

The genera comprised in the true Cancroid Cyclometopa are now extremely numerous, and, as is well known, are connected by almost insensible gradations of form and structure. Hence it is difficult, if not impossible, to indicate a system of classification whereby they may be divided into groups at once natural and distinctly defined; and the types represented in the Challenger collection are not sufficiently numerous to permit me to attempt (even did time and experience allow) a new and detailed arrangement of the genera of this group.

The classification of Professor J. D. Dana,¹ although somewhat artificial, is one which is certainly very convenient to systematists, since this author gives a synoptical arrangement, with diagnostic characters, of all the genera known at the time when his work was published, and as it is the one which I have hitherto followed in my own papers, I have thought it best, pending a complete revision of this group, to adhere to this arrangement so far as the sequence of the leading genera is concerned in the present Report, separating merely the somewhat abnormal genus *Trapezia* (which approaches the Catometopa in the form of the carapace) from the remainder of the group; but I refrain from indicating in the present imperfect state of our knowledge any subdivisional characters or subfamilies.

A widely different and in some particulars more natural arrangement has been indicated by A. Milne Edwards,² who divides the true Cancridæ into five primary, two transitional, and two accessory groups, characterised mainly by the form of the carapace, and typified respectively by the genera *Cancer*, *Carpilius*, *Xantho*, *Eriphia* and *Trapezia*, and by *Æthra* and *Galene*, and *Pirimela* and *Liagore*. His monograph of the recent genera of Cancridæ has, however, unfortunately never been completed, and the limits and subdivisional characters of six of the groups have not been defined, but it is probable that the true natural arrangement of the genera lies in the direction indicated by Milne Edwards. The genus *Æthra* (the type of his group Æthrides) is somewhat more nearly related to the Oxyrhyncha than to the Cyclometopa, and has been arranged, with *Cryptopodia* in the former group, both by Professor S. I. Smith and Dr. W. Stimpson, and by myself.

Section I. Cancrinæ.

Cancériens arqués, Milne Edwards, Hist. Nat. Crust., vol. i. pp. 369, 371, 1834.

„ *quadrilatères*, Milne Edwards (pt.), tom. cit., pp. 369, 424, 1834.

Carapace usually convex, with the antero-lateral margins arcuated, and armed with several lobes, teeth or spines. The front is of moderate width and usually does not project over the antennules and bases of the antennæ, which are seldom excluded from the interior hiatus of the orbits.

¹ Crust. in U.S. Explor. Exped., vol. xiii. p. 145, 1852.

² Ann. d. Sci. Nat. (Zool.), ser. 4, vol. xviii. p. 39, 1862; *Nouv. Archiv. Mus. Hist. Nat.*, vol. i. pp. 180, 182, 1865.