



## GEOLOGICAL &amp; NATURAL HISTORY SURVEY.

Alfred R. C. Selwyn L.L.D., F.R.S., Director.

MUSEUM &amp; OFFICE, SUSSEX ST. OTTAWA.

15 June 1886

My dear Father,

Another point perhaps worth considering in regard to the similarity of formations & fossils around the shores of each great oceanic area is that of the all though serving as barriers to some extent the oceans are really the great carriers of life forms, particularly plants, from one place to another. Given sufficient time they plant capable of growing in certain climates around an ocean will reach all these points. The time taken, however, to convey a given plant to points suitable for it in a separated great oceanic area would be very much greater.

Circumpolar forms are of course largely an exception. Remarkable instances of distribution by sea or across it (unless we suppose a great former South polar continent as given in the last

Nature (p. 107) Wallace has of course

worked up all these facts very fully in his

Distribution (See also Science Magazine Nature p. 99

in letter from Peppi Smith in which he refers to

Indian Flora of S. Africa on E. Side)

This distribution of similar things all round an ocean

would give a palaeontological result which may

be added to Contemporaneity of disturbances,

It is this very thing too which comes some thoughts

to mind an Atlantic to bridge the Atlantic Ocean.

Similar facts doubtless have led Blanford in a paper

paper of his to which I cannot give reference to

give a content for the Indian Ocean (not S

think such the same idea as the Tenuaria of

Wallace.) The same thing of necessity would

come us to suppose a South Polar Continent & in

fact as the life of the shores of an ~~sea~~ ocean

recent or fossil because seems to stop very one

of them up with an imaginary Continent, whereas

in America south of the Circumpolar flora the Continent

land area forms a more efficient dividing line

(a barrier!) than the Atlantic for plants, kept by

actual carriers by birds etc it is perhaps impossible to explain  
except by sea transport the occurrence of identical species in the north &  
south Circumpolar regions of land.

Sea Transit  
S. M. D.