

genera are known elsewhere, 7 are Miocene and Pliocene; of the still living genera 9 range back in Europe to Upper Miocene time, 10 only to Pliocene, while 6 are only known elsewhere as living forms or as occurring in post-Pliocene beds. The large preponderance of species belonging to such familiar genera as *Macacus*, *Ursus*, *Elephas*, *Equus*, *Hippopotamus*, *Bos*, *Hystrix*, *Mellivora*, *Meles*, *Capra*, *Camelus*, and *Rhizomys*, give the whole assemblage a singularly modern aspect. It should be added that, of the six or seven determinable reptiles, three are now living in northern India; that of the birds, one is probably identical with the living ostrich, and that all the known land and fresh-water shells, with one possible exception, are of existing species.¹¹⁷

North America.—It appears to be doubtful whether any of the Tertiary deposits of the Atlantic border can be referred to the Pliocene series. They seem to be rather older and to be covered directly by post-Pliocene and recent accumulations.¹¹⁸ In the Upper Missouri region, the White River group (p. 1645) is overlain by other fresh-water beds, 300 to 400 feet thick (Loup River group of Meek and Hayden, or Niobrara group of Marsh), from which an interesting series of vertebrate remains has been obtained. Among these, are those of an eagle, a crane, and a cormorant; a tiger, larger than that of India, an elephant, a mastodon, several rhinoceroses, the oldest known camels (*Procamelus*, *Homocamelus*), equine animals of the genera *Protohippus*, *Pliohippus*, *Merychippus*, and *Equus*, of which the last was as large as the living horse. The remarkably Oriental character of this fauna is worthy of special notice. At the eastern base of the Rocky Mountains in Colorado a group of sandstones (Denver beds) has yielded a large species of bison. Again, abundant remains of *Aceratherium* have recently been found in the *Pliohippus* beds of the Upper Pliocene series of Kansas.¹¹⁹

Australia.—In New South Wales, during what are supposed to correspond with the later Miocene, Pliocene, and Pleistocene periods, the land appears to have been gradually rising and to have been exposed to prolonged denudation and, in the Middle Pliocene period, to great volcanic ac-

¹¹⁷ Blanford, Brit. Assoc. 1880, p. 578, and 1884, Address.

¹¹⁸ A. Heilprin, as cited on p. 1612.

¹¹⁹ Marsh, Amer. Journ. Sci. xxxiv. 1887, p. 323.