

were common species. Australia is now and has been through the Quaternary the continent of Marsupials and Monotremes; and the same types were almost its only Mammalian population in the Tertiary. North America, distinguished for its large number of Pleistocene Herbivores and relatively few Carnivores, was equally so distinguished during the Tertiary; while Eurasia, in both the Tertiary and Quaternary eras, was the chief region of Carnivores. The principle could be illustrated by examples from tribes and species throughout the kingdoms of life; but this would be out of place here. It is explained by Darwin on the ground that the Quaternary kinds have been derived from the Tertiary by descent; and this explanation is now generally accepted. The exceptions to the rule have come chiefly through migration.

*Progress in degeneration.*—The most prominent cases of degeneracy in terrestrial Quaternary Mammals occur in the Edentates. A great population of them lived in South America, pertaining to numerous genera against two in Europe, Asia, and Africa. The Glyptodonts (Figs. 1563, 1564) appear to have been the lowest. The thick bony covering is protective, and very completely so. It is Molluscan in idea. From what higher Mammals they descended is not known. The low-grade characteristics seem to be a consequence of inactive habits or sluggishness as a result of freedom from enemies and from all unsatisfied desires. Degeneracy from inactivity is well exemplified in parasitic Crustaceans, as the Lernæans, which live with the head-end inside of a fish, always content. As a consequence they have become worm-like in body, and almost limbless and senseless. There is here, emphatically, degeneracy through *disuse*, with *adaptations* to the conditions; their origin is thus explained by disuse and adaptation without reference to the “survival of the fittest,” or “natural selection.” The same is true of the Megatheria; their legs became reduced nearly to massive pedestals by inactivity, and the front teeth, as in other Edentates, were lost through disuse. The Glyptodonts degenerated on the same principle; but, through some organic tendency (like that less perfectly illustrated in the Turtles, the most sluggish of Reptiles), ossification gave them—and eminently so *Dædicurus*—a protective covering almost to their destruction. It was fitted to save from Carnivores, but not from the cooler climate that ensued, and so the later fauna of the region was rid of them,—exemplifying the fact that the principle of the “survival of the fittest” determines the species that survive to constitute new faunas, if not the existence of new species. The first of the Glyptodonts appeared in the Miocene.

*Man.*—Man stands in the successional line of the Quadrumana, at the head of the Animal Kingdom. But he is not a Primate among Primates. The Quadrumana are, as Cuvier called them, Quadrumana from the first to the last. They are Brute Mammals, as is manifested in their Carnivore-like canines and their powerful jaws; in their powerful muscular development; in their walking on all fours, and the adaptation thereto exhibited in the vertebræ, producing the convexity of the back; and also in other parts of the skeleton.