alternation theory. Possibility of producing either sex at will. Darwinian considerations. Tables of statistics bearing on some of the questions. Do. as to the proportions of the sexes (in man) in different countries, &c. &c.

III. Notes on the Early Development of Aboriginal Women in Various Latitudes from the Tropics to the Arctic Regions.

This paper contains the results of extensive personal observations in Southern countries and in the Hudson's Bay region, with

noting
of numerous extraordinary cases and a
table of original statistics, Explanations
of causes, Observations and experiences of
others. Historical relations of aborigines.
The Chinese. General Deductions. Practical
Lessons which we may learn for our
own advantage from the experience
of aboriginal practitioners.

IV. Notes on Phthisis.

This consists of notes of a bad case
in an Indian, followed by a short
general account of the disease, from
notes of numerous cases taken by Dr.
Matthews in the London Hospitals.

During the present winter, I learn
that the Doctor is preparing papers on
The Anatomy of the White Whale (or "White
porpoise") from dissections which he
has had rare facilities for making
at York Factory.

Also a paper on The Smaller Mammals
of Andrew's Bay.

Last year he discovered a new mammal
in the course of his researches in this subject.
It has been described by Dr. Dobson of the
Royal Victoria Hospital, Netley, Southampton.
If there is anything new or rare in birds or
mammals his own to get it.

You may judge pretty well from the
going on whether Dr. Mathews's labors are
valuable or not. As to their constituting
any claim for recognition by the Royal
Society, I fancy that is a matter of
indifference to him. I doubt if he
would care for the fellowship of the
society - after a hot transfused last
spring.

With kind regards I remain

Very truly yours

Robert Bell