DESCRIPTION OF A NEW COPEPOD. By Thomas Scott. (6(3):232-234 (Pl. VIII. figs. 7-12.)

Artotrogus papillatus, n. sp.—In general appearance this species is not very unlike A. Normani, Brady and Robertson.

The first segment is equal in length to rather more than half of the

whole body, or as 21 is to 19.

The anterior antennæ are eight-jointed, stout, bearing comparatively few setæ, and each is terminated by a long curved olfactory appendage. The relative lengths of the joints are as follows:—

## $\frac{1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8}{14 \cdot 44 \cdot 14 \cdot 9 \cdot 12 \cdot 11 \cdot 14 \cdot 29}$

The terminal joint has a distinct curved band stretching across it near the middle, which in certain positions gives it the appearance of being two-jointed.

The last joint of the posterior antennæ is about as long as the two pre-

ceding ones, and terminates in a rather long slender spine.

The maxillæ resemble very closely those of *Dyspontius striatus*, Thorell.

The second pair of foot-jaws are rather powerfully clawed, and bear each a single spine at the distal end and on the inner aspect of the second-last joint.

The outer margins of the joints of the outer branches of the swimming feet are fringed with minute close-set spines, and the outer terminal angles of the first and second joints are armed with one stout lancet-shaped, and one small spine; the third joint has three such pairs of spines on its outer edge, and terminates in a sabre-like spine which has its outer edge finely serrate. The inner margins of these joints are clothed somewhat similar to those of A. magniceps, Brady.

The integument of the cephalothorax is thickly covered with small

conical papillæ.

This species has, like A. Normani, an elongated abdomen; the last joint is dilated distally, and is rather shorter than the third, while the second-last is shorter and narrower than either; the caudal appendages are stout and about as long as the last abdominal segment; each bears three setæ, the inner one is short and slender, and the other two long, the middle one being considerably the longest; on the outer edge of each appendage, and about a fourth of its length from the free end, there is inserted in a kind of notch a short plumose seta. Length, one-twentieth of an inch (1.3 mm.).

One specimen only of this form was obtained among material dredged in the vicinity of Inchkeith. This solitary specimen was a female, and does not agree with any species known to me. Dr G. S. Brady, F.R.S., and Mr J. C. Thomson, F.L.S., to whom I submitted the specimen, have also been unable to assign it to any described species. Mr Thomson, who has recently been working very largely at Copepoda, both of British and foreign seas, was at first of opinion that it is not impossible that it may be found to belong to the genus *Dyspontius*; but the differential characters cannot be completely made out without dissection, and I do not wish to destroy the specimen for that purpose.

Professor Ewart has suggested that the species should be named A. papil-

latus, which has been adopted.

I am indebted to Mr W. L. Calderwood for the drawings which accompany this description.

## EXPLANATION OF THE PLATE.

Figs. 1-6, Cyclops Ewarti, n. sp.

Fig. 1. Male; magnified 40 times,

Deserched & Br. G. S. B Fig. 2. Anterior antenna of male; magnified 90 times.

Fig. 3. Anterior antenna of female; magnified 90 times.

Fig. 4. Foot of first pair; magnified 90 times.

Fig. 5. Foot of fifth pair; magnified 200 times.

Fig. 6. Abdomen of male; magnified 90 times,

## Figs. 7-12. Artotrogus papillatus, n. sp.

Fig. 7. Adult female; ventral view.

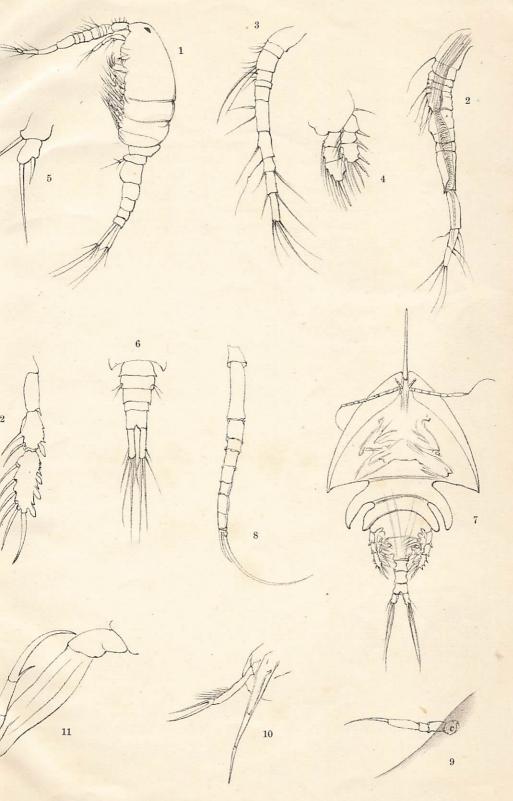
Fig. 8. Anterior antenna.

Fig. 9. Posterior antenna.

Fig. 10. Maxilla.

Fig. 11. Second foot-jaw.

Fig. 12. Foot of third pair of swimming feet,



Figs. 1—6. Cyclops Ewarti, n. sp. ,, 7—12. Artotrogus papillatus, n. sp.