these most ancient remains of the vegetable kingdom are preserved, in a state of integrity, little short of their living perfection, under conditions of our Planet which exist no more.

SECTION II.

VEGETABLES IN STRATA OF THE TRANSITION SERIES.*

THE remains of plants of the Transition period are most abundant in that newest portion of the deposits of this era, which constitutes the Coal Formation, and afford decisive evidence as to the condition of the vegetable kingdom at this early epoch in the history of Organic Life.

The Nature of our Evidence will be best illustrated, by selecting a few examples of the many genera of fossil plants that are preserved in the Strata of the Carboniferous Order, beginning with those which are common both to the ancient and existing states of Vegetable Life.

Equisetaceæ.†

Among existing vegetables, the Equisetaceæ are well known in this climate in the common Horse-tail of our swamps and ditches. The extent of this family reaches from Lapland to the

^{*} See Pl. 1. Figs. 1, to 13.

[†] See Pl. 1. Fig. 2.