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NOS. I TO IV.—1895 : WITH 29 PLATES.

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“It will flourish, if naturalists, chemists, antiquaries, philologers, and men of science in different parts of *Asia*, will commit their observations to writing, and send them to the Asiatic Society at Calcutta. It will languish, if such communications shall be long intermitted ; and it will die away, if they shall entirely cease.” SIR WM. JONES.

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exception of those belonging to the Regular system, ought to polarise light. But this could not be verified in the case of crystals opaque to light. There is no such difficulty with electric rays, for all crystals are transparent to them. As a matter of fact, all the above experiments with one exception were performed with specimens opaque to light.

Explanation of the plate

- R...metallic box containing the Ruhmkorff's coil.
 S...position of the sparking balls.
 L...position of the convex Lens.
 P...the Polariser.
 I...Iris diaphragm.
 K...the Crystal.
 A...the Analyser.
 C...the Coherer.
 G...the Galvanometer. In practice the Galvanometer is placed at a greater distance and the leading wires enclosed in tin-foil.

Description of a New Species of Oxyrhynch Crab of the Genus Parthenope.

—By A. ALCOCK, M. B., C. M. Z. S., Superintendent of
the Indian Museum.

[Read 3rd July.]

The species here described is a true *Parthenope* as delimited by Miers, Journ. Linn. Soc., Zool., Vol. XIV. 1879, p. 668.

PARTHENOPE INVESTIGATORIS, n. sp.

Carapace almost equilaterally triangular, the sides very slightly curved: its surface is deeply eroded and rugose as in *P. horrida* and *spinosissima*, but is almost devoid of the sharp tubercles found in those species: the antero-lateral borders are slightly crenulate: the produced postero-lateral angle is rounded and nearly smooth: the posterior border bears five small eroded lobules—a very small one in the middle line, with two larger ones on either side—with intervening granules. The gastric region is enormously inflated as in *P. spinosissima*, and descends almost vertically to the vertically deflexed rostrum, the latter being fused with the interantennulary

tooth. The hepatic regions are rounded laterally, not strongly angulated as they are in *P. horrida* and *spinosissima*. The external maxillipeds, when closed, have the inner edges in the closest contact throughout.

The chelipeds have the *merus* very short and squat—its breadth about two-thirds of its length—with two compressed teeth on its short anterior (inner) border, a few blunt teeth followed by a blunt lobe on its posterior (outer) border, a strong tubercle in the middle of its upper surface, and numerous pearly tubercles and nodules on its lower surface: the *carpus* is granular and pustular: the *hand* has five sharp almost equal sized teeth on the lower border (two of them being on the immobile finger), several large nodules on the outer surface, and several large unequal sized spiny lobules on its inner surface: the *mobile finger* is spiny.

The ambulatory legs are compressed: the *merus* is compressed-trigonal, with the edges, especially the anterior edge, spiny: the *carpus* is indistinctly nodular: the *propodus* is also slightly nodular, with a few spinules on its posterior margin: the *dactylus* is closely covered with spinules up to its tip.

The sternum, in the female, is excavated between the chelipeds.

The abdominal terga, in the female, are raised into strong quadrangular convexities down the middle line, and on either side near the edge.

Loc.—Pedro Shoal, ? depth; and Laccadives, 28 fms.

Length of carapace of largest specimen (female) 45 millim., greatest breadth 61 millim.

The position of the above species in the *key to the Indian species of the genus Parthenope*, page 279 *ante* is thus shown:—

I. Carapace remarkably rugose (or spinose); chelipeds of the ordinary *Lambrus* form:—

1. Carapace somewhat pentagonal, not vertically deflexed from the front of the gastric region: abdominal terga of the female with a series of large eroded pits down either side..... *P. horrida.*
2. Carapace somewhat equilaterally triangular, vertically deflexed from the front of the gastric region: abdominal terga of the female with a series of convexities or nodules down the middle line, and on either side—
 - i. Edges of carapace very strongly spinate: carpus of chelipeds and of ambulatory legs (like all the other parts of the body) strongly spinate: abdominal convexities of female spinate..... *P. spinosissima.*

- ii. Spinature very little developed : edges of carapace crenulate : carpus of chelipeds and of ambulatory legs granular or nodular : abdominal convexities of female not spinate *P. investigatoris*
- II. The whole body and all the appendages beset with delicate paxilliform tubercles which unite to form a lace-work or frosting : chelipeds tapering, with long slender spiny fingers which are nearly as long as the palm *P. (Parthenomerus) efflorescens.*

The present species, as well as *P. efflorescens*, have been figured for next year's issue (1896) of "Illustrations of the Zoology of the R.I.M.S. 'Investigator'."

The ambulatory legs are compressed : the margin is compressed : the anterior edge spiny : the carpus is indistinctly nodular : the propodus is also slightly nodular, with a few spinules on its posterior margin : the dactylus is closely covered with spinules up to its tip.

The sternum, in the female, is elevated between the chelipeds. The abdominal tergite, in the female, are raised into strong quadrangular convexities down the middle line, and on either side near the edge.

Car.—Tergo 3rd, ? depth; and facinivores, 28 mm. Length of carapace of largest specimen (female) 45 millim., greatest breadth 31 millim.

The position of the above species in the key to the genus of the genus *Parthenomerus*, page 275, is thus shown:—

1. Carapace somewhat pentagonal; not vertically deflexed from the front of the gastric region; abdominal tergite of the female with a series of large nodules down either side..... *P. investigatoris*
2. Carapace somewhat quadrately triangular; vertically deflexed from the front of the gastric region; abdominal tergite of the female with a series of convexities or nodules down the middle line, and on either side—
 - a. Tergite raised a very strongly spinate; carpus of chelipeds and of ambulatory legs (like all the other parts of the body) strongly spinate; abdominal convexities of female spinate..... *P. efflorescens*