

K. Page 339.—A TABULAR ARRANGEMENT OF THE FOSSIL FISHES OF THE CHALK FORMATION OF THE SOUTH-EAST OF ENGLAND, COLLECTED BY GIDEON MANTELL, LL.D. F.R.S.; IN THE MANTELLIAN MUSEUM AT BRIGHTON.*

(From "*Recherches sur les Poissons Fossiles*," by M. Agassiz.)

"Tout le monde sait que le Musée de M. le Dr. Mantell à Brighton est une collection classique pour la craie, et la formation Veldienne. Les soins minutieux que M. Mantell a donnés depuis bien des années à ces fossiles, les ont rendus plus parfaits que tous ceux des autres musées; car souvent il est parvenu à les détacher entièrement de la roche dans laquelle ils se trouvaient; ou du moins à les produire en relief, en détachant toutes les matières solides qui recouvraient les parties les mieux conservées de l'animal."

ORDER I.—The *Placoidians*, (from $\pi\lambda\alpha\acute{\xi}$, a broad plate.) The skin, covered irregularly with enamelled plates, sometimes of a large size, but frequently in the form of small points, as in the shagreen on the skin of sharks, and the tubercles on the integuments of rays. Tab. 84, fig. 2.

PTYCHODUS latissimus. Mantell's South Down Fossils. Tab. xxxii. fig. 19.

Agassiz, Poiss. Foss. Vol. iii. tab. 25.

————— *polygyrus*. Ibid. Tab. xxxii. figs. 23, 24.

————— *mammillaris*. Ibid. Tab. xxxii. figs. 18, 20, 25, 29.

————— *decurrens*. Tab. 58, fig. 6, page 329.

————— *altior*. South Down Fossils. Tab. xxxii. figs. 17, 21, 27.

Teeth, and perhaps vertebræ, of the above species, and a few examples of their dorsal defences, (*Ichthyodorulites* of Dr. Buckland,) are the only remains hitherto discovered. (Agass. Poiss. Foss. Vol. iii. tab. 10^a, 10^b.) The teeth were referred to fishes of the genus *Diodon*, by previous authors, and the defences were called radii, or fin-bones of balistes, and siluri.

Teeth of a new species of *Ptychodus* have been discovered in the sand of New Jersey, United States, by Dr. Morton.—(*Morton's Synopsis*, Pl. 18, fig. 1, 2.) I have named it *Ptychodus Mortoni*.

PTYCHODUS,—*spec. undetermined*. Dorsal defences, and a beautiful example of a fin, are represented in the Fossils of the South Downs. Tab. xxxiv. fig. 8. Tab. xxxix. and Tab. xl. fig. 3.

GALEUS pristodontus. Tab. 58, fig. 3. South Down Fossils. Tab. xxxii. figs. 12 to 16. Agass. Poiss. Foss. Vol. iii. tab. xxvi. fig. 14.

NOTIDANUS microdon. Tab. 58, fig. 1, page 329. Agass. Tab. xxxii. fig. 22.

LAMNA appendiculata. Tab. 58. fig. 4, page 329. Agass. Tab. xxxii. figs. 2, 3, 5, 6, 9.

————— *acuminata*. Agass. Tab. xxxii. fig. 1.

* Now in the British Museum.