

and the Suleman types. In size the animal is fully equal to the typical Astor race of the species. The general colour is, however, decidedly darker, the tips of the hairs being blackish brown instead of a kind of blotting-paper colour. The throat-fringe seems also to be somewhat darker; and the under-parts show a decided difference from those of the Astor race, being at least as dark as, if not actually darker than, the back, instead of distinctly lighter. The resemblance between the two animals is, however, so close as to indicate without doubt that they are races rather than species.

It may be worth mention that the rocks of Chitral are gneiss, and these present a spotted black-and-white coloration very similar to that of the Cabul race of the Markhor, the name Chitra' itself not improbably being derived from these spotted rocks.

2. Second Account of the Fishes collected by Dr. W. J. Ansonge in the Niger Delta. By G. A. BOULENGER, F.R.S., V.P.Z.S.

[Received October 15, 1902.]

(Plates XXVIII. & XXIX.<sup>1</sup>)

In January 1901<sup>2</sup> I had the honour of reporting on a small collection of freshwater fishes made by Dr. Ansonge in Southern Nigeria. Small as it was, that collection proved to be of considerable interest, six species being new and one deserving to become the type of a new family (Phractolæmidæ). Encouraged by these results, Dr. Ansonge has continued to collect in the same district, and has enabled me to draw up the following list of 56 species not represented in his former collection; these, added to the 24 species enumerated in the previous list, make a total of 80. Four species are now described as new.

As on the previous occasion, the difficulty of procuring spirit in sufficient quantity has prevented Dr. Ansonge from preserving any but small specimens. The fishes here enumerated are either small species or are represented merely by young specimens. In the case of the *Polypteri*, which have already been described in these 'Proceedings'<sup>3</sup>, there was no occasion to regret the course imposed on Dr. Ansonge by the circumstances.

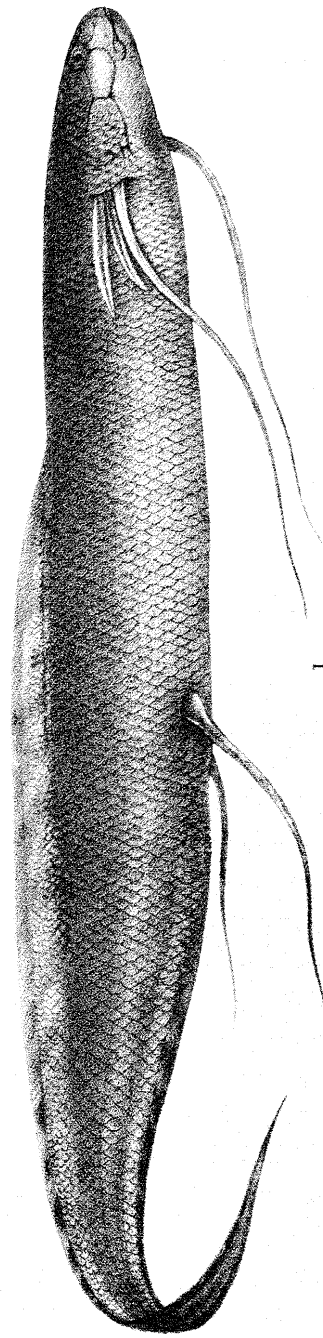
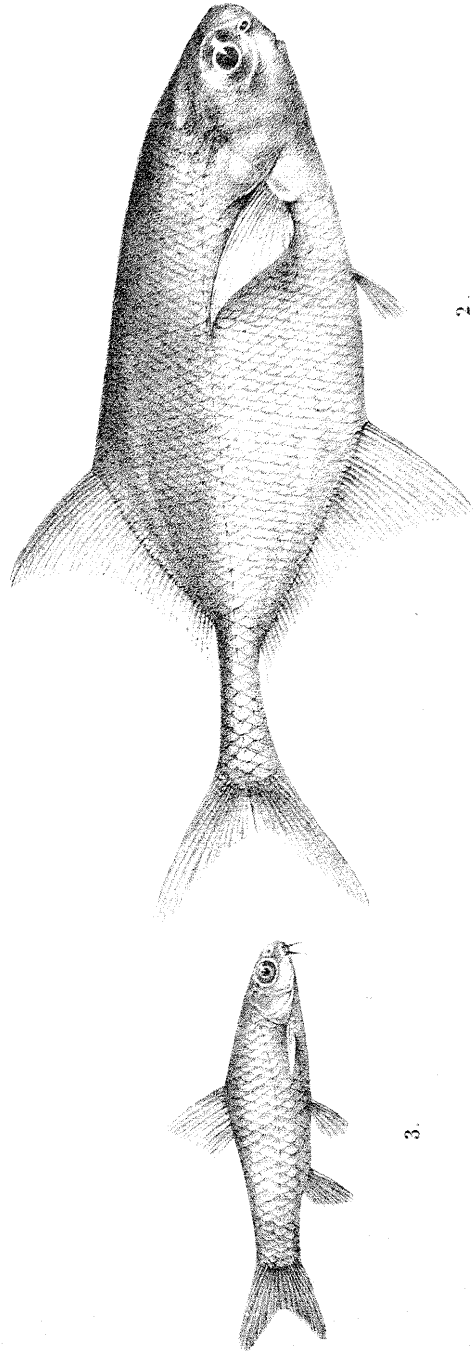
POLYPTERIDÆ.

1. POLYPTERUS LAPRADIИ Stdr.—Assay.
2. POLYPTERUS ENDLICHERI Heck.—Abo.

<sup>1</sup> For explanation of the Plates, see p. 330.

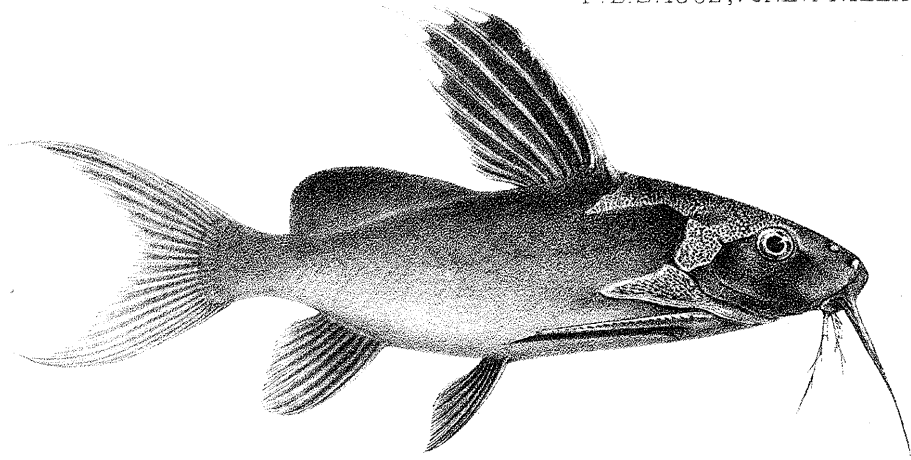
<sup>2</sup> P. Z. S. 1901, i. p. 4.

<sup>3</sup> P. Z. S. 1902, i. p. 121.

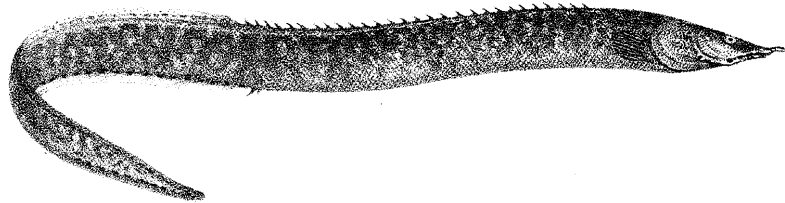


Mintern, Bros. imp.

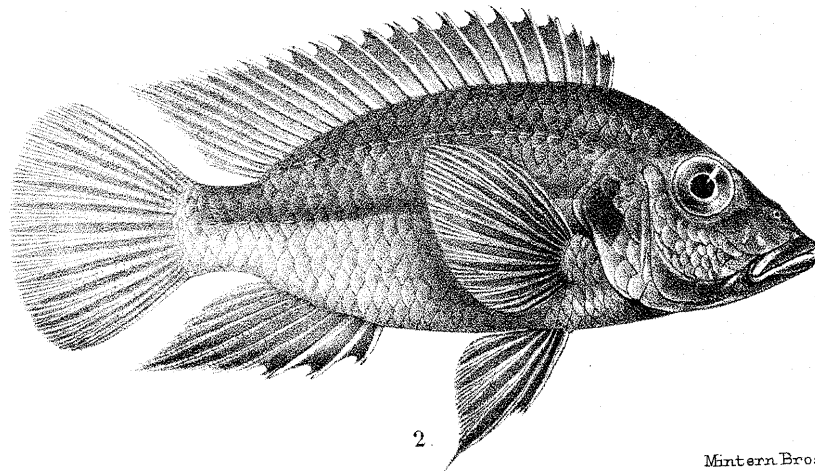
J. Green, del. et lith.  
1. PROTOPTERUS ANNECTENS. 2. PETROCEPHALUS ANSORGII. 3. BARBUS NIGERIENSIS.



1.



3.



2.

J. Green del. et lith. Mintern Bros. imp  
1. SYNODONTIS MELANOPTERUS. 2. PELMATOCHROMIS PELLEGRINI.  
3. MASTACEMBELUS LOENNBergi.

## 3. POLYPTERUS SENEGALUS Cuv.—Assay, Abo.

The young specimens of these three species obtained by Dr. Ansorge have been described and figured in P. Z. S. 1902, i. p. 4, pls. x. & xi.

## LEPIDOSIRENIDÆ.

## 4. PROTOPTERUS ANNECTENS Owen. (Plate XXVIII. fig. 1.)

Three young specimens, 160 to 215 millim. long. The limbs are longer than in specimens of *P. ethiopicus* and *P. dolloi* of corresponding size, the fore limb extending to the vent, or beyond. Head  $3\frac{2}{3}$  to 4 times in distance from end of snout to vent; eye 7 to 8 times in length of head,  $1\frac{2}{3}$  to 2 in interorbital width. 50 scales in a longitudinal series from gill-opening to vent, 38 round the middle of the body. The longest external gills measure  $\frac{2}{3}$  the length of the head. Vent on the left side in two specimens, on the right in the third.

The following are the measurements of the largest specimen:—

Total length 215 millim.; head 24; head to vent 70; head to origin of dorsal 30; fore limb 80; hind limb 56.

## MORMYRIDÆ.

## 5. MORMYROPS DELICIOSUS Leach.—Agberi, Assay.

## 6. PETROCEPHALUS SIMUS Sauv.—Agberi.

## 7. PETROCEPHALUS ANSORGII, sp. n. (Plate XXVIII. fig. 2.)

Depth of body 3 times in total length, length of head  $4\frac{1}{3}$ . Head slightly longer than deep; snout rounded,  $\frac{1}{3}$  length of head; mouth situated below the eye, its width  $\frac{1}{3}$  length of head; teeth bicuspid, 10 in the upper jaw, 20 in the lower; nostrils close together, close to the eye, a little above the level of its lower border; eye large, twice as long as the snout,  $1\frac{1}{3}$  interorbital width. Dorsal 33, originating above 9th ray of anal, its length  $1\frac{1}{2}$  in its distance from head. Anal 39, equally distant from base of ventral and from base of caudal. Pectoral pointed,  $\frac{3}{4}$  length of head, twice as long as ventral and extending beyond base of latter. Caudal with pointed lobes. Caudal peduncle 3 times as long as deep,  $\frac{2}{3}$  length of head. 45 scales in the lateral line,  $\frac{11}{13}$  in a transverse series on the body,  $\frac{14}{12}$  in a transverse series between dorsal and anal, 8 round caudal peduncle. Silvery, brownish on the back and on the anterior rays of the dorsal.

Total length 105 millim.

A single specimen from Agberi.

This species is well distinguished from all others of the same genus in having only 8 scales round the caudal peduncle. It approaches *P. bane* Lacép. in the number of dorsal and anal rays, but differs in the larger eye and the fewer teeth.

## 8. MARCUSENIUS BRACHYHISTUS Gill.—Agberi.

9. GNATHONEMUS CYPRINOIDES L.—Agberi.  
 10. GNATHONEMUS PETERSII Gthr.—Oguta.  
 11. MORMYRUS MACROPHthalmus Gthr.—Agberi.

The type specimen of this species, registered as from "West Africa," came no doubt from the Niger, as I now find out through the association of the examples of other species received along with it.

12. HYPEROPISUS BEBE Lacép.—Abo.  
 13. GYMNARCHUS NILOTICUS Cuv.—Oguta.

## NOTOPTERIDÆ.

14. XENOMYSTUS NIGRI Gthr.—Oguta.

## CLUPEIDÆ.

15. PELLONULA VORAX Gthr.—Agberi.

## CHARACINIDÆ.

16. HYDROCYON FORSKALII Cuv.—Assay.  
 17. ALESTES NURSE Rüpp.—Agberi.  
 18. ALESTES MACROLEPIDOTUS Cuv.—Agberi.  
 19. MICRALESTES ACUTIDENS Ptrs.—Agberi.

This species, described from Mozambique by Peters, has since been found in the Upper Niger by Dr. Christy, in the Ubanghi by Capt. Royaux, and in the White Nile by Mr. Loat.

20. NANNÆTHIOPS UNILENIATUS Gthr.—Abo.  
 21. DISTICHODUS BREVIPINNIS Gthr.—Agberi.  
 22. DISTICHODUS ROSTRATUS Gthr.—Agberi, Abo.  
 23. DISTICHODUS ENGYCEPHALUS Gthr.—Agberi, Abo.  
 24. CITHARIDIUM ANSORGII Blgr.—Abo.

This remarkable new generic type was described and figured in Ann. & Mag. N. H. (7) ix. 1902, p. 144, pl. iii.

25. CITHARINUS GEOFFROYI Cuv.—Agberi.

## CYPRINIDÆ.

26. LABEO SELTI C. & V.—Agberi, Abo.  
 27. LABEO SENEGALENSIS C. & V.—Abo.

28. *BARBUS NIGERIENSIS*, sp. n. (Plate XXVIII. fig. 3.)

Depth of body equal to length of head, 4 times in total length. Snout rounded, projecting very slightly beyond the mouth, as long as the eye,  $3\frac{1}{4}$  times in length of head; interorbital width  $2\frac{2}{3}$  in length of head; lips indistinct; two pairs of barbels, the posterior as long as the eye, the anterior a little shorter. Dorsal III 8, last simple ray slender, flexible, a little shorter than the head; the fin, the border of which is scarcely emarginate, originates anteriorly to the base of the ventral and is nearer the occiput than the root of the caudal. Anal III 5, its longest ray  $\frac{2}{3}$  length of head. Pectoral a little shorter than head, not reaching ventral. Caudal forked. Caudal peduncle  $1\frac{1}{2}$  as long as deep. Scales  $25\frac{31}{32}$ ,  $2\frac{1}{2}$  between lateral line and ventral, 12 round caudal peduncle. Silvery, brownish on the back.

Total length 48 millim.

A single specimen from Agberi.

Allied to *B. camptacanthus* Blkr., but snout shorter, eye larger, and dorsal more forward in position.

29. *BARILIUS NILOTICUS* Joannis.

Was obtained in the Upper Niger by Dr. Christy.

## SILURIDÆ.

30. *CLARIAS LAZERA* C. & V.—Agberi, Abo.31. *GYMNALLABES TYPUS* Gthr.—Ossomari.32. *HETEROBRANCHUS SENEGALENSIS* C. & V.—Agberi.33. *EUTROPIUS NILOTICUS* Rüpp.—Ossomari.34. *SCHILBE SENEGALENSIS* C. & V.—Abo.35. *PARAILIA CONGICA* Blgr.—Abo.36. *CHRYSICHTHYS BUETTIKOFERI* Sldr.—Assay.37. *CLAROTES LATICEPS* Rüpp.—Oguta, Abo.38. *AUCHENOGLANIS OCCIDENTALIS* C. & V.—Agberi, Assay, Oguta, Abo.39. *SYNODONTIS GAMBIENSIS* Gthr.—Assay.40. *SYNODONTIS ROBBIANUS* J. A. Smith.—Oguta, Abo, Ossomari.41. *SYNODONTIS MELANOPTERUS*, sp. n. (Plate XXIX. fig. 1.)

Præmaxillary teeth in several irregular series, forming a broad band; mandibular teeth 35 to 40, measuring about  $\frac{2}{5}$  the diameter of the eye. Depth of body  $3\frac{1}{2}$  times in total length, length of head  $3\frac{1}{3}$  or  $3\frac{2}{5}$ . Head a little longer than broad, convex on the

occiput; snout obtusely conical, a little less than  $\frac{1}{2}$  length of head; eye supero-lateral,  $5\frac{1}{2}$  times in length of head, 2 in interorbital width; upper surface of head granulate and pitted from between the eyes. Occipito-nuchal shield as long as broad, simply convex, terminating in two pointed processes. Gill-cleft not extending below base of pectoral. Maxillary barbel distinctly fringed at the base, as long as the head; mandibular barbels with rather short, simple branches, the outer barbels twice as long as the inner and measuring  $\frac{2}{5}$  length of head. Lips rather feebly developed. Humeral process granulate and feebly keeled, acutely pointed, extending as far as occipito-nuchal shield. Dorsal II 7; spine strong, shorter than the head, serrated behind. Adipose fin  $3\frac{1}{2}$  times as long as deep, as long as the head, 3 times as long as its distance from the rayed dorsal. Anal III 8. Pectoral spine slightly shorter than the head, strongly serrated on the outer edge, more strongly still on the inner. Ventral reaching, or nearly reaching anal. Caudal deeply forked, with pointed lobes. Caudal peduncle as long as deep. Skin of body smooth. Dark brown above and beneath; fins black, with some light cross-bands in the young.

Total length 110 millim.

Two specimens from Oguta.

42. *SYNODONTIS MEMBRANACEUS* Geoffr.—Assay, Abo.

43. *PHRACTURA ANSORGII* Blgr.—Agberi.

P. Z. S. 1901, ii. p. 623, pl. xxxvii. fig. 1.

#### CYPRINODONTIDÆ.

44. *HAPLOCHILUS SPILAUCHEN* A. Dum.—Degama.

45. *FUNDULUS GULARIS* Blgr.—Agberi.

P. Z. S. 1901, ii. p. 623, pl. xxxvii. figs. 2 & 3.

#### POLYNEMIDÆ.

46. *POLYNEMUS QUADRIFILIS* L.—Munahor.

#### SERRANIDÆ.

47. *LATES NILOTICUS* L.—Agberi.

#### CICHLIDÆ.

48. *PELMATOCROMIS PELLEGRINI*, sp. n. (Plate XXIX. fig. 2.)

Teeth in 2 or 3 series in each jaw. Depth of body  $2\frac{1}{3}$  to  $2\frac{2}{3}$  times in total length, length of head  $2\frac{2}{3}$  to  $2\frac{3}{4}$ . Snout with straight profile,  $1\frac{1}{2}$  to  $1\frac{2}{3}$  diameter of eye, which is contained  $3\frac{1}{2}$  to 4 times in length of head, and equals or nearly equals interorbital width; maxillary extending to about midway between

nostril and eye; 4 or 5 series of scales on the cheek; large scales on the opercle. Gill-rakers short and broad, 14 or 15 on lower part of anterior arch. Dorsal XVI-XVII 9-11; spines increasing in length to the last, which measures  $\frac{1}{2}$  length of head; median soft rays more or less produced,  $\frac{2}{3}$  to  $\frac{4}{5}$  length of head. Anal III 7, third spine a little shorter than the last dorsal, median soft rays produced like the dorsals. Pectoral about  $\frac{3}{4}$  length of head, not reaching origin of anal. Caudal rounded. Caudal peduncle as long as deep or a little deeper than long. Scales not ciliated, 28-29  $\frac{2\frac{1}{2}}{9}$ ; lat. l.  $\frac{20-22}{9-11}$ . Dark olive-brown above, yellowish beneath; a black opercular spot, followed by a rather indistinct dark band, extending to the root of the caudal; fins dark grey, spinous dorsal sometimes with a series of round black spots near the base.

Total length 135 millim.

Three specimens from Sapelle and one from Ossomari.

I have much pleasure in naming this fish after Dr. Pellegrin, of the Paris Museum, who is at present engaged on a monograph of the Cichlidae, and who has pointed out to me the specific distinctness of this *Pelmatochromis* from *P. guentheri* Sauv., to which I had first referred it. The latter differs in the shorter posterior dorsal spines and the more truncate caudal fin.

49. *TILAPIA NILOTICA* L.—Abo.

50. *TILAPIA GALILÆA* Hasselq.—Agberi, Abo.

#### PLEURONECTIDÆ.

51. *CITHARICHTHYS SPILOPTERUS* Gthr.—Degama.

52. *CYNOGLOSSUS SENEGALENSIS* Kaup.—Degama.

#### Gobiidæ.

53. *Gobius nigri* Gthr.—Degama.

54. *Gobius schlegelii* Gthr.—Agberi, Degama.

55. *Gobius guineensis* Peters.—Agberi, Assay, Abo.

*G. aeneofuscus*, var. *guineensis* Peters, Mon. Berl. Ac. 1876, p. 248.

This is a smaller fish than the East-African *G. aeneofuscus*, growing to a length of 75 millim. only. The interorbital space is narrower.

Recorded from the Cameroon River by Peters; obtained by Miss Kingsley at Kondo-Kondo, Ogowé; by Mr. G. L. Bates in the Benito River, Gaboon.

#### MASTACEMBELIDÆ.

56. *MASTACEMBELUS LOENBERGII* Blgr. (Plate XXIX. fig. 3.)  
—Agberi, Abo, Oguta, Gregani.



Several specimens of this species, originally described from Cameroon. The largest measures 190 millim.

Depth of body 14 to 17 times in total length, length of head  $8\frac{1}{2}$  or 9 times. Length of head 4 to  $4\frac{1}{2}$  times in distance from snout to vent,  $1\frac{1}{2}$  to twice as great as its distance from first dorsal spine; a præorbital and 2 or 3 præopercular spines. Dorsal XXVIII-XXXI, 110-130; anal II, 110-130. The coloration varies: some specimens are nearly uniform brown, with an ill-defined darker lateral band, others are spotted with darker or with lighter; a series of alternating dark and light bars may be present at the base of the anal fin.

#### EXPLANATION OF THE PLATES.

##### PLATE XXVIII.

- Fig. 1. *Protopterus annectens*, young, p. 325.  
 2. *Petrocephalus ansorgii*, p. 325.  
 3. *Barbus nigeriensis*, p. 327.

##### PLATE XXIX.

- Fig. 1. *Synodontis melanopterus*, p. 327.  
 2. *Pelmatochromis pellegrini*, p. 328.  
 3. *Mastacembelus loennbergii*, p. 329.

3. Last Account of Fishes collected by Mr. R. B. N. Walker, C.M.Z.S., on the Gold Coast. By Dr. A. GÜNTHER, F.R.S., V.P.Z.S.

[Received November 7, 1902.]

(Plates XXX.-XXXIII.<sup>1</sup> & Text-fig. 62.)

Shortly after the publication of my previous paper on Fishes from the Gold Coast (Proc. Zool. Soc. 1899, pp. 716-732), Mr. Walker paid another visit to that district. On this occasion he travelled into Ashantee, visited Lake Busum-chi, and followed the River Enon on a portion of his return journey. He did not long survive the fatigues of this, his last, voyage.

It was his intention to supply me with full particulars as regards the stopping-places at which he obtained the fishes; and I was all the more anxious to obtain this information, as some of the places are small and not important enough to be shown on any of the most recent maps of the country. Fortunately he was careful in labelling the bottles with the names and sometimes with the positions of the localities, although not always in a very legible manner; and supplementing this source of information with what I can gather from his letters, I am able to supply the following list:—

1. River Atesu,
2. River Ibbi, and

<sup>1</sup> For explanation of the Plates, see p. 339.