# THE ANNALS

AND

# MAGAZINE OF NATURAL HISTORY,

INCLUDING

ZOOLOGY, BOTANY, AND GEOLOGY.

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

## CONDUCTED BY

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VOL. VII.—EIGHTH SERIES.

#### LONDON:

PRINTED AND PUBLISHED BY TAYLOR AND FRANCIS.

SOLD BY SIMPKIN, MARSHALL, HAMILTON, KENT, AND CO., LD.; BAILLIÈRE, PARIS: HODGES, FIGGIS, AND CO., DUBLIN: AND ASHER, BERLIN.

1911.

XLI.—Descriptions of new Freshwater Fishes discovered by Dr. W. J. Ansorge in Portuguese Guinea. By G. A. BOULENGER, F.R.S.

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Representatives of the following six new species form part of a large collection made at or near Bafata by Dr. Ansorge, and sent by him to the British Museum. Some specimens are from the Geba River, others from the Culufi River, an affluent of the Geba.

#### Petersius septentrionalis.

Depth of body equal to length of head, 3½ to 3¾ times in total length. Head twice as long as broad, longer than deep; lower jaw projecting slightly beyond snout; snout shorter than eye, which is 21 times in length of head and exceeds interorbital width; maxillary extending to below anterior border of eye; outer præmaxillary teeth 4, alternating with those of the inner row, 8 in number; 8 teeth in lower jaw. Gill-rakers moderately long, 12 on lower part of anterior arch. Dorsal II 7, originating above ventral, at equal distance from centre of eye and from root of caudal. Adipose fin very small. Anal III 13-14. Pectoral nearly as long as head, not quite reaching ventral. Caudal deeply forked. Caudal peduncle a little longer than deep. Scales  $25-26\frac{4\frac{1}{2}}{2\frac{1}{2}}$ , 1 or  $1\frac{1}{2}$  between lateral line and ventral. Silvery, finely speckled with brown on the back; a blackish lateral band; fins white.

Total length 45 mm.

Several specimens from the Geba and Culufi Rivers.

The northernmost species of the genus. Distinguished from all the species with alternating præmaxillary teeth and a complete lateral line by the low number of scales in the lateral line.

# Distichodus ansorgii.

Depth of body  $3\frac{3}{4}$  to  $4\frac{1}{2}$  times in total length, length of head 41 to 5 times. Head longer than deep; snout rounded, not compressed, projecting very slightly beyond mouth, shorter than eye, which is 21/2 to 22/3 times in length of head and equals interorbital width; maxillary extending to below nostrils; teeth in a single series, 20 or 22 in each jaw. Dorsal 17-19 (4 unbranched), equally distant from occiput and from caudal, its base equal to its distance from adipose fin, which is not scaly. Anal 11-12 (3-4 unbranched), its base much shorter than that of dorsal. Pectoral about  $\frac{3}{3}$  length of head. Caudal deeply forked, lobes pointed. Caudal peduncle as long as deep or a little longer than deep. Scales 55-62  $\frac{73-83}{73-83}$ ,  $5\frac{1}{2}-6$  between lateral line and root of ventral. Yellow, speckled with brown above the lateral line, silvery white below; a more or less distinct blackish band may be present along the lateral line; dorsal and caudal fins lemon-yellow, the former with a black spot in the upper third of its anterior part.

Total length 70 mm.

Many specimens were obtained in the Geba and Culufi

Rivers.

A very distinct species, the smallest and most slender of the genus, further remarkable for the absence of scales on the adipose dorsal fin.

#### Nannocharax ansorgii.

Depth of body  $3\frac{2}{3}$  to  $4\frac{1}{4}$  times in total length, length of head  $3\frac{1}{4}$  to  $3\frac{3}{4}$  times. Head deeper than broad; snout as long as or a little shorter than eye, which is 3 to  $3\frac{1}{3}$  times in length of head and equals interorbital width. Dorsal III 9-10, originating a little in front of base of ventral, situated at equal distance from centre of eye and from root of caudal, longest ray a little shorter than head. Anal III 7-8. Pectoral  $\frac{3}{4}$  to  $\frac{4}{5}$  length of head, not reaching root of ventral. Caudal forked, with pointed lobes. Caudal peduncle  $1\frac{1}{2}$  times as long as deep. Scales 40-45  $\frac{5\frac{1}{2}}{6-7}$ ,  $4-4\frac{1}{2}$  between lateral line and ventral. Back straw-yellow, with numerous fine dark longitudinal lines; a lateral series of large black spots on the lateral line, usually confluent into a broad band terminating on the caudal fin; bases of dorsal, ventral, and caudal fins pale orange.

Total length 43 mm.

Several specimens from the Geba and Culufi Rivers. Allied to N. tania, Blgr., and N. dimidiatus, Pellegr.

#### Barbus macrops.

Depth of body equal to length of head,  $3\frac{1}{3}$  to  $3\frac{1}{2}$  times in total length. Snout rounded, much shorter than eye, which is  $2\frac{1}{2}$  to  $2\frac{3}{3}$  times in length of head; interorbital width  $2\frac{3}{3}$ 

to 3 times in length of head; mouth subinferior; lips moderately developed; two barbels on each side, anterior  $\frac{1}{3}$ , posterior  $\frac{1}{2}$  diameter of eye. Dorsal III 8, equally distant from centre of eye and from base of caudal, border feebly concave; last simple ray not enlarged, as long as head. Anal III 5, not reaching caudal. Pectoral  $\frac{3}{4}$  to  $\frac{4}{5}$  length of head, not quite reaching ventral; base of latter below anterior rays of dorsal. Caudal peduncle  $1\frac{1}{3}$  to  $1\frac{1}{2}$  times as long as deep. Scales radiately striated,  $23-25\frac{3\frac{1}{23}}{3\frac{1}{3}}$ ,  $2-2\frac{1}{2}$  between lateral line and ventral, 12 round caudal peduncle. Yellow above, silvery below, scales on back and sides finely speckled with brown, with a more or less distinct dark brown spot at the base; a black straight lateral band from the end of the snout, through the eye, to the base of the caudal; fins yellow, dorsal and caudal orange at the base; a blackish spot at the end of the longest rays of the dorsal.

Total length 65 millim.

Numerous specimens from the Geba and Culufi Rivers.

Near B. ablabes, Blkr. Distinguished by the much larger eye.

## Synodontis ansorgii.

Depth of body 3 to 3½ times in total length, length of head 33 to 4 times. Head a little longer than broad, granulate above from between the eyes; snout rounded, as long as postocular part of head; eye supero-lateral,  $3\frac{1}{2}$  (young) to  $4\frac{1}{2}$ times in length of head,  $1\frac{1}{3}$  to  $1\frac{2}{3}$  times in interorbital width; lips moderately developed; præmaxillary teeth forming a short and very broad band; movable mandibular teeth \( \frac{1}{3} \) to \( \frac{1}{3} \) diameter of eye, 60 to 80 (50 in young) in number. Maxillary barbel with a broad marginal membrane in its basal third, 1 to 11 times length of head, reaching between anterior fourth and posterior third of pectoral spine; outer mandibular barbel  $1\frac{1}{2}$  to 2 times as long as inner, former with long slender branches, latter with tubercular ramifications. Gill-opening not extending downwards beyond root of pectoral spine. Occipito-nuchal shield granulate like the occiput, obtusely tectiform,  $1\frac{1}{2}$  to  $1\frac{2}{3}$  times as long as broad, posterior processes rounded or obliquely truncate. Humeral process much longer than broad, granulate, not keeled, obtusely pointed, extending as far or not quite so far as occipito-nuchal process. Dorsal I 7; spine nearly straight, as long as or longer than head, not serrated, terminating in a long filament. Adipose dorsal 2 to 3 times as long as deep,  $2\frac{1}{3}$  to 3 times as long as its distance from rayed dorsal. Anal IV-V 7-8, rounded. Pectoral spine as long as or slightly longer than head, strongly serrated on both sides. Ventral reaching origin of anal or a little beyond. Caudal deeply notched, upper lobe the longer. Caudal peduncle as long as deep or a little deeper than long. Dark brown above and below, head, body, and dorsal fins with numerous round black spots. Young paler brown, with larger and fewer black spots; fins whitish, with large black spots forming cross-bars on the anal and caudal

Total length 235 mm.

Numerous specimens from the Geba and Culufi Rivers.

This species, which may be placed near S. nigrita, C. & V., and melanopterus, Blgr., is very distinct from any previously described.

## Tilapia ansorgii.

Depth of body twice in total length, length of head 3 times. Head 13 times as long as broad, upper profile slightly concave; snout as long as broad, 13 times as long as eye in adult, as long as eye in young; eye 3 (young) to 4 times in length of head, 1 to  $1\frac{3}{4}$  times in interorbital width, equal to depth of præorbital; mouth extending to between nostril and eye, extremity of maxillary exposed; outer teeth in both jaws large, obtusely bilobed, 20 (young) to 38 in upper jaw, followed after a wide interspace by a few minute tricuspid teeth arranged in 2 or 3 transverse series; 5 or 6 series of scales on the cheek, the vertical diameter of the scaly part below the eye equal to diameter of latter. Gill-rakers rather short, the larger anvil-shaped, 11 or 12 on lower part of anterior arch. Dorsal XIV-XV 14-15; spines increasing in length to the last, which measures \frac{1}{2} to \frac{3}{3} length of head; longest soft ray \(\frac{3}{4}\) to \(\frac{5}{6}\) length of head. Anal III 10-11; third spine longest, stronger but shorter than longest dorsal. Pectoral a little shorter than head, not reaching vertical of origin of anal. Ventral produced into a long filament, reaching origin of anal or beyond. Caudal rounded, scaly all over in the adult. Caudal peduncle deeper than long. Scales not or but very feebly denticulate,  $30-32 \frac{3_3^3-4_3^4}{11-12}$ ; lat. l.  $\frac{19-22}{9-13}$ . Grey or brown, with seven or eight broad black vertical bars descending to the mid-ventral line, the first passing through the eye, the last on the caudal peduncle; pectoral greyish, other fins blackish.

Total length 210 mm.

Several specimens from the Geba and Culufi Rivers.