

basis of the species *Laopteryx priscus* of Marsh. It probably had teeth and biconcave vertebræ.

4. **Mammals.**—Remains of Jurassic Mammals have been described by Marsh from the *Atlantosaurus* series, and mostly from Wyoming, where portions of lower jaws of some hundreds of individuals have been found in thin dirt-beds. (The same beds have afforded, besides Dinosaurian bones, remains of Crocodiles, Turtles, small Lizards, and Fishes, besides the *Laopteryx*.) The Mammals were like mice and rats in size, the length of the lower jaw varying from half an inch to one and one half inches. Specimens, more or less perfect, of the jaws of species are shown in Figs. 1225–1249, from Marsh. *Ctenacodon* has a large cutting incisor, as Figs. 1230–1233 show, and is referred, along with the genus *Allodon*, to the same family with the genus *Plagiaulax* of Owen. The characters of the others are mostly those of Marsupial Insectivores. The number of teeth in some modern Marsupials is 2 to 4 above the normal number 44; but in the Triassic and Jurassic species, where determinable, as tabulated by Osborn, it is beyond the normal number by 4 to 24 teeth; the earliest *Dromatherium* is stated to have had 56 teeth; the Jurassic *Stylacodon*, 68.

FOREIGN TRIASSIC AND JURASSIC.

1. TRIASSIC.

At the commencement of the Triassic period, Scotland and western England were mostly dry land. Triassic beds show that the only underwater or rock-making region of western England (Wales included) was that of a broad channel, passing westward over Cheshire to the coast of the Irish Sea by Liverpool, and northward of that city. Eastward, the channel opened into the North Sea of the era, or into its great sea-border flats; and the shore line stretched northward nearly to Newcastle, thence along by eastern Scotland, and southwestward to Torquay on the British Channel. But the seashore flats appear to have been emerged land over southeastern England, the Triassic being absent according to evidence from borings. In Europe, southeast of England, beyond a broad border region of the continent (now under Tertiary or Cretaceous rocks), Triassic beds again appear over both eastern France and the Netherlands; and the two areas, united (beneath a strip of Tertiary) behind the Carboniferous area of the Belgian border, continue from the Vosges Mountains to Saxony, Bohemia, and the Juras on the borders of Switzerland, and also along the western and eastern Alps into Italy and Austria. Further, they appear again over a large surface in Russia, west of the Urals, reaching from the Caspian to the coast east of the White Sea, and again farther north, in Spitzbergen, as already stated. And since the interval between the Triassic outcrops of Austria and Russia, and that between the Alpine and the Franco-Prussian areas are largely under later rocks, it is probable that at this period nearly all outside of Scandinavia and the Baltic provinces in Russia was a shallow