

they appear to range far southward into the Argentine Republic.⁹⁴ The fossils include species of *Pentacrinus*, *Monotis*, *Gryphæa*, *Trigonia*, *Lima*, *Ammonites* (*Amaltheus*, *Arietites*, *Cardioceras*), and *Belemnites*.

The American Jurassic rocks, though a few European species appear to occur in them, have not yet been satisfactorily correlated with the subdivisions of the system in Europe. The younger members of the series are probably best developed. In these strata as exposed in Wyoming, Utah, Dakota, and Colorado great discoveries of vertebrate remains have been made. Prof. Marsh has brought to light from the upper Jurassic strata of Colorado the remarkable series of reptilian forms already referred to which have given a wholly new interest and importance to the Jurassic rocks of America. Among remains of fish (*Ceratodus*), tortoises, pterodactyles, and crocodilians, he has recognized the bones of herbivorous dinosaurs (*Atlantosaurus*, *Brontosaurus*, *Stegosaurus*, *Morosaurus*, *Apatosaurus*), together with the carnivorous *Creosaurus* and the curious ostrich-like *Laosaurus*. With this rich and striking reptilian fauna are associated the remains of many genera of small mammals which have been named by Prof. Marsh *Allodon*, *Ctenacodon*, *Dryolestes*, *Stylacodon*, *Asthenodon*, *Laodon*, *Diplocynodon*, *Docodon* [*Enneodon*], *Menacodon*, *Tinodon*, *Triconodon*, *Priacodon*, *Paurodon*.⁹⁵

Asia.—In India, as already stated, the upper part of the enormous Gondwana system is possibly referable to the Jurassic period. In Cutch, however, a marine series of strata occurs containing a representation of the European Jurassic system from the Inferior Oolite up to the Portland group inclusive. These rocks attain a thickness of 6300 feet, of which the lower half is chiefly marine and the upper mainly fresh-water. Among the zones recognized by Stoliczka were those of *Ammonites macrocephalus*, *A. anceps*, and *A. athleta* of the Kellaways (Callovian) group; *A. Lamberti*, *A. cordatus*, *A. transversarius* of the Oxford clay; *A. tenuilobatus* of the Kimeridge group.⁹⁶

⁹⁴ O. Behrendsen has found Lower and Middle Lias, and higher Jurassic beds on the eastern slopes of the Argentine Cordilleras. *Zeit. Deutsch. Geol. Gesell.* xliii. 369, 1891.

⁹⁵ Marsh, *Amer. Journ. Sci.* xv. 1878, p. 459; xviii. 1879, pp. 60, 215, 396; xx. 1880, p. 235; xxi. 1881, p. 511; xxxiii. 887, p. 237; *Geol. Mag.* 1887, pp. 241, 289.

⁹⁶ Medlicott and Blanford's "Geology of India," p. 253. Waagen, *Palæont. Indica*, 1875.