

foliage as they possess, are also allied, by the form of their fructification, to the Rhizocarps, and not to ferns, as some palæo-botanists have incorrectly supposed.\*

I do not suppose that the facts above stated furnish any positive proof that the abundant *Sporangites* of the Erian period were the fructification of Rhizocarps, but they establish a certain probability of this, and invite to farther researches. If it should prove that these humble plants, now so insignificant, culminated in the palæozoic age, and occupied the extensive submerged flats of that period with an abundant vegetation, producing a great quantity of the bituminous matter found in the resulting beds, this early culmination of the Rhizocarps would be strictly in accordance with other facts in the development of the vegetable kingdom. We may even be permitted to speculate on the existence in the early palæozoic and eo-zoic ages of a rich Rhizocarpean vegetation, anticipating the great development of the acrogens in the later palæozoic.

I have not referred above to the well-known fact that in certain beds of coal and shale of the Carboniferous period there are multitudes of globular spore-cases or microspores not dissimilar from those above described. These may have been derived from plants of higher organization than the Rhizocarps, yet it is quite possible that this group of plants may have contributed to them. It is, however, only in the Erian that these *Sporangites* are so widely and abundantly distributed in aquatic beds, and that we have direct evidence as to their origin.

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#### IV. ON THE ATHABASCA DISTRICT OF THE CANADIAN NORTH-WEST TERRITORY. †

BY THE REV. ÉMILE PETITOT.

Some nine years ago, I wrote a short paper on the Fur District of Athabasca, which was inserted in the Bulletin of the French Geographical Society, for July-September, 1875, and was also twice published separately. My subsequent journeys on the Upper Athabasca river, and a stay of some months on the lake of

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\* See Report on Erian Plant of Canada, 1882.

† From the Proceedings of the Royal Geographical Society for November, 1883.