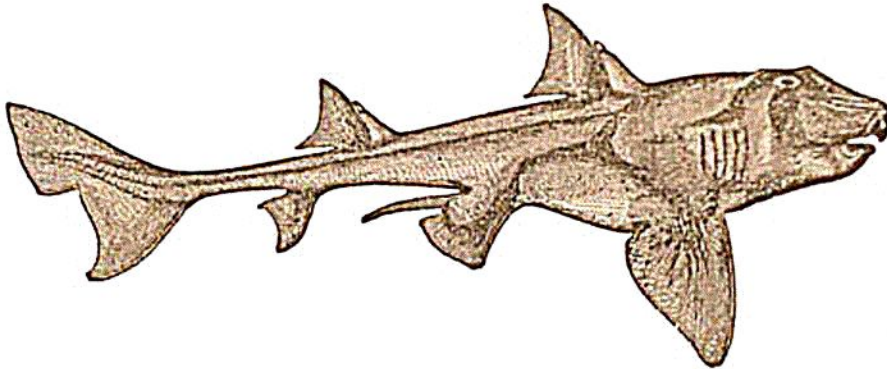


ICHTHOLOGY in the "Encyclopædia Britannica," "has the temporal aperture, the anal fin, and rounded teeth, of *Squalus Mustelus*; but the mouth is TERMINAL, OR AT THE EXTREMITY OF THE POINTED MUZZLE." The accompanying

Fig. 49.



PORT JACKSON SHARK, (*Cestracion Phillippi.*)

figure, (fig. 49,) taken from a specimen of *Cestracion* in the collection of Professor John Fleming, may be recorded as of some little interest, both from its direct bearing on the point in question, and from the circumstance that it represents, not inadequately for its size, the sole surviving species (*Cestracion Phillippi*) of the oldest vertebrate family of creation. With this family, so far as is yet known, ichthyic existence first began. It does not appear that on the globe which we inhabit there was ever an ocean tenanted by living creatures at all that had not its *Cestracion*, — a statement which could not be made regarding any other vertebrate family. In Agassiz's "Tabular View of the Genealogy of Fishes," the Cestracionts, and they only, sweep across the entire geologic scale. And, as shown in the figure, the mouth in this ancient family, instead of opening, as in the ordinary sharks, under the middle of the head, do expose them to the suspicion of being creatures of