

the palm tree. But
 and, their visible con-
 y demonstrated that
 vertebra, all varieties
 e idea of the infinity
 en the microscopic
 appears the size of
 le, measuring some-
 ce is filled up with
 e or less connected;
 microscopic mildew
 g that the immense
 every form and size.
 life exists in what are
 ures. There is dis-
 amidst the diversity
 ers which are of no
 found. Apparently
 representing similar
 other animals, they
 ne gaps in the scale
 these rudimentary
 , a species of whale
 y a common mem-
 these filaments ap-
 naceti whale. The
 at part of the jaw of
 cut the gum, but
 and no other teeth
 condition of those
 essing no teeth, has
 dible, but without
 er animals. The
 of flight, has an
 y condition, yet it
 es of the ordinary
 gs are discernible,
 d, although useless
 the largest known

species of serpents, have beneath their scaly coats two elementary extremities, rudiments of the organs of locomotion, just anterior to the base of the tail, and in which are found a series of bones representing those of the hind limbs of Mammals. These rudiments, though imperfectly developed, are yet acted upon by powerful muscles, and thus become a strong fulcrum in the animals' movements or in seizing their prey. We may pass from lizards to serpents through a continuous series of forms in which the limbs become more and more feeble, until all external traces of them are lost. Such, for instance, are the family of Chalcidae, one of which, the *Pseudopus*, found in Northern Africa and Greece, has only the rudiments of hind limbs; whilst another, the *Chirotes*, a native of Mexico, has only the fore limbs, placed a short distance behind the head, yet so developed in its case as to be used. In the family of *Scincidae*, the *Evesia*, a native of India, has the limbs reduced to footless appendages. In the common slow worm or blind worm, rudimentary limbs are found beneath the skin on dissection.

In a species of Turtle, the *Matamata*, found in Guiana, rudimentary ears or ear-like membraneous prolongations of skin on the head exist. Again, at the inner corner of the human eye is a third eyelid, known, I have no doubt, to very few persons, and an object of attention only to anatomists. In other animals, birds especially, it is of full size and of great utility, enabling them to turn their eyes upwards to the sun, a feat they could never accomplish were not the visual organ thus protected.

A curious animal has been discovered in the Amazon, called the *Lepidosiren*, with the scales and mucous covering of a fish, but with rudimentary limbs, represented by four tentacular appendages, not jointed. Another species is met with in South Africa, with the tentaculæ jointed.

Professor Owen, speaking of rudimentary forms, thinks that we have not in this globe all the diversities of which a general pattern or archetype is susceptible, and that limbs which are found only in an undeveloped state in this world, may be fully developed in the other planetary bodies. Arguing on this principle, Dr. Leitch, in his work, "God's Glory in the Heavens," says there are undeveloped volcanic structures on the face of the earth, similar ones to which have long ago been fully developed in the moon, and by analogy he