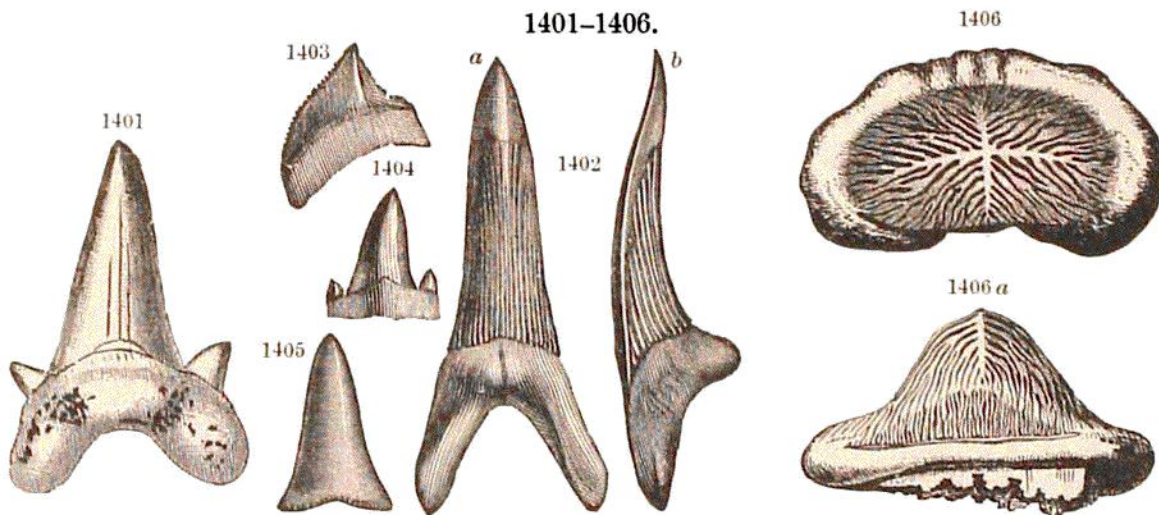


long; and 1396, *S. larvæformis*, another, showing more decidedly the imperfectly coiled condition, from the Fort Benton group. Fig. 1397 is an Ammonoid in which the form is straight, and hence the name *Baculites*, from the Latin *baculum*, a walking-stick. The length of this Baculite is over a foot, and the diameter $2\frac{1}{2}$ inches; other associated species are more than a yard long. Another species, common in New Jersey, is the *B. compressus* Say, and Fig. 1399 is a section of it. A young stage of it is represented, enlarged, in Figs. 1398, *a*, by A. P. Brown (1891); the specimens were from the Black Hills, S. D.; they show that the animal in the young stage has a perfectly coiled shell. Others of these partly uncoiled kinds are represented on page 862. Fig. 1400 is a Nautilus from the Lower Greensand, New Jersey.

Vertebrates. — 1. Fishes. — In addition to Selachians and Ganoids there were Teleosts, or Osseous Fishes, the tribe which includes the larger part of modern fishes, and nearly all edible species. The Cestracient Sharks still continue; and the bony pavement pieces of the mouth are not rare fossils. Two views of one from New Jersey are given in Figs. 1406, 1406 *a*.



SQUALODONT SELACHIANS. — Fig. 1401, *Otodus appendiculatus*; 1402 *a, b*, *Lamna Texana*; 1403, *Corax heterodon*; 1404, *Otodus appendiculatus*; 1405, *Oxyrhina* Mantelli. **CESTRACIENT SELACHIAN.** — Figs. 1406, 1406 *a*, *Ptychodus Mortoni*. Fig. 1401, Gibbs; 1402-1405, Reemer; 1406, Morton.

Many of the Sharks were of the modern tribe of *Squalodonts* — distinguished by the sharp cutting edges of the teeth, and other peculiarities. One kind is represented in Figs. 1401 and 1404 of the genus *Otodus*, the latter from Texas; 1403, tooth of a *Corax*; 1405, of an *Oxyrhina*; 1402 *a, b*, of *Lamna Texana*.

The *Teleosts* of the Middle and Upper Cretaceous of North America include species of the Mullet family, represented by *Beryx insculptus* Cope, from New Jersey; the Sphyrenids of several large species described by Cope, of the genera *Pachyrhizodus*, *Empo*, and others, from Kansas; the Siluroids, powerful carnivorous fishes, called *Saurodonts* by Cope, one of which, *Portheus molossus* Cope, from Kansas, had the vertical diameter of the head