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#### Salarias curtus.

A strong canine on each side of the lower jaw. Depth of body equal to length of head,  $3\frac{1}{2}$  to  $3\frac{3}{4}$  times in total length. Head nearly as deep as long; profile of snout descending nearly vertically; diameter of eye \frac{1}{4} length of head and double interorbital width; a short nasal tentacle; a very long fringed supraocular tentacle, measuring \frac{1}{3} to \frac{2}{5} length of head; maxillary extending to below centre of eye; no cephalic crest. Dorsal XII 19, not notched, longest rays \frac{1}{2} length of head, originating on occiput, well in advance of opercular cleft. Anal 20. Dorsal and anal narrowly separated from caudal, which is rounded and measures 3 length of head. Flesh-colour, minutely speckled with dark brown, with more or less distinct dark spots confluent into 7 or 8 paired dorsal cross-streaks; a dark blotch behind and an oblique streak below the eye; vertical fins greyish, dorsal sometimes with dark spots, prolongations of the bars on the body.

Total length 60 millim.

Several specimens.

#### Salarias phantasticus.

No canines. Depth of body equal to length of head, 5 times in total length. Head a little longer than deep; profile of snout descending vertically; diameter of eye \(\frac{1}{4}\) length of head and  $1\frac{1}{2}$  interorbital width; a long nasal tentacle, equalling the diameter of the eye; no supraocular tentacle; no cephalic crest; maxillary extending to below centre of eye. Dorsal XII 19, with a shallow notch; longest rays in anterior portion, equal to length of head; dorsal originating above opercular cleft. Anal 23. Dorsal and anal nearly reaching caudal, the outer rays of which are produced and exceed length of head. Head and anterior half of body dark brown; posterior half of body orange, with eight vertical black bars; fins yellowish.

Total length 75 millim.

Two specimens.

# L.—Descriptions of new Fishes from the Upper Congo.—II.\* By G. A. BOULENGER, F.R.S.

THE Fishes here described were obtained at Stanley Falls by Mr. Bentley. They are preserved in the British Museum.

#### Pelmatochromis congicus.

Three series of teeth in both jaws. Depth of body 2½ times \* Cf. 'Annals,' vol. xvii. 1896, p. 309.

Ob.

in total length, length of head  $2\frac{3}{4}$  times. Snout as long as diameter of eye, which is  $3\frac{2}{3}$  in length of head and equals interorbital width; maxillary extending to below anterior third of eye; 4 series of scales on the cheek; opercle naked (?). Gill-rakers long and slender, about 20 on lower part of anterior arch. Dorsal XIII 11; spines subequal from the sixth, nearly  $\frac{1}{2}$  length of head and  $\frac{2}{5}$  longest soft rays, which are produced and filiform. Pectoral as long as head. Ventral with produced outer rays, reaching anal spines. Anal III 8; third spine as long as and stronger than longest dorsal spine. Caudal rounded. Caudal peduncle a little deeper than long. Scales cycloid,  $30\frac{4}{11}$ ; lat. l.  $\frac{21}{10}$ . Olive, with yellowish spots occupying the centres of the scales; a rather indistinct dark lateral streak; vertical fins blackish, with round yellow spots.

Total length 175 millim.

A single specimen.

# Synodontis pleurops.

Præmaxillary teeth in 6 transverse series; mandibular teeth 17, uncinate, simple, measuring \frac{1}{2} diameter of eye, forming a small fascicle; no posterior villiform mandibular teeth. Depth of body equal to length of head, 4 times in total length. Head little longer than broad, flat on the crown; snout triangular, broader than long; eye perfectly lateral, just visible from below as well as from above, its diameter 13 in length of snout,  $3\frac{1}{2}$  in length of head,  $2\frac{1}{2}$  in interorbital width. Gill-cleft very narrow, not extending below base of pectoral. Maxillary barbels small, simple, hardly reaching base of pectoral; mandibular barbels fringed, outer twice as long as median and half as long as maxillaries. Dorsal II 7; spine not serrated. Adipose fin small, \frac{1}{2} length of head, shorter than its distance from the dorsal. Humeral process simply granulate, obtusely pointed, not extending quite as far as the occipito-nuchal shield, which is 11 as long as broad and does not extend beyond the first soft ray of the dorsal. Anal IV 8. Caudal deeply bifurcate. Skin smooth. Brown above, whitish beneath; fins greyish white, with a blackish stripe along each lobe of the caudal.

Total length 170 millim.

A single specimen.

Prof. L. Vaillant has recently published a monograph of this genus (Nouv. Arch. du Mus. (3) vii. & viii. 1895-96). Eight species are recorded by him from the Congo basin, and may be distinguished, together with the one now added, by means of the following synopsis:—

<ul> <li>I. Slender mandibular teeth 35 or more; posterior villiform mandibular teeth present.</li> <li>A. About 60 slender mandibular teeth; maxillary barbel reaching extremity of pectoral</li> <li>B. 35-45 slender mandibular teeth.</li> <li>1. Maxillary barbel reaching beyond extremity of pectoral spine</li> <li>2. Maxillary barbel not extending beyond</li> </ul>	S. Afro-Fischeri, Hilg
2. Maxillary barbel not extending beyond middle of pectoral spine.  Humeral process not extending beyond occipito-	
nuchal shield	S. angelica, Schilth.
nuchal shield	S. omias, Gthr.
<ul> <li>II. Slender mandibular teeth not more than 25.</li> <li>A. Posterior villiform mandibular teeth present; 16-25 slender mandibular teeth; maxillary barbel reaching middle of pectoral spine.</li> <li>B. No posterior villiform mandibular teeth.</li> <li>1. 15-25 slender mandibular teeth.</li> <li>a. Eyes sublateral, well visible from above</li> </ul>	S. schall, Bl. Schn.
Maxillary barbel reaching caudal fin  Maxillary barbel reaching middle of pectoral	S. Alberti, Schilth.
b. Eyes perfectly lateral, just visible from above as well as from below;	S. notatus, Vaill.
yond base of pectoral	S. pleurops, Blgr.
base of pectoral	

#### Citharinus congicus.

Depth of body twice in total length, length of head  $3\frac{1}{2}$  times. Snout very short and broad, a little shorter than diameter of eye, which is  $3\frac{2}{3}$  times in length of head and  $1\frac{1}{2}$  in interorbital width; free border of opercle forming nearly a right angle; a much-developed membranaceous border to the opercle. Dorsal 18, originating a little nearer base of caudal than end of snout; fourth ray  $1\frac{1}{3}$  length of head. Base of adipose fin  $\frac{2}{5}$  base of dorsal. Pectoral  $\frac{2}{3}$  length of head, reaching base of ventral. Ventral equally long, reaching

<sup>\*</sup> S. labeo, Vaill., nec Gthr.—Günther's S. labeo differs in the longer maxillary barbel, reaching anterior third of pectoral spine; the shorter humeral process, which extends only to below the middle of the occipitonuchal shield; and the longer adipose fin, which equals nearly twice its distance from the dorsal. Another difference, in the distance between ventral and anal, has been pointed out by Vaillant himself.

vent. Anal 30. Caudal deeply forked. Scales  $60\frac{5}{17}$ ; 13 scales between lateral line and base of ventral. Uniform silvery.

Total length 205 millim.

A single specimen.

Closely allied to C. Geoffroyi, Cuv. Distinguished by larger scales.

### Distichodus sexfasciatus.

Two series of teeth in the jaws; 14 teeth in the outer series in both jaws. Depth of body 22 times in total length, length of head 4 times. Snout as long as deep, 13 as long as diameter of eye, which is 4 times in length of head and 11 in interorbital width; snout slightly projecting beyond the mouth, which extends to below nostrils; interorbital region convex. Dorsal 24, originating a little nearer the base of the caudal than the end of the snout; longest rays as long as head. Pectoral as long as head to præopercular border. Ventrals equally long, reaching vent. Anal 13. Caudal forked, with rounded lobes. Caudal peduncle 1½ as deep as long. Scales strongly ciliated, 65 15; lat. l. 63. Reddish, with 6 black vertical bands, a little narrower than their interspaces, the first on the nape, the third below the origin of the dorsal, the sixth on the caudal peduncle; dorsal fin with small round blackish spots; adipose fin blackish.

Total length 70 millim.

A single specimen.

### Distichodus leptorhynchus.

Two series of teeth in the jaws; 14 teeth in the outer series of the upper jaw, 12 in the lower. Depth of body equal to length of head,  $3\frac{1}{4}$  times in total length. Snout longer than deep,  $1\frac{1}{2}$  as long as diameter of eye, which is 4 times in length of head and equals interorbital width; mouth terminal, not extending to below nostrils; interorbital space flat. Dorsal 25, originating a little nearer the base of the caudal than the end of the snout. Pectoral  $\frac{3}{5}$  length of head. Ventral equally long, reaching vent. Anal 13. Caudal forked, with rounded lobes. Caudal peduncle as long as deep. Scales strongly ciliated,  $70\frac{12}{15}$ ; lat. l. 66. Yellowish, with 7 blackish vertical bands, much narrower than their interspaces, the first on the nape, the third below the origin of the dorsal, the sixth below

the adipose fin, the seventh on the caudal peduncle; dorsal and adipose fins blackish.

Total length 115 millim.

A single specimen.

## Mormyrus Bentleyi.

Depth of body equal to length of head, 5 times in total length. Snout short, moderately curved, twice diameter of eye,  $\frac{1}{4}$  length of head; mouth terminal, on a line with lower border of eye, its width  $\frac{1}{5}$  length of head; teeth moderately large, notched, 7 in the upper jaw, 10 in the lower; chin strongly swollen; diameter of eye 8 times in length of head. Dorsal 23, originating halfway between the gill-opening and the caudal and above the sixth ray of the anal; longest rays  $\frac{1}{2}$  length of head. Pectoral nearly as long as head, extending beyond base of ventral; latter not quite  $\frac{1}{2}$  length of head. Anal 34; longest rays  $\frac{3}{5}$  length of head. Depth of caudal peduncle  $\frac{1}{3}$  its length. Scales  $\frac{8}{12}$ ; 12 scales round caudal peduncle. Dark olive.

Total length 270 millim.

A single specimen.

### Mormyrus Stanleyanus.

Depth of body  $3\frac{3}{4}$  times in total length, length of head 5 times. Snout short, moderately curved,  $1\frac{1}{2}$  diameter of eye,  $\frac{1}{3}$  length of head,  $\frac{2}{3}$  interorbital width; mouth terminal, on a line with centre of eye, its width  $\frac{1}{5}$  length of head; teeth moderately large, not notched, 7 in the upper jaw, 6 in the lower; chin strongly swollen; diameter of eye 5 times in length of head. Dorsal 28, originating halfway between the gill-opening and the caudal and above the ninth ray of the anal; longest rays a little more than  $\frac{1}{2}$  length of head. Pectoral a little shorter than head, reaching base of ventral; latter  $\frac{2}{5}$  length of head. Anal 37; longest rays a little more than  $\frac{1}{2}$  length of head. Depth of caudal peduncle  $\frac{1}{3}$  its length. Scales  $80 \frac{15}{15}$ ; 12 scales round caudal peduncle. Silvery, dark grey on the back.

Total length 210 millim.

A single specimen.

Allied to M. cyprinoides, L., which differs in the more convex snout, the smaller eye, and in the number (16) of scales round the caudal peduncle.

### Mormyrus psittacus.

Depth of body  $3\frac{1}{2}$  times in total length, length of head  $4\frac{1}{2}$  times. Snout very short, strongly curved, hardly as long as diameter of eye, which is  $4\frac{1}{2}$  times in length of head; mouth terminal, below the level of the eye, its width  $\frac{1}{5}$  length of head; teeth moderately large, notched, 3 in the upper jaw, 4 in the lower; chin slightly swollen. Dorsal 33, originating halfway between end of snout and caudal and considerably in advance of anal; longest rays  $\frac{3}{5}$  length of head. Pectoral a little shorter than head, reaching base of ventral; latter  $\frac{1}{2}$  length of head. Anal 23, originating below thirteenth dorsal ray; longest rays  $\frac{2}{3}$  length of head. Depth of caudal peduncle  $\frac{1}{3}$  its length. Scales  $60\frac{12}{13}$ ; 12 scales round caudal peduncle. Silvery, dark grey on the back.

Total length 125 millim.

A single specimen.

This species is probably the same as M. discorhynchus, Schilthuis (nec Peters). M. discorhynchus differs in the snout projecting beyond the mouth, the smaller scales  $(65-70\frac{15}{15})$ , and the deeper caudal peduncle  $(2-2\frac{1}{2})$  as long as deep).

LI.—New Genera and Species of Millipedes of the Family Platyrrhachidæ from the Indo- and Austro-Malayan Subregions, contained in the Collection of the British Museum. By R. I. POCOCK.

Most of the material upon which this paper is based has been acquired by the Trustees of the British Museum, during the past ten years, from various collectors, like Messrs. C. Hose, A. Everett, and H. N. Ridley, who are resident in the East and have kindly forwarded the specimens to the Museum in response to an appeal for examples of Millipedes.

A few of the species here described as new may eventually prove to be identical with species established by Peters in 1864. But without examination of the types the identification of Peters's species is almost impossible, owing to the absence of figures and to the fact, recently established by Mr. Cook, that in many cases the diagnoses were based upon two or more recognizable forms \*.

\* On behalf of collectors unfamiliar with the taxonomy of the Diplopoda, it may be explained that the Platyrrhachidæ are for the most part Millipedes of large or medium size, in which the body is composed of twenty segments, each segment, except the first and the last, being furnished on each side with a large more or less square and horizontal plate which bears the pore.

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#### Genus Phyodesmus, Cook.

Phyodesmus, Cook, Brandtia, i. p. 1 (1896).

Phyodesmus ornatus, sp. n. (Fig. 1, p. 431.)

J.—Colour (in alcohol) of dorsal surface bluish grey, the middle of the back yellowish green; the cylindrical part of the segments with a broad blackish blotch on each side, separated by a triangular paler portion; keel-bearing portion of segments furnished with two or three black spots on each side in front and a few more behind; at the end of the body these spots show a tendency to fuse and form continuous dark bands; pores black; antennæ and legs blackish.

Length of antennæ excelling width of first tergite by about

half its own width, less than width of second.

First tergite with its angles produced, the anterior border straight between them. Second segment about as wide as the twelfth. The anterior seven segments with merely lobulate side margins, the rest with two or three distinct though short triangular teeth; anterior border of keels convex, with rounded basal shoulders, posterior border lightly sinuous, both smooth. Pore on fifth and seventh segments about three diameters from the edge, on the toothed keels not more than two diameters from the notch. Caudal process posteriorly narrowed, posterior border straight but laterally notched.

Copulatory foot (as in fig. 1) straight, ending in a shorter blade-like ramus and a longer curved prong, from which

projects a smaller lamina.

Measurements in millimetres.—Total length 100; width of second segment 14.5, of fifth 16, of twelfth 14.8.

Loc. Borneo (Rev. G. Brown).

# Phyodesmus Hosei, sp. n. (Fig. 2.)

J.—Resembling the preceding, but bluer in colour, without yellowish-green dorsum, and the black patches on the cylindrical part of the segments separated by a narrower pale band.

Keels also considerably larger, with the teeth much stronger, appearing as far forwards as the fifth segment; on the posterior segments long and sharp, the pore being often quite close to the adjacent notch.

Copulatory foot much longer, the long prong broader at the base, the short ensiform process much shorter and not

projecting as straight forwards.

Measurements in millimetres.—Total length (at least) 96; width of second segment 15, of fifth 17.7, of twelfth 16.

Loc. Baram, Borneo (C. Hose).

# Phyodesmus vittatus, sp. n. (Fig. 3.)

3.—Colour (dry and faded) a tolerably uniform pale brown, but with a distinct continuous narrow pale band passing along the middle of the dorsum from the first to the nineteenth segments.

First tergite with its angles scarcely produced.

Body not so wide anteriorly as in the preceding two species, the fifth segment being only a little narrower than those situated more posteriorly; the keels more elevated from the base and the whole of the dorsal surface more coarsely granular; lateral margins of keels dentate from the fifth backwards; the teeth from two to four in number, not including the anterior and posterior angles. Pore about two diameters from the edge on the fifth and seventh segments; about one or less from the adjacent notch on the posterior segments. Sternal spines much longer than in the preceding two species.

Copulatory foot (as in fig. 3) long, straightish, ending in two unequal prongs, the longer strongly curved and slender, the

shorter more laminate and abruptly hooked.

Measurements in millimetres.—Total length 93 (at least); width of second segment 13.8, of fifth 15, of twelfth 14.3.

Loc. Borneo (H.M.S. 'Samarang').

This species belongs doubtfully to the genus *Phyodesmus*, being apparently more coarsely granular than the type (*P. pictus*, Peters), with the anterior angles of the first tergite not produced to anything like the same extent. Either of the other species here referred to *Phyodesmus* may prove to be identical with *pictus*, Pet., *Petersii*, Cook, or *montrado*, Cook, which have not yet been satisfactorily diagnosed.

## Phyodesmus areatus, sp. n.

Q.—Colour (dry and faded specimen) greyish brown; cylindrical half of segments blackish above, with a median pale band; keel-bearing portion paler in the middle, with three blotches in front on each side, also some brown spots posteriorly, the spots separated by whitish lines, which form a kind of pale network pattern. Anterior angles of first tergite produced. Dorsal surface of all the segments distinctly granular, the rows of tubercles distinct.

Side margins of the keels from about the eighth distinctly dentate, but the teeth all small, about four in number not including the anterior and posterior angles, so that the pores never come close to the nearest notch, being usually separated by about two diameters from it; on the fifth segment the