

2. On a Second Collection of Fishes made by Mr. S. L. Hinde in the Kenya District, East Africa. By G. A. BOULENGER, F.R.S., V.P.Z.S.

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(Plate VII.*)

Nearly three years ago † I had the pleasure of reporting on a small collection of Fishes made by Mr. S. L. Hinde in the Mathoiya River, among which were examples of four new species. The British Museum is indebted to Mr. Hinde for a second collection made in the Kenya District, partly again in the Tana River system, partly in the wholly unexplored Nyiro River system, which takes its source in the Aberdare Range and loses itself in the Lorian Swamp. This second collection contains examples of only five species, two of which had been previously discovered by Mr. Hinde, the three others being new to Science.

1. *DISCOGNATHUS HINDII*, sp. n. (Plate VII. fig. 1.)

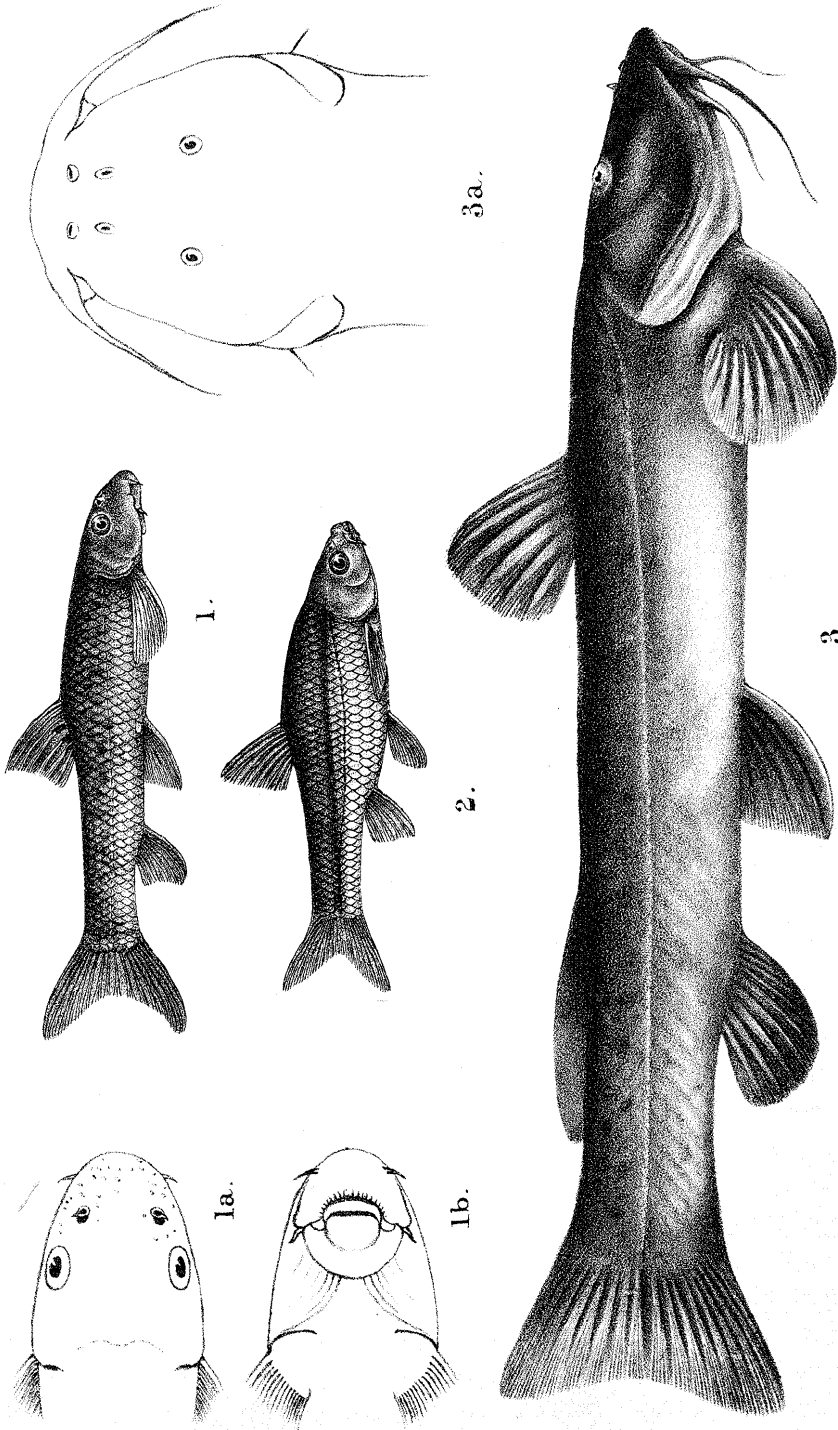
Body feebly compressed, its depth 5 to $5\frac{1}{2}$ times in the total length. Head broader than deep, once and $\frac{1}{3}$ to once and $\frac{1}{2}$ as long as broad; snout rounded, projecting very strongly beyond the mouth; interorbital region flat, its width not quite half the length of the head; eye supero-lateral, not visible from below, in the middle of the length of the head, its diameter 4 (young) to 5 times in the length of the head and twice and a half in the interorbital width; width of mouth about $\frac{2}{7}$ the length of the head; upper lip well developed, fringed; lower lip forming a mental disk which is broader than long; two barbels on each side, measuring $\frac{1}{2}$ to $\frac{2}{3}$ the diameter of the eye. Dorsal equally distant from the centre or the anterior border of the eye and from the root of the caudal; first branched ray longest, as long as the head or a little shorter. Anal II 5, first branched ray longest, about $\frac{2}{3}$ the length of the head. Pectoral nearly as long as the head, not reaching the ventral, which is situated below the middle of the dorsal. Caudal fin deeply emarginate, as long as the head. Caudal peduncle once and $\frac{1}{3}$ to once and $\frac{1}{2}$ as long as deep. Scales $38-42$ $\frac{5\frac{1}{2}-6\frac{1}{2}}{7\frac{1}{2}-8\frac{1}{2}}$, $3\frac{1}{2}$ or 4 between the lateral line and the ventral, 16 round the caudal peduncle. Dark olive above, whitish beneath; usually a few black spots on the base of the dorsal fin; young with a more or less distinct yellowish, dark-edged bar at the root of the caudal fin.

Total length 70 millimetres.

Numerous specimens from the head-waters of the Nyiro River, at an altitude of 7000 feet.

In these 'Proceedings' for 1903 (ii. p. 531) I have given a synopsis of the African species of *Discognathus*. The species now added is most nearly allied to *D. blanfordii*, which has a lower number of scales in the lateral line.

* For explanation of the Plate, see p. 64. † P. Z. S. 1902, ii. p. 221.



J. Green del. et. lith. *Mintern Bros imp*
1. DISCOGNATHUS HINDII. 2. BARBUS THIKENSIS. 3. AMPHILIUS GRANDIS.

2. *BARBUS THIKENSIS*, sp. n. (Plate VII. fig. 2.)

Depth of body equal to length of head, $3\frac{1}{2}$ to $3\frac{2}{3}$ times in total length. Snout rounded, as long as the eye, which is contained $3\frac{1}{2}$ to 4 times in length of head; interorbital width $2\frac{1}{2}$ to $2\frac{2}{3}$ times in length of head; mouth small, terminal; lips feebly developed, lower interrupted on the chin; barbels two on each side, anterior $\frac{2}{3}$ length of eye, posterior a little shorter than eye. Dorsal III 7, equally distant from eye and from root of caudal, with a straight or slightly convex border; last simple ray bony, strongly serrated, about $\frac{3}{4}$ length of head. Anal III 5, longest ray $\frac{3}{4}$ length of head. Pectoral $\frac{2}{3}$ to $\frac{3}{4}$ length of head, not reaching, or nearly reaching ventral; latter below anterior rays of dorsal. Caudal peduncle twice as long as deep. Scales 33-35 $\frac{5\frac{1}{2}}{6\frac{1}{2}}$, 3 or $3\frac{1}{2}$ between lateral line and base of ventral, 12 or 14 round caudal peduncle. Brownish, with a more or less distinct dark streak along the middle of the side; lateral line often blackish; fins grey; a blackish spot sometimes present at the base of the anal fin.

Total length 55 millimetres.

Numerous specimens from the Thika River, Tana system, 3000 ft.

This species agrees very closely with the description and figure of *B. gibbosus* Peters*, which differs principally in having the caudal peduncle more than twice as long as deep. The name *gibbosus* being preoccupied (Cuvier and Valenciennes), I propose to designate Peters's *Barbus* from the Zambesi as *B. longicauda*.

I also avail myself of this opportunity for changing the name *Barbus miolepis*, which I bestowed on a species from the White Nile in 1893, but which is preoccupied by a Congo species, to *B. wernerii*, in honour of Dr. F. Werner, who has recently rediscovered the fish at Wady Halfa.

3. *BARBUS HINDII* Blgr.

Fort Hall, Kenya (Tana system), 4400 feet. Grows to a length of 390 millimetres.

4. *BARBUS PERPLEXICANS* Blgr.

Fort Hall and Thika River. Grows to a length of 350 millimetres.

5. *AMPHILIUS GRANDIS*, sp. n. (Plate VII. fig. 3.)

Depth of body $5\frac{1}{2}$ to 6 times in total length, length of head 4 to $4\frac{1}{3}$ times. Head not or but slightly longer than broad; eyes small, in the second half of the head, $2\frac{1}{2}$ or 3 diameters apart; interocular width $\frac{1}{2}$ or $\frac{2}{3}$ length of snout; latter broadly rounded, projecting but slightly beyond lower jaw; posterior nostril midway between eye and end of snout; præmaxillary teeth forming a crescentic band, measuring $\frac{1}{2}$ or $\frac{2}{3}$ width of mouth; maxillary barbel measuring about $\frac{2}{3}$ length of head, nearly reaching root of pectoral; outer mandibular barbel $\frac{1}{2}$ length of head, inner $\frac{1}{3}$. Dorsal I 6, in the middle of the space between bases of pectorals

* Reise n. Mossamb. iv. p. 52, pl. xi. fig. 2.

and ventrals, equally distant from end of snout and from middle of adipose fin; first branched ray $\frac{1}{2}$ length of head. Adipose fin 5 or 6 times as long as deep, twice and $\frac{1}{3}$ as long as rayed dorsal. Anal III 6, midway between root of ventral and root of caudal. Pectoral a little longer than ventral, $\frac{2}{3}$ length of head. Caudal moderately emarginate. Caudal peduncle as long as deep. Olive-brown above, with very indistinct darker marblings, brownish white below.

Total length 180 millimetres.

Three specimens, from the Chania River of Tete, Tana system, in cold water, at an altitude of 7000 feet.

This new *Amphilius* is the largest yet described, exceeding in size the *A. longirostris* of South Cameroon (originally described from an immature specimen), which grows to a length of 140 millimetres.

The genus *Amphilius* Gthr. (*Anoplopterus* Pfeff., *Chimarrhognianis* Vaill.), until quite lately represented by two known species only, now includes as many as seven, the characters of which may be thus contrasted:—

- I. Dorsal above the space between pectorals and ventrals.
- A. Head not or but slightly longer than broad; snout broadly rounded, its length not more than twice interocular width; base of adipose fin much longer than that of rayed dorsal.
- Length of head at least 5 times in total length; maxillary barbel extending beyond posterior border of head; caudal peduncle not longer than deep *A. uranoscopus* Pfeff. 1896.
- Length of head 4 times in total length; maxillary barbel not reaching posterior border of head; length of snout once and $\frac{2}{3}$ to twice interocular width; caudal peduncle not longer than deep ... *A. grandis* Blgr. 1905.
- Length of head 4 to $4\frac{1}{2}$ times in total length; maxillary barbel not extending beyond posterior border of head; length of snout once and $\frac{1}{2}$ to once and $\frac{1}{2}$ interocular width; caudal peduncle longer than deep *A. platyichir* Gthr. 1864.
- B. Head longer than broad; snout obtusely pointed, its length 2 (young) to 3 times interocular width; base of adipose fin not more than once and a half that of rayed dorsal... *A. longirostris* Blgr. 1901.
- II. Dorsal above the ventrals.
- Length of head 4 to $4\frac{1}{2}$ times in total length; snout broadly rounded; interocular width $2\frac{1}{2}$ to 3 times diameter of eye; caudal peduncle a little longer than deep; caudal forked, with rounded lobes ... *A. atesuensis* Blgr. 1904.
- Length of head $3\frac{2}{3}$ to $3\frac{3}{4}$ times in total length; snout broadly rounded; interocular width $2\frac{1}{2}$ to 3 times diameter of eye; caudal peduncle as long as deep; caudal feebly emarginate *A. brevis* Blgr. 1902.
- Length of head 4 to $4\frac{1}{2}$ times in total length; snout pointed; interocular width not greater than diameter of eye; caudal peduncle more than twice as long as deep; caudal emarginate *A. angustifrons* Blgr. 1902.

EXPLANATION OF PLATE VII.

- Fig. 1. *Discognathus hindii*, p. 62.
 1 a. " " Upper view of head.
 1 b. " " Lower view of head.
 2. *Barbus thikensis*, p. 63.
 3. *Amphilius grandis*, p. 63.
 3 a. " " Upper view of head.