by the same colouring matter—the substance called leaf-green, or chlorophyll—which colours the leaves of all the higher plants.

To this class belong, besides a great number of low marine Algæ, most of the Algæ of fresh water, the common water hair-weeds, or Confervæ, the green slime-balls, or Glœosphæræ, the bright green water-lettuce, or Ulva, which resembles a very thin and long lettuce leaf, and also numerous small microscopic algæ, dense masses of which form a light green shiny covering to all sorts of objects lying in water—wood, stones, etc.

These forms, however, rise above the simple primary Algæ in the composition and differentiation of their body. As the green Algæ, like the primæval Algæ, mostly possess a very soft body, they are but rarely capable of being petrified. However, it can scarcely be doubted that this class of Algæ —which was the first to develop out of the preceding one—most extensively and variously peopled the fresh and salt waters of the earth in early times.

In the third class, that of the *Brown Tangles* (Phæophyceæ), or *Black Algæ* (Fucoideæ), the *branch* of the Algæ attains its highest stage of development, at least in regard to size and body. The characteristic colour of the Fucoid is more or less dark brown, sometimes tending more to an olive green or yellowish green, sometimes more to a brownish red or black colour.

Among these are the largest of all Algæ, which are at the same time the longest of all plants, namely, the colossal giant Algæ, amongst which the Macrocystis pyrifera, on the coast of California, attains a length of 400 feet. Also, among our indigenous Algæ, the largest