

than one-third of the length; end view broadly ovate, widest toward the ventral margin; surface of the shell smooth. Length, 1-43d of an inch (.57 mm.).

Dredged in Simon's Bay, South Africa, 15 to 20 fathoms (Station 140); Port Jackson, Australia, 2 to 10 fathoms. The anterior depression of this species suggests doubt as to the propriety of its genuine location as a *Pontocypris*, but I do not know of any genus, except perhaps *Bythocypris*, to which it could with propriety be referred, its anatomical characters being quite unknown.

[Pl. XV. fig. 6, *a-d*. *a* Carapace seen from left side, *b* from above, *c* from below, *d* from front. All magnified 60 diameters.]

Argillæcia, G. O. Sars.

Argillæcia, Sars, Oversigt af Norges marine Ostracoder, 1865.

Argillæcia, Brady, Crosskey, and Robertson, Post-Tertiary Entomostraca, 1874.

Valves equal, smooth, elongated, moderately robust, scarcely higher in front than behind, more or less angulated at the junction of the posterior and ventral margins. Anterior antennæ (Pl. IV. fig. 5) robust, five-jointed, first joint large and stout, the rest beset on the lower margins with strong spines, and on the upper margins, especially in the male, with numerous long setæ; posterior antennæ (Pl. IV. fig. 6) short and thick, otherwise as in *Pontocypris*; the setæ of the antepenultimate joint in the female short, in the male very long, and reaching much beyond the terminal claws. Mandibles (fig. 7) almost as in *Pontocypris*, the palp, however, having only three or four setæ ("one," Sars) in place of a branchial plate. Palp of the second pair of jaws indistinctly three-jointed (fig. 9) bearing several terminal setæ ("ending in a single claw," Sars). First pair of feet (fig. 10) strong, ending in two nearly equal claws; second pair unlike the first, and almost like those of *Pontocypris*; last joint very short, and bearing three setæ, of which one is very long and curved. Postabdominal rami short, attenuated towards the apices, terminal claws very small. Eye wanting.

The anatomical details of *Argillæcia eburnea*, as shown in Pl. IV., do not in all respects coincide with Sars' generic description; the antennal setæ of *Argillæcia eburnea* are much longer and more slender than ought to be the case, the branchial setæ of the mandible-palp are more numerous, and the second pair of maxillæ seem to be somewhat different in structure; yet, notwithstanding these divergences, I prefer, for the present at least, to place this species in the already established genus, rather than to create a new one on what might perhaps prove to be insufficient grounds. The genus, though widely distributed, does not seem to contain a large number of species, and these, like most of the *Cypridæ*, present so few peculiarities of external form that their identification is a difficult matter in the case of fossil species and of recent empty shells. The subacute infero-posteal angle, and the overlap of the right valve in the centre of the ventral surface, are the only tangible distinctive marks, so far as the shell is concerned.