THE ANNALS

AND

MAGAZINE OF NATURAL HIS

INCLUDING

ZOOLOGY, BOTANY, AND CROSS



CONDINGERS OF BY

SIE A. SMITH WOODWARD, LED. E. SIE GUY A. K. MARSHALL, C.M.G., U.S. C. TATE REGAN, M.A., D.Sc., E.J.

AND

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REING A CONTINUATION OF THE ANNAIS CONST.
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articles très courts, égaux, 2 à l'apex ventral avec un appendice vermiforme. Ailes (fig. 38) assez fortement brunies sur la moitié antérieure. Balanciers à capitule noir brun. Cuillerons noirs à cils jaunes. Long. 6 mm.

Femelle inconnue.

Type, & Malay Penin., Pahang, Fraser's Hill, 4000',

i. 31. 1929 (H. M. Pendlebury).

Remarque: Cette espèce ressemble beaucoup, jusque dans les détails de l'ornementation, à S. triplex Beck., S. collectus Walk. Elle s'en distingue par la taille plus forte, le capitule des balanciers noir, le nombre des d.c., 5 contre 6, les acrosticaux plus développés, bien visibles alors qu'ils sont difficilement perceptibles chez triplex, les cuillerons noirs, la forme de l'appendice vermiforme de l'article 2 du tarse iii., les poils écailleux de l'article 3 du tarse i., l'article 3 du tarse i. plus long que l'article 4 et l'article 5 pris séparément, et non le plus court comme l'écrit Becker, et comme il le dessine. L'espèce rentre dans le genre Pycsymnus Frey., mais elle tranche sur les autres espèces par sa grande taille.

(To be continued.)

XVII.—A Collection of Fishes from the Ashanti Forest, Gold Coast. By J. R. Norman, Department of Zoology, British Museum (Natural History).

A COLLECTION of fishes recently made by Mr. Willoughby P. Lowe and Miss F. Waldron is of some interest, and includes examples of three species believed to be new and of one previously unrepresented in the Museum Collection. A full list of the species is given, as several of them are here recorded from the Gold Coast for the first time. Specimens were obtained from Goaso, Wenchi, Ejura, and the upper parts of the Volta River.

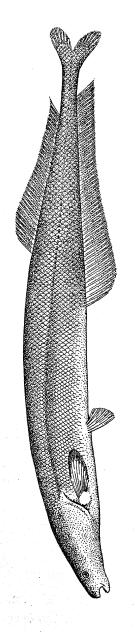
The figures have been drawn by Lieut.-Col. W. P. C.

Tenison, D.S.O.

1. Mormyrops deliciosus (Leach).

2. Mormyrops elongatus, sp. n. (Fig. 1.)

Depth of body about 9 in the length, length of head nearly 5. Head more than twice as long as deep, upper



Mormyrops elongatus. Holotype $(\times \frac{1}{3})$.

profile scarcely concave. Snout rounded, 1 length of head, slightly projecting beyond mouth, the width of which is equal to that of interorbital space and about 7 in length of head. Teeth truncate, about 20 in each jaw. Eye in anterior third of head, its diameter a little more than 3 in length of snout and 23 in interorbital width. Dorsal 31; about 2 length of anal; origin about 12 times as distant from tip of snout as from base of caudal. Anal 48; origin well in advance of that of dorsal and considerably nearer head than base of caudal. Pectoral about $\frac{1}{2}$ as long as head. Caudal densely scaled except at extremities of lobes, which are more or less rounded. Caudal peduncle twice as long as deep, length $2\frac{3}{4}$ in that of head. 102 scales in lateral line, 11 between origin of dorsal fin and lateral line, 9 between latter and origin of anal, and 16 round caudal peduncle. Greyish brown above, paler below; basal part of pectoral whitish, distal part dusky.

Described from a single specimen, 465 mm. in total

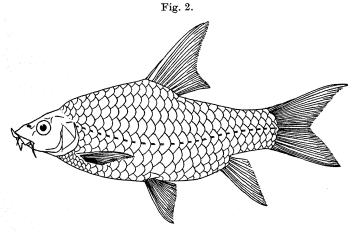
length, from Ejura.

Close to *M. breviceps* Steindachner, from Liberia, and *M. longiceps* Günther, from the Gold Coast.

- 3. Gnathonemus senegalensis (Steindachner).
- 4. Gnathonemus pictus (Marcusen).
- 5. Mormyrus rume Cuv. & Val.
- 6. Sarcodaces odoë (Bloch).
- 7. Hydrocyon forskalii Cuvier.
- 8. Alestes dentex (Linn.).
- 9. Alestes baremose (Joannis).
- 10. Alestes longipinnis (Günther).
- 11. Alestes chaperi Sauvage.
- 12. Alestes nurse (Rüppell).
- 13. Alestes macrolepidotus (Cuv. & Val.).
- 14. Petersius occidentalis Günther.
- 15. Labeo senegalensis Cuv. & Val.
- 16. Labeo chariensis Pellegrin.

17. Barbus waldroni, sp. n. (Fig. 2.)

Depth of body $2\frac{3}{4}$ in the length, length of head nearly 4. Breadth of head $1\frac{4}{5}$ in its length. Snout $1\frac{3}{5}$ times diameter of eye, which is about $4\frac{1}{2}$ in length of head and $1\frac{2}{3}$ in interorbital width. Mouth subinferior, its width $3\frac{1}{3}$ in length of head; lips strongly developed, both upper and lower produced into a pointed triangular median flap; both lips with shorter flaps laterally; two barbels on each side, anterior shorter than posterior, which is a little longer than eye. Scales longitudinally striated, 26 in lateral line, $4\frac{1}{2}$ between lateral line and



Barbus waldroni. Holotype $(\times \frac{1}{2})$.

origin of dorsal (or middle of back), $2\frac{1}{2}$ between lateral line and root of pelvic, 12 round caudal peduncle. Dorsal IV 9; equidistant from occiput and base of caudal; last simple ray strong, bony, not serrated, length (including flexible portion) about $1\frac{1}{5}$ times that of head; free margin of fin concave. Anal III 5; reaching caudal when laid back. Pectoral shorter than head, not reaching pelvics, which are inserted below anterior part of dorsal. Caudal deeply forked, upper lobe the longer, $1\frac{1}{4}$ times length of head. Caudal peduncle about as deep as long. Silvery, back darker; centres of scales on back and sides dusky.

Described from a single specimen, 187 mm. in total length, from Goaso.

Closely related to *B. gruveli* Pellegrin, from French Guinea, and *B. foureaui* Pellegrin, from Gribingui. *B. gruveli* has somewhat larger scales, a shorter osseous dorsal ray, and the lips are not produced; *B. foureaui* has somewhat smaller scales, the upper lip is not produced, and the lower is provided with a small truncate lobe *.

- 18. Barbus wurtzi Pellegrin †.
- 19. Barbus chlorotænia Boulenger.
- 20. Barbus trispilus (Bleeker).
- 21. Barbus spurrelli Boulenger.
- 22. Barilius macrostoma Boulenger.
- 23. Clarias liberiensis Steindachner.
- 24. Clarias læviceps Gill.
- 25. Heterobranchus isopterus Bleeker.
- 26. Eutropius mentalis Boulenger.
- 27. Schilbe mystus (Linn.).
- 28. Auchenoglanis occidentalis (Cuv. & Val.).
- 29. Synodontis schall (Schneider).
- 30. Synodontis gambiensis Günther.

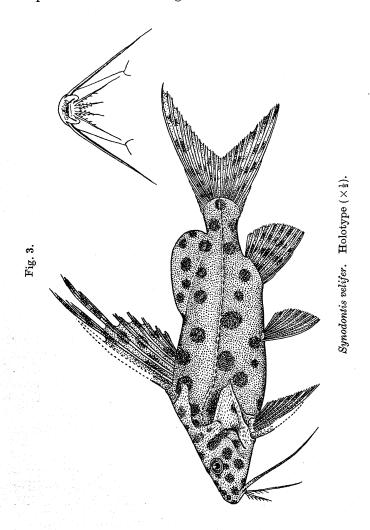
31. Synodontis velifer, sp. n. (Fig. 3.)

Depth of body 3½ in the length, length of head (to upper angle of gill-opening) about 4. Head nearly as broad as long, rugose above from opposite anterior margins of eyes. Snout very obtusely pointed, about 1½ times postocular part of head; eye supero-lateral, 4½ in length of head, a little more than twice in interorbital width. Lips moderately developed. Præmaxillary teeth forming a short and broad band; about 30 movable mandibular teeth, length of each tooth ½ diameter of eye. Maxillary barbel unbranched, with a well-developed marginal membrane at base, 1½ times as long as head, nearly reaching tip of humeral process; outer mandibular barbel with

^{*} I am much indebted to Dr. J. Pellegrin for notes on these species, and for kindly comparing this Ashanti specimen with the types in the Paris Museum.

[†] Dr. Pellegrin has compared one of these specimens with the type of the species, and confirms the identification.

a few slender branches, twice as long as inner, which has stouter and more numerous branches. Gill-opening not extending downwards beyond base of pectoral. Occipito-nuchal shield rough like the occiput, obtusely



tectiform, with bluntly pointed posterior processes. Humeral process longer than broad, more or less distinctly keeled, pointed behind, extending a little farther

back than the occipito-nuchal process. Dorsal I 7*; first and second soft-rays prolonged, more than twice as long as head and 3½ times base of fin. Adipose fin more than 3 times as long as deep, 3 times its distance from rayed dorsal. Anal IV 8; pointed. Pectoral spine with strong serræ on inner edge. Pelvics reaching origin of anal. Caudal forked, upper lobe the longer. Caudal peduncle deeper than long. Yellowish brown, with some large round black spots on head, body, and fins; fringe of maxillary barbels black.

Described from a single specimen, 225 mm. in total length, from Ejura.

Apparently near S. eupterus, S. nigrita, S. melanopterus, and S. macrepipterus.

- 32. Amphilius atesuensis Boulenger.
- 33. Malopterurus electricus (Gmelin).
- 34. Panchax sexfasciatus (Gill).
- 35. Hemichromis fasciatus Peters.
- 36. Hemichromis bimaculatus Gill.
- 37. Pelmatochromis kingsleyæ (Boulenger).
- 38. Tilapia melanopleura Duméril.
- 39. Ophiocephalus obscurus Günther.
- 40. Ctenopoma kingsleyæ Günther.
- 41. Mastacembelus nigromarginatus Boulenger.

XVIII.—New African Trichoptera. By MARTIN E. Mosely, F.R.E.S. (Department of Entomology, British Museum (Nat. Hist.)).

THE new species described herein are based upon material collected by correspondents of the Imperial Institute of Entomology. The types have kindly been presented by the Institute to the British Museum.

Of interest is a new genus, *Ecnomiella*, closely all ed to *Ecnomus*, differing slightly in the construction of the

^{*} The spines of the dorsal and pectoral fins have been cut off at their bases.