

was already developed during the palæolithic period out of other ferns by adaptation to an aquatic life.

The fourth class of ferns is formed by the *Tongue Ferns* (Ophioglossæ, or Glossopterides). These ferns, to which belongs the *Botrychium*, as well as the *Ophioglossum* (adder's-tongue) of our native genera, were formerly considered as forming but a small subdivision of the frondose ferns. But they deserve to form a special class, because they represent important transitional forms from the Pterideæ and Lepidophytes towards higher plants, and must be regarded as among the direct progenitors of the flowering plants.

The fifth and last class is formed by the *Scale Ferns* (Lepidophytes, or Selagines). In the same way as the Ophioglossæ arose out of the frondose forms, the scale ferns arose out of the Ophioglossæ. They were more highly developed than all other ferns, and form the transition to flowering plants, which must have developed out of them. Next to the frondose ferns they took the largest part in the composition of the palæolithic fern forests. This class also contains, as does the class of reed ferns, three nearly related but still very different orders, of which only one now exists, the two others having become extinct towards the end of the carboniferous period. The scaled ferns still existing belong to the order of the club-mosses (Lycopodiaceæ). They are mostly small, pretty moss-like plants, whose tender, many-branched stalk creeps in curves on the ground like a snake, and is densely encompassed and covered by small scaly leaves. The pretty creeping *Lycopodium* of our woods, which mountain tourists twine round their hats, is known to all, as also the still more delicate