

The Jurassic of Dakota, Wyoming, and Utah have afforded *Ostrea stringilecula*, *Tancredia extensa*, *Camptonectes bellistriatus*, and the Ammonite *Quenstedioceras cordiforme*. That of Idaho afforded White: *Pentacrinus asteriscus*, *Ostrea stringilecula*, species of *Tancredia*, *Trigonia*, *Myacites*, etc. In the Uintah Mountains, where the rocks are shales and sandstones with limestone, occur *Pentacrinus asteriscus*, *Belemnites densus*, *Trigonia*, *Gryphæa calceola*, *Myophoria lineata*, *Camptonectes bellistriatus*, *Eumicrotis curta*, etc.; and in the Wasatch have been found *Cucullæa Haguei*, *Myophoria lineata*, *Myacites subcompressa*, *Volsella scalpra* (King's Report on the 40th Parallel).

In the West Humboldt region, west Nevada, occur *Belemnites Nevadensis*, species of *Montlivaltia*, etc.; and probably from this region came the Ammonite, *Arnioceras Humboldti*; in Esmeralda County, Nev., *Vermiceras Crossmani*, *Arnioceras Nevadense*; in Inyo County, Cal., *Arnioceras Woodhulli*.

Jurassic beds at Taylorville, Cal., on the Sierra Nevada, afforded Hyatt, in the lower beds referred to the *Lias*, besides the most of the above genera, species of *Pinna*, *Entolium*, *Goniomya*, *Pleuromya*; also an Echinoderm of the genus *Cidaris* and a Crustacean of the genus *Glyphæa*. The Middle Oölytic beds contain, among the species, Ammonites of the genera *Grammoceras* and *Sphaeroceras*; and the Upper Oölyte, species of the genus *Rhacophyllites*, with 3 species of *Trigonia* in the lower bed referred to the *Callovian* division of the Oölyte, and several species of Coral of the genus *Stylina* referred to the *Corallian*, besides the *Camptonectes bellistriatus* Mk., and the *Rhacophyllites* of the Upper Oölyte. Hyatt speaks of the contrast of the species with those of the summit region of the Black Hills, southeastern Wyoming, whose Ammonites are of the *Cardioceras* family and whose beds are *Callovian* or *Oxfordian*.

The Mariposa beds extending to near Colfax, Placer County, Cal., contain, according to Hyatt, *Cardioceras dubium* of *Oxfordian* age, and striated *Aucellæ* (Figs. 1203–1205) in great numbers, *Perisphinctes* of the same types as those found in the Upper Jura, Upper *Oxfordian*, and *Volgian* of Russia, namely, *Perisphinctes virgulatiformis*, *P. Colfaxi*, *P. Mühlbachi*, and *Belemnites Pacificus*. None of these species pass into the Knoxville beds.

The Queen Charlotte beds have afforded Whiteaves (*Mesozoic Foss., Can. Survey, 1884*) species of the Ammonite group of the genera *Lytoceras*, *Haploceras*, *Ancylloceras* (*A. Remondi* of Gabb), *Hamites*, and also species of *Trigonia*, *Inoceramus*, *Aucella*, *Amusium*, *Yoldia*, etc.; also *Belemnites densus*.

Among the Arctic fossils of this period, there are, at Prince Patrick Island, *Ammonites M'Clintocki*, a species near *A. concavus* Sow., of the Lower Oölyte; and at Cook's Inlet, *Ammonites Wosnessenski*, *A. biplex* Sow. (?), *Belemnites paxillosus* (*B. niger* List ?), and *Pleuromya unioides* Br. (*Unio liassinus* Schubler). *A. biplex* also is reported to occur in the Chilean Andes, in latitude 34° S., as well as in Britain and Europe.

1. **Fishes.** — Fishes are rare fossils. The teeth of *Ceratodus Güntheri* of Marsh have been described from the Upper Jurassic (*Atlantosaurus* beds) of Colorado.

2. **Reptiles.** — The Upper Jurassic formation of Colorado and Wyoming has afforded remains of a few Amphibians, many great and small Reptiles, and of some Mammals. The specimens are thus far from the "*Baptanodon* and *Atlantosaurus* beds" of Colorado and Wyoming. They include Sea-Saurians related to the Ichthyosaurs (page 784), and also Dinosaurs, Crocodilians, Turtles, and Pterosaurs or Flying Reptiles.

Enaliosaurians (Ichthyopterygians). — These Sea-Saurians are the most fish-like of Reptiles. This appears (1) in their biconcave vertebræ (Fig.