

The Favosites ended in the Devonian, but related tabulate Corals still exist.

2. **Echinoderms.** — Cystoids, one of the early Cambrian types, the simplest of the Crinoid tribe, embryo-like in their want of symmetry, are unknown after the Devonian. Crinoids, also Cambrian, multiply in genera and species through the Silurian and Devonian, appear under a marvelous diversity of forms in the Subcarboniferous period, and then rapidly decline, few appearing in the Permian, and none of the same paleozoic type in after time. The next period, or that commencing the Mesozoic, has more modern forms under the genus *Encrinus*, closely related to the living *Pentacrinus*.

Starfishes commence in the Cambrian, and Echinoids, the higher Echinoderms, in the Silurian. The latter are abundant in the early Carboniferous era, but they do not lose in Paleozoic time their low-grade multiply characteristic; that is, the excessive number of vertical series of plates in the shell.

3. **Molluscoids.** — The Brachiopods, earliest Cambrian in origin, the most abundant of all Paleozoic animal life in species, and in individuals under species, had the larger part of the groups, to which they are referred, introduced in the Cambrian and Lower Silurian, but were most numerous in genera and species in the Upper Silurian and Devonian. And although of many species and few genera in the Carboniferous and Permian, the type appears to have lost, at the close of the Permian, all the genera then existing excepting four. These are: *Lingula*, *Crania*, *Spirifer*, and *Rhynchonella*; all of these continue into the Mesozoic, showing remarkable adaptability to varying conditions. Further study may subdivide the genera; but the general fact remains as regards the groups. The early Cambrian *Orthis* group continued through Paleozoic time, but appears to have ended at its close.

4. **Mollusks.** — The tribe of Pteropods — if the species, so referred, rightly belong here — had predominance over other Mollusks in the Early and Middle Cambrian, the species being many and large. They were numerous also in the Lower Silurian; but they diminish in numbers afterward. Conulariæ — of much more uncertain relations — existed in the Upper Cambrian, but had their largest species in the Silurian, Devonian, and Carboniferous. They are rare fossils afterward; the last known is from the Lias.

Lamellibranchs and Gastropods, commencing in very small forms during the Early Cambrian, increased slowly in number of genera through the Paleozoic, without reaching a culminant condition in either of their higher divisions. The Cephalopods also culminate after Paleozoic time. One of the early genera, *Orthoceras*, had species of large size through the whole Paleozoic, and survived until the middle of the Mesozoic.

5. **Limuloids.** — Limuloids of Eurypterid type commenced in the Lower Silurian, have species of great size in the Upper Silurian and Devonian, in which era they passed their culmination, and ended with small species in the Carboniferous era. The family of Limulids, a branch from the earlier