plants with enclosed seeds, the Monocotylæ and Dicotylæ, it is exceedingly probable that the Dicotyledons developed out of the Gnetaceæ, but that the Monocotyledons developed later out of a branch of the dicotyledons.

The class of *one seed-lobed plants* (Monocotylæ, or Monocotyledons, also called Endogenæ) comprises those flowering plants whose seeds possess but one germ leaf or seed lobe (cotyledon). Each whorl of its flower contains in most cases *three* leaves, and it is very probable that the mother plants of all Monocotyledons possessed a regular triple blossom. The leaves are mostly simple, and traversed by simple, straight bunches of vessels or "nerves." To this class belong the extensive families of the rushes, grasses, lilies, irids, and orchids, further a number of indigenous aquatic plants, the water-onions, sea grasses, etc., and finally the splendid and highly developed families of the Aroideæ and Pandaneæ, the bananas and palms. On the whole, the class of Monocotyledons—in spite of the great variety of forms which it developed, both in the tertiary and the present period—is much more simply organized than the class of the Dicotyledons, and its history of development also offers much less of interest. As their fossil remains are for the most part difficult to recognize, it still remains at present an open question in which of the three great secondary periods—the Trias, Jura, or chalk period—the Monocotyledons originated. At all events they existed in the chalk period as surely as did the Dicotyledons.

The second class of plants with enclosed seeds, the *two seed-lobed* (Dicotylæ, or Dicotyledons, also called Exogenæ) presents much greater historical and anatomical interest in