VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY.

REPORT on the Development of the Green Turtle (Chelone viridis, Schneid.).

By William Kitchen Parker, F.R.S.

PART I.—THE CRANIUM, FACE, AND CRANIAL NERVES.

In the spring of last year (1878), my friends Sir Wyville Thomson, F.R.S., and Mr H. N. Moseley, F.R.S., kindly put me in possession of a very fine and perfect series of the embryos of this most important type.

These had been carefully preserved in spirits. The larger specimens came to me from Sir Wyville Thomson and the smaller ones from Mr Moseley. The former, to my great satisfaction, accepted my offer to prepare from these invaluable specimens a monograph for the Challenger series of Zoological Memoirs.

These embryos have been measured by me along their curved axis, from the snout to the end of the tail; those measurements were as follows:—

First stage, 6½ lines long—three specimens.

Second stage, 4 inch long-eight specimens.

Third stage, 11 inch long—thirteen specimens.

Fourth stage, 3 inches long—two specimens.

Fifth stage, 4 inches long—a large number of specimens; these were just ready for hatching.

As by far the greatest number of morphological problems are concentred in the head,

¹ Since the above was written, Sir Wyville Thomson has made over to me (March 22, 1879) a large series of embryo Turtles, lately sent to the Admiralty from Ascension by Dr Maclean, R.N., who was one of the surgeons of the Challenger Expedition. I have to express my acknowledgments to the Admiralty for the promptitude with which they acceded to Sir Wyville Thomson's request to procure these specimens, and to Dr Maclean for carrying out his instructions so thoroughly. Most of these later specimens have still to be worked out embryologically, but they yield me two stages more immature than the smallest found in the first collection, viz., those gathered by Mr Moseley. These with the other five stages, and the adult, give me eight stages of this type of skull.