canal is sub-central. There appears to be excentric rings of growth almost wholly confined to the side furthest from axis of alimentary canal, which can with difficulty be traced. The joint carrying auxiliary arms has the same character as No. 2, but there are either four or five "auxiliary arms," and in one specimen there is a solitary auxiliary placed lower upon an ordinary joint. Greatest diameter, 8 millimetres; least, 7 millimetres; distance of annular sutures apart, 2 millimetres.

No. 4 is, no doubt, the extreme portions of auxiliary arms probably of either No. 2 or 3, composed of fine, simple, rounded moniliform joints, about $1\frac{1}{2}$ millimetres in diameter, gradually tapering.

Tribrachyocrinus Tasmanicus? Nov. sp.

Perforation of large pentagonal tripartite pelvis or dorsocentral plate exceedingly minute, apparently absent; costal plates large, roundly pentagonal; one plate (first costal) irregularly hexagonal; margins of plates marked with fine parallel concentric striæ. Specimen much distorted, having a broadly oval form. Length, 3 inches; width, 2 inches.

Associated with *Spirifera convoluta*, *Sanguinolites Etheridgei*, etc., in Upper Palæozoic mudstone cliffs at Shot Tower, Brown's River-road.

Specimen obtained by Mr. A. Morton, Curator of Tasmanian Museum, from the collector, Mr. Harrison. The above species comes very close to, and perhaps may not be specifically distinct from, the smaller form with large perforation in tripartite pelvis described by Prof. M'Coy as *T. Clarkei*, from the soft grey shales of Darlington, N.S.W.

NOTES ON FOSSIL CRABS FROM THE DEEP DREDGINGS OF THE YARRA RIVER, AND EXCAVATION OF THE COODE CANAL, VICTORIA.

By S. H. Wintle, F.L.S., &c.

The accompanying fossil crustacea I obtained from the deposits of deep dredgings of the Yarra river, and from the material deposited from the excavation of the Coode Canal. The age of the old Estuarine bed which supplied them is Post Pliocene. These cancerolites belong to the Genera

Phlyxia and *Utica* (Haswell), and exist in Australian waters now. *Utica* are very numerous, *Phlyxia* scarce. At present I can only forward examples of *Utica Yarraensis* (Wintle), but hope to be able to supply specimens of *Phlyxia*.

DESCRIPTION.

Utica Yarraensis (Wintle), carapace sub-quadrate, smooth, naked, rounded, convoluted, trilobed, anterior margin nearly straight. Antero-lateral margin with one small conical tooth in living examples. Posterior margin unarmed. Postero-lateral margin edges recurved. Eye-stalks short, depressed. Ambulatory appendages fine, tomentose, terminal, and penultimate; joints fringed below with fine hairs; jaw legs long, slender, second joint twice as long as first one. Jaws slight, attenuated. Abdomen without deep mesial furrow. Third and sixth segments coalescent in both sexes.

Shores of Port Phillip, Port Jackson, and possibly Tasmania.

Utica Haswelli (Wintle), carapace subquadrate, broader than long, smooth, convoluted, trilobed. Anterior margin shield-shaped, edges finely recurved. Two deep lateral furrows. Ambulatory appendages finely tomentose, long, same as in *U. Yarraensis*. A close ally to *U. barbimana* (Haswell).

Associated with these crabs are the remains of the small freshwater crayfish, *Astacopsis Franklinii* (McCoy); the river mussel, *Unio* sp., both of which have been brought down from the fresh water by river action, and with them are also found marine testaceous remains in abundance. (See examples.)

I purpose at a future early date sending further examples from this interesting deposit, with diagrams of section of the stratigraphy of the canal cutting.