

generic characters, yet is evidently nearly allied to the genus, the term *ites* (from *lithos*, stone,) is added—as *Equisetites*, *Palmacites*, &c. When the fossil plant differs altogether from any known recent genus, it is distinguished by some arbitrary name, as *Bucklandia*, *Stigmaria*, &c.

There are also a few provisional genera for the reception of such leaves, fruits, and stems, as are not admissible in the established classification, in consequence of their characters and relations being imperfectly known, as *Carpolithes*, *Endogenites*, &c. Upon these principles the following arrangement has been founded: the progress of discovery will, of course, be continually adding to the list, and may probably require the classification to be modified, and some genera to be altogether abandoned.

The arrangement, although commencing with the plants of the most simple structure, the *Cellulosæ*, and advancing to the higher orders, will not be strictly botanical, for occasionally it will be found convenient to notice species and genera of different orders under the same head, from their occurring under the same geological relations. It is estimated that scarcely one thousand species of plants have been discovered in a fossil state, while the known recent species amount to nearly one hundred thousand.

AGAMIA.—The plants of this class have no traces of fructification, and their structure consists of cells alone. It comprises the sea-weeds, and con-