

## SECTION III.

## VEGETABLES IN STRATA OF THE SECONDARY SERIES.\*

*Fossil Cycadeæ.*

THE Flora of the Secondary Series † presents characters of an intermediate kind between the Insular vegetation of the Transition series, and the Continental Flora of the Tertiary formations. Its predominating feature consists in the abundant presence of Cycadeæ, (see Pl. 1, Figs. 33, 34, 35,) together with Coniferæ, ‡ and Ferns.§ (See Pl. 1, Figs. 37, 38, 39.)

\* See Pl. 1, Figs. 31 to 39.

† M. Ad. Brongniart, in his arrangement of fossil plants, has formed a distinct group out of the few species which have been found in the Red-sandstone formation (Gres bigarré) immediately above the Coal. In our division of the strata, this Red-sandstone is included, as an inferior member, in the Secondary series. Five Algæ, three Calamites, five Ferns, and five Coniferæ, two Liliacæ, and three uncertain Monocotyledonous plants form the entire amount of species which he enumerates in this small Flora.

See also Jæger uber die Pflanzenversteinerungen in dem Bausandstein von Stuttgart, 1827.

‡ We again refer to Witham's Account of Coniferæ from the Lias, in his observations on Fossil Vegetables, 1833.

§ A very interesting account, accompanied by figures, shewing the internal structure of the stems of fossil arborescent Ferns of the Secondary period, is given in Cotta's Dendrolithen, Dresden, 1832; these appear to be chiefly from the New red sandstone of Chemnitz near Dresden.