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(BEING A CONTINUATION OF THE 'ANNALS' COMBINED WITH LOUDON AND CHARLESWORTH'S 'MAGAZINE OF NATURAL HISTORY.')

CONDUCTED BY
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V.—*On a new Crab taken from a Deep-sea Telegraph-Cable in the Indian Ocean.* By W. T. CALMAN, D.Sc., British Museum (Natural History).

THE crab described below was presented to the British Museum, along with a number of other rare and interesting deep-sea Crustacea, by Mr. O. G. F. Luhn, M.A., M.B., who obtained them while acting as medical officer on board the cable-ship 'Colonia,' of the Telegraph Maintenance and Construction Company. The specimens were found in repairing the cable between Aden and Zanzibar. Most unfortunately the exact locality has not been recorded, but the depth is given as "about 600 fathoms."

It is most desirable that advantage should be taken of the opportunities afforded by cable repair work of adding to our knowledge of the deep-sea fauna. At present these opportunities are mostly wasted; but a special leaflet, with instructions for the preservation of specimens found on the cables, has recently been issued by the Zoological Department of this Museum, and will be sent on application to anyone interested in the subject. It is hoped in this way to induce some of the officers of these ships to preserve, instead of throwing overboard, the valuable material which comes to their hands.

Family Xanthidæ.

CALOCARCINUS*, gen. nov.

Carapace transversely octagonal, fronto-orbital margin between a half and two-thirds of its greatest width; surface smooth. Antero-lateral margin with two teeth behind outer angle of orbit. Orbits nearly concealing eyes, without fissures, completely closed, the inner suborbital angle meeting the front and excluding the antennæ. Antennules folding transversely. Basal segment of antenna not reaching front. Endostomial ridges extending to anterior margin of buccal frame, which is notched on either side. Chelipeds long, massive, and unequal, the greater part of the merus extending beyond the carapace; fingers pointed. Propodus of legs having a "pulley-like" articulation with dactylus on posterior

* From κάλωσ, a rope or cable, in allusion to the circumstances under which the specimens were captured; if the ambiguity may be pardoned, the alternative derivation from καλὸσ, beautiful, is not inapplicable to the species.

side. Abdomen of male with seven segments distinct, the third to fifth more firmly connected than the others.

Type species, *Calocarcinus africanus*, sp. n.

This genus approaches closely to *Sphenomerides*, Rathbun (*Sphenomerus*, Wood-Mason), though differing from it in several important characters. In having the orbital gap completely closed it agrees with the more typical Trapeziinæ, but in the general shape of the carapace, and especially in the relative narrowness of the frontal region, it differs from these and from all the related subfamilies, and assumes more the typical Xanthine aspect. On comparing the species described below with *Sphenomerides trapezioides*, W.-M.*, and with a *Trapezia*, it is impossible to doubt that all three are closely related, although *Sphenomerides* is excluded by its open orbital gap and *Calocarcinus* by its narrow front from current definitions of the Trapeziinæ. It is very easy to point out that the characters hitherto relied on for the subdivision of the Xanthidæ are all of very slight importance, but it is very difficult to suggest any better. Borradaile† has shown that such characters as the "pulley-like" articulation of the dactylus of the walking-legs and the closure of the orbital gap, which might be supposed to be of systematic importance, recur in groups apparently unrelated, and *Calocarcinus* only adds to evidence already existing that the general proportions of the carapace are not always trustworthy as a guide to affinity.

Calocarcinus africanus, sp. n.

Carapace about three-fourths as long as broad, convex in both directions, smooth and polished, with only slight traces of inter-regional grooves; octagonal in outline, the antero-lateral margins between the two pairs of antero-lateral teeth being straight and parallel. Front about three-eighths of greatest width of carapace, with a very shallow median notch and with the supraorbital angles slightly produced, but not acute. There is no tooth at the outer angle of the orbit. Antero-lateral margin straight to the first tooth, the distance being a little more than that between the first and second teeth, which are both blunt. Postero-lateral margin distinctly longer than antero-lateral.

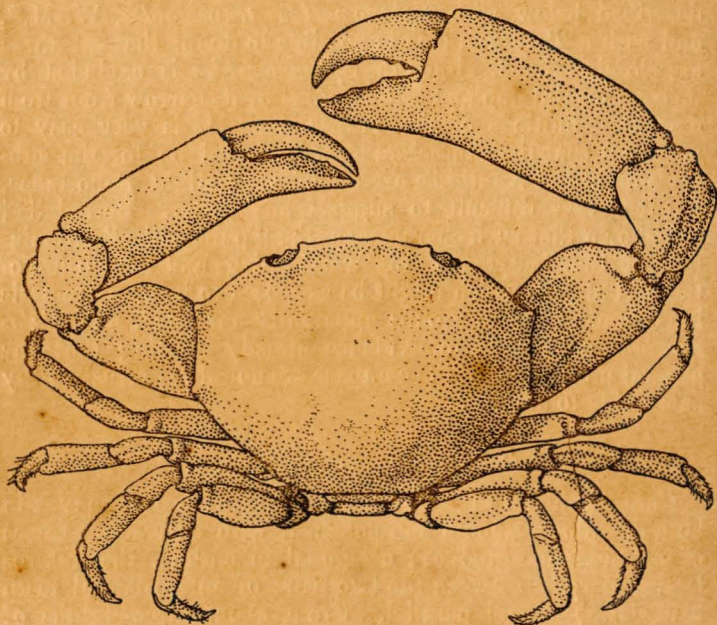
Eyes smaller than in *Sphenomerides*, nearly concealed when retracted. Antennal flagellum as long as major

* I am indebted to Dr. N. Annandale, Superintendent of the Indian Museum, Calcutta, for a specimen of this crab.

† Gardiner's 'Fauna . . . Maldives,' i. p. 239 (1902).

diameter of orbit. Buccal frame slightly narrowed anteriorly. Merus of third maxillipeds about as broad as long, its anterior margin straight.

Larger cheliped about two and a half times the length of the carapace; merus shaped as in *Trapezia*, but its front edge not expanded or serrated; carpus with two longitudinal ridges on its outer and upper surface, somewhat rugose externally, its inner angle forming a blunt tooth. Hand compressed, smooth and polished except above, where it is faintly rugulose; the upper margin forms a ridge defined



Calocarcinus africanus, male, twice natural size.

externally and internally by a groove; lower edge rounded. In the larger cheliped the depth of the palm increases slightly distally, where it is about one-half of its length and equal to the length of the fingers; in the smaller cheliped the depth does not increase, is less than half the length, and shorter than the fingers. Both fingers furrowed, slightly curved, sharp-pointed. Walking-legs moderately slender, smooth, without hairs except on the dactyli, first pair equal to or a little longer than the breadth of carapace.

Measurements in millimetres.

	♂.	♀.	♀.
Length of carapace	16.5	15.3	14.75
Breadth of carapace.....	22.3	20.5	20.0
" front	8.3	7.75	7.5
" fronto-orbital margin	13.0	12.0	12.0
Length of larger cheliped	45.0	35.0	34.0
" smaller cheliped	40.0	29.0	29.0
" first walking-leg	25.0	20.5	20.5

Occurrence. "On submarine telegraph-cable between Aden and Zanzibar, depth about 600 fathoms." One male and two ovigerous females. The eggs are minute, about .45 mm. in diameter.

VI.—On Mammals from the Upper Zambezi River.

By E. C. CHUBB.

THE Rhodesia Museum is indebted to Mr. T. N. Micklem for a collection of small mammals made by him on the Upper Zambezi River between Sesheke and the junction of the Kabompo River with the Zambezi.

It is of interest as being the first collection of properly prepared specimens from this region, and also in that it contains a very distinct new species of rodent-mole, which Mr. Micklem is to be congratulated upon obtaining.

The country, except for a mile or so on either side of the Zambezi, consists of thick forests alternating with large open vleis, through the middle of which run streams flowing down into the Zambezi.

1. *Crocidura neavi*, Wrough.

♀. 23rd Aug., 1908. Sonso River.

"Trapped with meat at night.

"Barotse name 'Nyundi.'"—*T. N. M.*2. *Crocidura* sp.

♀. 17th Aug., 1908. Sonso River.

"Barotse name 'Nyundi.'"—*T. N. M.*3. *Crocidura* sp.

♀. 17th Aug., 1908. Sonso River.

"Barotse name 'Nyundi.'"—*T. N. M.*