

an important share in the composition of the archilithic Algæ flora.

If we now again take into consideration the flora of the primordial period, which was exclusively formed by the group of Algæ, we can see that it is not improbable that its four subordinate classes had a share in the composition of those submarine forests of the primæval oceans, similar to that which the four types of vegetation—trees with trunks, flowering shrubs, grass, and tender leaf-ferns and mosses—at present take in the composition of our recent land forests.

We may suppose that the submarine tree forests of the primordial period were formed by the huge Brown Algæ, or Fucoideæ. The many-coloured flowers at the foot of these gigantic trees were represented by the gay Red Algæ, or Florideæ. The green grass between was formed by the hair-like bunches of Green Algæ, or Chloroalgæ. Finally, the tender foliage of ferns and mosses, which at present cover the ground of our forests, fill the crevices left by other plants, and even settle on the trunks of the trees, at that time probably had representatives in the moss and fern-like Siphonææ, in the Caulerpa and Bryopsis, from among the class of the primary Algæ, Protophyta, or Archeephyceæ.

With regard to the relationships of the different classes of Algæ to one another and to other plants, it is exceedingly probable that the Primary Algæ, or Archeephyceæ, as already remarked, form the common root of the pedigree, not merely for the different classes of Algæ, but for the whole vegetable kingdom. On this account they may with justice be designated as primæval plants, or Protophyta.

Out of the naked vegetable Monera, in the beginning of the