seen on the shore. The vegetation seems to approach that of our days; it consists of Ferns and Cycadeæ (Pterophyllums), mingled with Palms, Willows, and some dicotyledons of species analogous to those of our present epoch. Algæ, then very abundant, composed the vegetation of the sea-shore.

We have said that the terrestrial flora of the Upper Cretaceous period was nearly identical with that of the Lower. The marine flora of these two epochs included some Algæ, Confervæ, and Naïadæ, among which may be noted the following species: *Confervites fasciculatus*, *Chondrites Mantelli*, *Sargassites Hynghianus*. Among the Naïadæ, *Zosterites Orbigniana*, *Z. lineata*, and several others.

The *Confervæ* are fossils which may be referred, but with some doubt, to the filamentous Algæ, which comprehend the great group of the Confervæ. These plants were formed of simple or branching filaments, diversely crossing each other; or subdivided, and presenting traces of transverse partitions.

The *Chondrites* are, perhaps, fossil Algæ, with thick, smooth branching fronds, pinnatifid, or divided into pairs, with smooth cylindrical divisions, and resembling *Chondrus*, *Dumontia*, and *Halymenia* among living genera.

The *Sargassites*, finally, have been vaguely referred to the genus *Sargassum*, so abundant in tropical seas. These Algæ are distinguished by a filiform, branched, or ramose stem, bearing foliaceous appendages, regular, often petiolate, and altogether like leaves, and globular vesicles, supported by a small stalk.

The rocks which actually represent the *Upper Cretaceous period* divide themselves naturally into six series; but British and French geologists make some distinction: the former dividing them into 1, *Maestricht* and *Faxoe* beds, said not to occur in England; 2, *White Chalk*, with *flints;* 3, *White Chalk*, without *flints;* 4, *Chalk Marl;* 5, *Upper Greensand;* and 6, *Gault*. The latter four are divided by foreign geologists into 1, *Turonian;* 2, *Senonian;* 3, *Danian*.

The *Gault* is the lowest member of the Upper Cretaceous group. It consists of a bluish-black clay mixed with greensand, which underlies the Upper Greensand. Near Cambridge, where the Gault is about 200 feet thick, a layer of shells, bones, and nodules, called the "Coprolite Bed," from nine inches to a foot thick, represents the Upper Greensand, and rests on the top of the Gault Clay. These nodules and fossils are extensively worked on account of the phosphatic matter they contain, and when ground and converted into superphosphate of lime they furnish a very valuable agricultural manure.