

A P P E N D I X .

I.—COMPARATIVE VIEW OF THE SUCCESSIVE PALÆOZOIC FLORAS OF NORTHEASTERN AMERICA AND GREAT BRITAIN.

IN eastern Canada there is a very complete series of fossil plants, extending from the Silurian to the Permian, and intermediate in its species between the floras of interior America and of Europe. I may use this succession, mainly worked out by myself,* to summarise the various Palæozoic floras and sub-floras, in order to give a condensed view of this portion of the history of the vegetable kingdom, and to direct attention to the important fact, too often overlooked, that there is a definite succession of fossil plants as well as of animals, and that this is important as a means of determining geological horizons. A British list for comparison has been kindly prepared for me by Mr. R. Kidston, F. G. S. For lists referring to the western and southern portions of America, I may refer to the reports of Lesquereux and Fontaine and White.†

In this connection I am reminded, by an excellent little paper of M. Zeiller, ‡ on Carboniferous plants from the region of the Zambesi, in Africa, that the flora which in the Carboniferous period extended over the temperate portions of the northern hemisphere and far into the arctic, also passed across the equator and prevailed in the southern hemisphere. Of eleven species brought from the Zambesi by M. Lapierre and examined by M. Zeiller, all were identical with Euro-

* "Acadian Geology," "Reports on Fossil Plants of Canada," Geological Survey of Canada.

† "Geological Surveys of Pennsylvania, Ohio, and Illinois."

‡ Paris, 1883.