

The spore-producing plants occupy a position mid-way between the lowest forms of vegetation, which are purely aquatic, and the highest, which are terrestrial. They are all more or less amphibious, their spores requiring water to germinate in. But with *flora* as with *fauna* there are amphibians and amphibians. The Club Moss among plants, like the Duck-billed Platypus among animals, is a living fossil, and the importance of its bearing on the question of origins can hardly be over-estimated. It may be said recently to have come into its own and reaped the reward of its conservatism; for it has been given a prominent place in that splendid floral tribute to Darwin, Prof. Bower's "Origin of a Land Flora"; easily the most notable contribution (in English) ever made by Botany to the Theory of Evolution, and the first philosophic treatise on the subject since the labours of men like Hooker and Gray were supplemented by their greater contemporary's "Origin of Species".

The Club Moss has been a hide-bound conservative ever since the Coal Age, pursuing the even tenor of its way uninfluenced by change and progress towards higher forms as evinced by the more adaptive members of the vegetable kingdom. *Æon* after *æon* its policy has been the same; its stock argument, that what was good enough for its primitive ancestors is good enough for it. Clad in the same simple armour and wielding the same weapons as when first it left its aquatic home and started on the war-path in its daring conquest of earth, this pigmy of the forest still subsists; and strange sights it must have seen in its time.

It saw the first forests ever formed, those dense jungles of rank vegetation, tree-ferns and giant horse-tails—*quorum pars magna fuit*, indeed, for Club Mosses abounded then. It saw the ancient whorled or radial outgrowth—such as is preserved in the Horse-tails, in the branching of certain Conifers, the foliation of the Juniper, or the parts of a flower—superseded by a more and more complex system of spiral symmetry as in the phyllotaxy of our modern forest trees; it saw its cousins the ferns evolve larger and larger leaf-areas, and it saw the idea adopted and adapted all down the line, each new type bettering the instruction till they reached the umbrageous foliage of more recent vegetation as it dominates to-day. It watched plants pass from the primitive strobiloid form of terminal fruiting spike, such as survives in the *Lycopodiums* and *Equisetums*, with their analogies in *Ophioglossum* or the cones of pines and spruces. It was present at the inception of seed formation whereby the earliest Gymnosperms (Cycads) first broke away from the aquatic nursery to which the Lycopod still clings; and it witnessed the miracle of the floral envelope replacing the wasteful vagaries of the wind by the ordered efforts of myriad insect myrmidons, a marshalled