

universal law, which limits the cervical vertebræ of quadrupeds to a very small number. Even in the Camelopard, the Camel, and Lama, their number is uniformly seven. In the short neck of the Cetacea the type of this number is maintained. In Birds it varies from nine to twenty-three; and in living Reptiles from three to eight.* We shall presently find in the habits of the Plesiosaurus a probable cause for this extraordinary deviation from the normal character of the Lizards.

* To compensate for the weakness that would have attended this great elongation of the neck, the Plesiosaurus had an addition of a series of hatchet-shaped processes, on each side of the lower part of the cervical vertebræ. (Pl. 17, and Pl. 19, 1, 2.) Rudiments and modifications of these processes exist in birds, and in long-necked quadrupeds. In the Crocodiles they assume a form, most nearly approaching that which they bear in the Plesiosaurus.

The bodies of the vertebræ also more nearly resemble those of certain fossil Crocodiles, than of Ichthyosauri or Lizards; they agree further with the Crocodile, in having the annular part attached to the body by sutures; so that we have in the neck of the *P. Dolichodeirus* a principle of construction resembling that of the vertebræ of Crocodiles; combined with an elongation very much exceeding that of the longest neck in birds, and such as occurs in no other known animal of the extinct or living creations. The length of the neck in *P. Dolichodeirus* is nearly five times that of the head; that of the trunk four times the length of the head, and of the tail three times; the head itself being one-thirteenth part of the whole body.—See Geol. Trans. Lond. Vol. 5, p. 559, and Vol. I. N. S. p. 103, et seq.