

that an analogous distribution of the fossil submerged Algæ appears to have placed in the lowest and most ancient formations, genera allied to those which now grow in regions of the greatest heat, whilst the forms of marine vegetation that succeed each other in the Secondary and Tertiary periods, seem to approximate nearer to those of our present climate, as they are respectively enclosed in strata of more recent formation.*

If we take a general review of the remains of *terrestrial* Vegetables, that are distributed through the three great periods of geological history, we find a similar division of them into groups, each respectively indicating the same successive dimi-

* See Ad. Brongniart's *Hist. de Vég. Foss.* 1 Liv. p. 47.— Dr. Harlan in the *Journal of the Academy of Nat. Sc. of Philadelphia*, 1831, and Mr. R. C. Taylor in *Loudon's Mag. Nat. Hist.* Jan. 1834, have published accounts of numerous deposits of *fucoïds*, as occurring in repeated thin layers among the Transition strata of N. America, and extending over a long tract on the E. flank of the Alleghany chain. The most abundant of these is the *Fucoides Alleghaniensis* of Dr. Harlan. Mr. R. C. Taylor has found extensive deposits of fossil Fuci in the Grauwacke of central Pennsylvania; in one place seven courses of Plants are laid bare in the thickness of four feet, in another, one hundred courses within a thickness of twenty feet. (*Jameson's Journal*, July, 1835, p. 185.) I have also seen *Fucoids* in great abundance in the Grauwacke-slate of the Maritime Alps, in many parts of the new road between Nice and Genoa. I once found small *Fucoids* dispersed abundantly through shale of the Lias formation, from a well at Cheltenham. The *Fucoides granulatus* occurs in Lias at Lyme Regis, and at Boll in Wurtemberg; and *F. Targionii* in the Upper Green-sand near Bignor in Sussex.