

kangaroo-rats (*Hypsiprymnus*), is held by Owen to have been a carnivorous form.⁵⁷ A still more varied and abundant assemblage of mammalian remains has been exhumed from the Jurassic rocks of the western regions of the United States (see Sect. ii. § 2).

GEOGRAPHICAL DISTRIBUTION.—The Jurassic system covers a vast area in Europe. Beginning at the west, remnants of it occur in the far north of Scotland. It ranges across England as a broad band from the coasts of Yorkshire to those of Dorset. Crossing the Channel, it encircles with a great ring the Cretaceous and Tertiary basin of the north of France, whence it ranges on the one side southward down the valleys of the Saone and Rhone, and on the other round the old crystalline nucleus of Auvergne to the Mediterranean. Eastward, it sweeps through the Jura Mountains (whence its name is taken) up to the high grounds of Bohemia. It forms part of the outer ridges of the Alps on both sides, rises along the centre of the Apennines, and appears here and there over the Spanish peninsula. Covered by more recent formations, it underlies the great plain of northern Germany, whence it ranges eastward and occupies large tracts in central and eastern Russia. Some years ago, Neumayr, following up the early generalization of L. von Buch, showed that three distinct geographical regions of deposit, marking diversities of climate, can be made out among the Jurassic rocks of Europe.⁵⁸ (1) The Mediterranean prov-

⁵⁷ See Falconer, *Q. J. Geol. Soc.* xiii. 261; xviii. 348; Owen, "Monograph of Mesozoic Mammals," *Palæontograph. Soc.* 1871; "Extinct Mammals of Australia," 1877.

⁵⁸ Neumayr, "Jura-Studien," *Jahrb. Geol. Reichsanstalt*, 1871, pp. 297, 451; *Verhandl. Geol. Reichsanst.* 1871, p. 165; 1872, p. 54; 1873, p. 288. "Ueber climatiscche Zonen während der Jura- und Kreidezeit," *Denksch. Wien. Akad.* xlvii. 1883, p. 277. "Die geographische Verbreitung der Juraformation," *op. cit.* i. 1885, p. 57. In these memoirs the student will find much