

SECTION XXII.

LOCALIZATION OF TYPES IN PAST AGES.

The study of the geographical distribution of the animals now living upon earth has taught us, that every species of animals and plants has a fixed home, and even that peculiar types may be circumscribed within definite limits, upon the surface of our globe. But it is only recently, since geological investigations have been carried on in remote parts of the world, that it has been ascertained that this special localization of types extends to past ages. Lund for the first time showed that the extinct Fauna of the Brazils,¹ during the latest period of a past age, consists of different representatives of the very same types now prevalent in that continent; Owen has observed similar relations between the extinct Fauna of Australia² and the types now living upon that continent.

If there is any naturalist left who believes that the Fauna of one continent may be derived from another portion of the globe, the study of these facts, in all their bearing, may undeceive him.

It is well known how characteristic the Edentata are for the present Fauna of the Brazils, for there is the home of the Sloths, (*Bradypus*), the Tatous, (*Dasybus*), the Ant-eaters, (*Myrmecophaga*); there also have been found those extraordinary extinct genera, the *Megatherium*, the *Mylodon*, the *Megalonyx*, the *Glyptodon*, and the many other genera described by Dr. Lund and Professor Owen, all of which belong to this same order of Edentata. Some of these extinct genera of Edentata had also representatives in North America, during the same geological period,³ thus showing that though limited within similar areas, the range of this type has been different in different epochs.

Australia, at present almost exclusively the home of Marsupials, has yielded also a considerable number of equally remarkable species, and two extinct genera of that type, all described by Owen in a report to the British Association, in 1844, and in *Michell's Expeditions into the Interior of Australia*.

¹ LUND, (DR.) *Blik paa Brasiliens Dyreverden for sidste Jordomvulning.* K. Danske Vidensk. Selsk. Aftandl. VIII., Kiöbenhavn, 1841, 4to. fig., p. 61, etc.; Engl. Abstract, *Ann. and Mag.* vol. 3, p. 422.

² OWEN, (R.) *On the Geographical Distribution*

of Extinct Mammalia, Ann. and Mag. Nat. Hist., 1846, vol. 17, p. 197.

³ LEIDY, (JOS.) *A Memoir on the Extinct Sloth Tribe of North America, Smithson. Contrib.* 1855, 4to. fig. — WYMAN, (J.) *Notice of Fossil Bones, etc., Am. Journ. Sc. and A.*, 2d ser., 1850, vol. 10.