

Family IV. PINNOTHERIDÆ.

Pinnotheriens, Milne Edwards, Hist. Nat. Crust., vol. ii. p. 28, 1837.

Carapace usually more or less membranaceous, convex or depressed, with the antero-lateral margins entire or but very slightly dentated; front, orbits, and eye-peduncles very small. The post-abdomen of the male usually does not cover the sternum between the bases of the fifth ambulatory legs. The buccal cavity is usually arcuated anteriorly. The merus (and usually the ischium) of the exterior maxillipedes is well developed, and the carpal joint is articulated at the summit or at the antero-internal angle, or more rarely at the antero-external angle of the merus. Chelipedes (in the adult males) small, or moderately developed; ambulatory legs slender and usually naked; dactyli styliiform, unarmed.

The species are of small size, and many are found living within the shells of bivalve Mollusca, *Echini*, tubicolous Annelida, &c.

However characterised, the Pinnotheridæ constitute at present a somewhat heterogeneous group, which I think it most convenient to define in the sense originally indicated by Milne Edwards in 1834. In his later monograph (1852, 1853) Milne Edwards separated *Myctiris*, *Scopimera*, and *Doto* (*Dotilla*) from the Pinnotheridæ. By Dana (1852) *Myctiris* is constituted the type of a distinct family and arranged next to the Pinnotheridæ, but *Scopimera* and *Dotilla* are widely separated from *Myctiris* and placed in the Macrophthalmidæ.

The few forms occurring in the collection of H.M.S. Challenger must be arranged in three distinct subfamilies, as will be seen in the following synoptical arrangement of the genera of this group, wherein I have recharacterised the subdivisions established by Milne Edwards, and have added a new subfamily to those previously established, which includes a few forms not represented in the Challenger collection.

Subfamily 1. PINNOTHERINÆ.

Pinnotherinæ, Milne Edwards, Ann. d. Sci. Nat., ser. 3, Zool., vol. xx. p. 216, 1853.

„ Dana, U.S. Explor. Exped., vol. xiii., Crust. 1, p. 378, 1852.

Carapace usually convex, subglobose or transverse. Front not rostrated. Ischium joint of the exterior maxillipedes usually rudimentary or very short; dactyli of the ambulatory legs very short. The ambulatory legs all well developed.

Genera :--*Pinnotheres*, Latreille; *Ostracotheres*, Milne Edwards; *Pinnixa*, White (= *Tubicola*, Lockington); *Xanthasia*, White; *Pinnotherelia*, Lucas; *Fabia*, Dana; *Pinnaxodes*, Heller (?); *Dissodactylus*, Smith (?);¹ *Malacosoma*, de Man; *Holothuriophilus*, Nauck.

¹ This genus is regarded by S. I. Smith as typical of a distinct subfamily.