

least worthy of notice that, alike in the systems of our botanists and in the chronological arrangements of our geologists, the first or introductory class which occurs in the ascending order is this humble thallogenic class. There is some trace in the Lower Silurians of Scotland of a vegetable structure which may have belonged to one of the humbler Endogens, of which at least a single genus, the *Zosteraceæ*, still exists in salt water ; but the trace is faint and doubtful ; and, even were it established, it would form merely a solitary exception to the general evidence that the first-known period of vegetable existence was a period of Thallogens. The terrestrial remains of the Upper Silurians of England, the oldest yet known, consist chiefly of spore-like bodies, which belonged, says Dr Hooker, to *Lycopodiaceæ*,—an order of the second or acrogenic class. And in the second great geologic period,—that of the Old Red Sandstone,—we find this second class not inadequately represented. In its lowest fossiliferous beds we detect a *Lycopodite* which not a little resembles one of the commonest of our club-mosses,—*Lycopodium clavatum*,—with a minute fern and a large striated plant resembling a calamite, and evidently allied to an existing genus of Acrogens, the *Equisetaceæ*. In the Middle Old Red Sandstone there also occurs a small fern, with some

Fig. 2.



CYCLOPTERIS HIBERNICUS.
(Nat. size.)