host of winged allies. With what astonishment it must have seen its neighbours, the Lady's Slipper, the Wood Lily and the upland Harebell, blossom forth in all their glory to repel the wanton advances of the spendthrift breeze, turning a deaf ear to all its airy whisperings and yielding to the embrace of the frugal honey-gathering bee.

More than all, from amphibian through reptile to bird and beast, it has watched unfold the whole drama of animal life on earth, through scenes grotesque and monstrous, to culminate in the grandeur of man; and in all probability it will see that drama

draw at long last to its tragic close.

It has been outdistanced in the race and nearly all its compeers and contemporaries have passed to their grave. Yet still on that grave it grows green and lives undaunted beneath the shadow of alien giants no longer sporophyte, claiming elbow room among flowering herbs and other such new-fangled forms of life.

Of all the members of this conservative family probably the archetype of our land plants is Lycopodium selago, or its woodland next of kin L. lucidulum. The plants are very similar, and an examination of either will serve to show the underlying idea\* (to use a Platonic term) that informed their prototype. It is that of a simple vegetative shoot of unlimited apical growth. with a radial output of small leaves, each leaf subtending a sporangium or spore-case. The lines of development shown in the genus as now extant are all subservient to the two great functions of nutrition and reproduction, they consist in the formation of (a) branches, (b) roots, (c) cones (i.e., terminal fruiting spikes or strobiles). In the simplest forms the branching is dichotomous, that is, by the forking of the apex into two growing tips; the process being repeated again and again so that the plant in time has many leafy shoots on which to produce its spore-cases; the development of branches in L. selago usually stops here, the species growing for the most part on rocks and exposed mountain sides. But in L. lucidulum a further step has been possible owing to its growing in damp shady situations: when the erect stem has branched and re-branched several times. it becomes top-heavy and sinking under the weight of the superstructure totters and falls into a recumbent position on the forest floor: here a pall of dead leaves and decay settles down upon it and in the darkness the shining green leaves that fringe it densely from end to end forsake their office, grow vellow and die. The mother stem is buried; but she is not dead, and she thrusts down rootlets on the under side into the rich vegetable

<sup>\*</sup>Vide Bower's Land Flora, pp. 288-365.