## THE ANNALS

AND

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including

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(being a continuation of tife 'annals' combined with loudon and
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## CONDUCTED BY

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## LXVII.-A new Crab of the Genus Calappa from West Africa. By W. T. Calman, D.Sc.

(Published by permission of the Trustess of the British Museum,)
A small but very interesting collection of Crustacea obtained by trawling off Lagos, West Africa, has recently been presented to the British Museum (Natural History) by Mr. J. Cadman, of the Western Fisheries, Ltd. Among them are five specimens of a crab that appears to differ from any species hitherto described.

## Calappa piscatorum, sp. n.

Carapace about four-fifths as long as wide, very convex; the longitudinal grooves well marked, surface smooth, except for a few low and ill-defined tubercles anteriorly and scattered granules near the posterior margin. Lateral expansions small, formed of acutely triangular teeth, which are not distinctly keeled on the upper surface ; laterally there are three teeth, which are continued without any wellmarked limit by the more obtuse teeth of the antero-lateral margin, becoming obsolete anteriorly ; posteriorly are three more acute and well-separated teeth on each side, the last pair directed backwards, bounding the true hind margin, which is beaded and convex or obscurely angled in the middle.

Front projecting well beyond the orbits, with a deep excavation, the distance between the points about equal to twothirds the width of the orbit.

Endostomial septum convex anteriorly.
Crest of the merus four-lobed, each lobe with a sharp point, the anterior lobe acute and turned forwards. Outer surface of palm with blunt tubercles and scattered granules between them; crest of palm with five palisade-like teeth and three blunt tubercles; tooth at proximal end of lower border sharp, but not spiniform.

Dimensions of carapace in millimetres :-

|  | ㅇ. | $\delta$ \% | $\delta$ \% | $\delta$. | $\delta$. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Length | $77 \cdot 0$ | $74 \cdot 0$ | $72 \cdot 5$ | 69.5 | 68.5 |
| Breadth | 960 | 95.0 | 93.0 | 86.5 | 86.0 |

Locality. "Off Lagos, West Africa. Mud bottom."
Remarks. In general aspect this species approaches the Mediterranean and West-African C. granulata (Linn.), but differs from it and from all the other species of which specimens are available for comparison in the very large and backwardly directed teeth on the hinder margin of the

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carapace. According to the figure given by Brito Capello (Jorn. Sci. Lisboa, iii. 1871, pl. ii. fig. 2), C. guerini somewhat resembles it in the disposition, although not in the size, of these teeth. Alcock suggests (J. Asiat. Soc. Bengal, lxv. (2) 1896, p. 144) that C. guerini is based on a young specimen of C. lophos, but the specimens here described are too large for this character to be due to immaturity.


Calappa piscatorum, sp. n., ठ. Outline of carapace. Natural size.

PROCEEDINGS OF LEARNED SOCIETIES. gEOLOGICAL SOCIETY.
June 24th, 1914.-Dr. A. Smith Woodward, F.R.S., President, in the Chair.

The following communication was read:-
'The Paradoxidian Fauna of a part of the Stockingford Shales.' By Vincent Charles Illing, B.A., F.G.S.
This communication deals mainly with a small subdivision of the Stockingford Shales occurring at the base of the Oldbury division. The beds have been termed the Abbey Shales, and are about 100 feet thick, consisting mainly of blue laminated shales, although glauconitic sandy horizons occur at frequent intervals. This small subdivision passes down into the Purley Shales, while it is separated from the overlying shales (which are probably of Lower Maentwrog age) by a calcareous conglomerate lying upon an eroded surface of

