a monograph on the fossil Chitons, Rochebrune figures [1] a "valve médiane" of *Cryptoplax oculatus*, Quoy and Gaim. From its shape it must be a second valve, but it neither agrees with the original description of the valves by Quoy and Gaimard, nor with my specimen, and we are driven to the alternative that it represents the worn valve of another species, possibly of *Cryptoplax burrowi*, Smith.

In order to render this account of the Chitonelloidea as complete as my opportunities admit of, I now append extracts from Dall's valuable paper On the Genera of Chitons.[2]

"CHITONELLOIDEA.

"Tail plate funnel-shaped. Laminæ thrown forward." [3] *Chitonellus*, Blainv. [Lam.]—Insertion plates very sagittate; 5 [*sic*] slits in anterior valve, none in middle and posterior valves; teeth very short, except at sutures; eaves distinct; gills posterior; sinus very deep and narrow; girdle, crowded bristles, no tufts; body very long; hind valves separate.[4]

The subgenus "*Cryptoplax*, Gray" [Blainv.], precisely resembles above, except that there are small tufts.

Choneplax, Carp.—Insertion plates intermediate; 5 slits in anterior valve, 1 in middle and posterior valves; teeth moderately long in front; eaves minute; gills (?); sinus very deep and narrow; girdle gravelly, with sutural tufts; valves touching.[4]

On page 288 there is the following definition of this genus:—"Animal repens, satis elongatum: valvæ expositæ parvæ, omnino contiguæ; valva postica infundibuliformis; mucro retrojectus, terminalis; laminæ ut in *Katherina* sed obsoletim fissatæ; zona Acanthochitonoidea. Type *Chiton strigatus*, Sowerby. West Indies."

Subgenus *Chitoniscus*, Carp. "49*a*. Animal et testa Choneplacis similes sed zona haud porifera."

"Based on *Chitonellus striatus* and *strigatus*, Sowerby, Conch. Ill., figs. 62, 63, which are represented as without pores. In the former the valves are separated (as in *Notoplax*); in the latter they touch (as in *Choneplax*)." As Dall truly observes, "The species need examination to confirm the accuracy of the figures."

The relationship of the Chitonelloidea to the other Chitons has always been a subject of controversy. The tendency of those modern authors who have approached the subject with what may be termed a morphological bias is to regard the former as the most primitive division of the group.

Professor Hubrecht, for example, says: "This genus [*Cryptoplax*] was long looked upon as representing a reduced stage in comparison with Chiton; different details of its organisation (branchiæ, foot, &c.) show the inconsistency of this proposition, and of all

[1] *Ann. des Sci. géol. Paris*, vol. xiv. pl. iii. fig. 14.
[2] *Proc. U.S. Nat. Mus.*, 1881, pp. 279–291.
[3] *Op. cit.*, p. 285.
[4] *Op. cit.*, pp. 289, 291.