to occur in the fossilized remains of trees and plants, we proceed to consider the application of the data thus obtained.

THE MODE OF INVESTIGATION. — The distinguished authors of the British Fossil Flora* justly remark, that a few isolated, and often times very imperfect data, exclusively afforded by the remains of the organs of vegetation, are the sole guide to the class, order, or genus of the fossil plants which the geologist has to examine; hence a general idea only can be obtained of the nature of the original. For his guidance they offer some admirable suggestions, which have served as the basis of the following directions to the student for the investigation of vegetable remains, and which our previous remarks will, we trust, enable him clearly to comprehend.

1. *The Trunk, or Stem.*—Examine if the wood in a transverse section be disposed in concentric circles (as Plate V. fig. 4.): if so, it belonged to an exogenous tree: if, on the contrary, the wood appears deposited irregularly in spots (*Lign.* 1, fig. 4.), then the original was endogenous. If a transverse section show remains of sinuous, unconnected layers, resembling arcs with their ends directed outwards, and of a solid structure, and imbedded among looser

* Foss. Flor. Vol. I. p. xxvi.