

THE ANATOMY OF MEGALATRACTUS.

BY H. LEIGHTON KESTEVEN.

- I.—INTRODUCTION.
 - II.—ANATOMY OF *MEGALATRACTUS ARUANUS*.
 - III.—ANATOMY OF *MEGALATRACTUS MAXIMUS*.
 - IV.—ANATOMY OF THE GENUS.
 - V.—COMPARATIVE.
 - VI.—THE SYSTEMATIC ALLOCATION OF THE GENUS.
-

I.—INTRODUCTION.

The material used in the present investigation was derived from three sources:—(1) examples of *Siphonalia maxima*, Tryon, obtained during the Trawling Expedition of H.M.C.S. "Thetis" in 1898; (2) specimens taken by the "Deep Sea and Trawling Syndicate" off Broken Bay in 1891; and (3) a large example of *Megalatractus aruanus*, Linn., obtained by Mr. C. Hedley at Mapoon, at the mouth of the Batavia River, Gulf of Carpentaria, Queensland, in May, 1903. Although the apex of the shell and part of the body-whorl of the latter were broken off, the state of preservation of the soft parts was not all that might be wished. The visceral coil was in a thoroughly satisfactory condition, but the preservative used, a mixture of formalin and alcohol, was not strong enough to permeate the muscular tissue of the body, and as a result the organs at the anterior end of the body cavity were far from well preserved. The ganglia of the nerve-ring, the salivary glands, the anterior portion of the œsophageal loop and œsophageal gland, were found to be completely destroyed. The nerves lay loose among these decomposed organs, connective tissue and muscle strands, filling this part of the body cavity.

Nevertheless it is to this specimen that the present paper owes a great deal of its completeness, for, whilst the organs of the body cavities of most of the specimens of *S. maxima* were in a condition fitting them for investigation, the visceral coils of these were almost useless for the purpose, and Mr. C. Hedley* had suggested a relationship between the two molluscs.

* Hedley—Aust. Mus. Mem., iv., 1903, p. 375.