The brecciated limestone (No. 2) and the concretionary masses (No. 1) overlying it (although Professor King has attempted



Fig. 73. - Strophalosia Morrisiana.

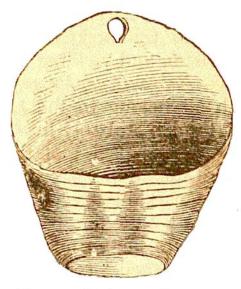


Fig. 74.—Cyrtoceras depressum.

to separate them) are considered by Professor Sedgwick as different forms of the same rock. They contain no foreign elements, but seem to be composed of fragments of the underlying limestone, No. 3.

Some of the angular masses at Tynemouth cliff are two feet in diameter, and none of them are water-worn.

The crystalline or concretionary limestone (No. 1) formation is seen upon the coast of Durham and Yorkshire, between the Wear and the Tees; and Mr. King thinks that the character of the shells and the absence of corals indicate a deposit formed in shallow water.

The plants also found in some of the Permian strata indicate the neighbourhood of land. These are land species, and chiefly of genera common in the Coal-measures. Fragments of supposed coniferous wood (generally silicified) are occasionally met with in the Permian red beds of many parts of England.

Among the Ferns characteristic of the period may be mentioned Sphenopteris dichotoma and S. Artemisiæfolia; Pecopteris lonchitica and Neuropteris gigantea, figured on pp. 143, 144. "If we are," says Lyell, "to draw a line between the Secondary



Fig. 75.—Walchia Schlotheimii.