

joints, none of which show special modifications, are involved: (i) moveable finger, carina; (ii) immovable finger, carina; (iii) palm, upper carina often involving distal spine; (iv) palm, central carina; (v) palm, lower carina; (vi) palm, granular distal border; (vii) palm, boss on upper border; and (viii) wrist, spine. These structures are all obvious except for two which are (vi) which is near the lower portion of the articulation of the moveable finger, and (vii) which is near the upper portion of the articulation of the moveable finger.

The only cheliped area showing possible modification for engaging the carapace is (ix) the anterointernal upper surface of the arm (Fig. 3A-E), which bears a smooth hardened area (see Fig. 3A-a) which engages certain anterolateral teeth by horizontal movements.

(b) *Carapace—the stationary structures* (Fig. 3G)

Most engagements are with tips or granular edges of (i) suborbital tooth, (ii) first anterolateral tooth (Fig. 3G-a), (iii)-(vi) second to fifth teeth respectively.

Only a single carapace area shows possible modification associated with stridulation, and this is a clear arc of cuticle on the ventral surface just behind the anterolateral teeth (Fig. 3G-b). The arc bears scattered granules, and is approximately equivalent to, but less modified than, the "*pars stridens sous-orbitaire*" of other

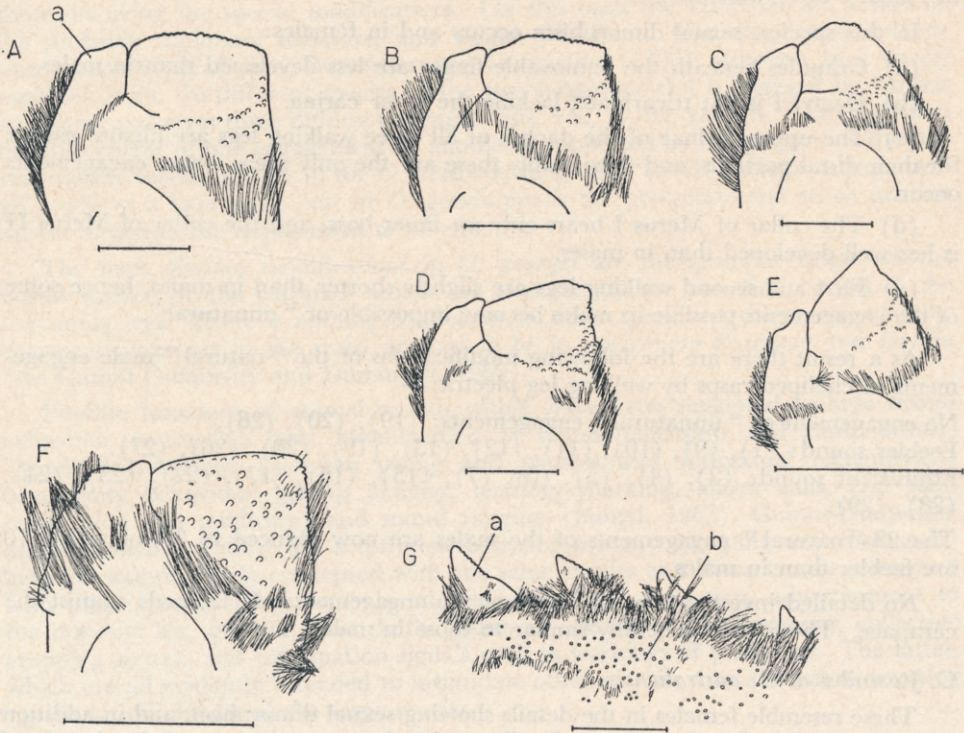


FIG. 3.—A-F. Dorsal views of distal upper border of arm of right cheliped, G. ventral view of ventral surface of left of front of carapace. Anterior sides on left and posterior sides on right; males except female in E. A. *O. punctatus* (de Haan), a—smooth hardened area. B. *O. australiensis* Stephenson and Rees. C. *O. trimaculatus* (de Haan). D. *O. catharus* (White). E. *O. elongatus* Stephenson and Rees. F. *O. georgei* Stephenson and Rees. G. *O. trimaculatus* (de Haan), a—first anterolateral tooth, b—cuticular arc. Scale = 10mm.