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SOME FISHES FROM LIBERIA, WEST AFRICA, WITH DESCRIPTIONS OF TWO NEW SPECIES

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The collection of fishes here reported was received July 24, 1946. It was formed by my esteemed friend Mr. Charles R. Matlock, Jr., of St. John's School, Robertsport, Liberia. The Academy is therefore indebted to Mr. Matlock for his kindness in presenting it to the museum. Though without details as to special localities, dates of capture, etc., the presumed locality for the materials is Robertsport or its environs. The collection comprises 94 specimens, which I refer to 16 species, of which two are described as new. Figures are given of the new species, besides several others of early or young stages of growth. Most interesting are two postlarval young of *Psettias sebae*, the deepest bodied of known fishes when mature. These reveal that the immature are similar in proportional depth of body to other monodactylids.

When studying the fishes of the U. S. Eclipse Expedition to West Africa, I reported Liberian fishes then available.¹ More recently Dr. L. P. Schultz has given an account of fresh-water fishes from Liberia, describing seven new forms.²

¹ Proc. U. S. Nat. Mus., vol. 56, 1919, Liberian specimens pp. 231-249, figs. 7-10.

² L.c., vol. 92, 1942, pp. 301-348, pls. 35-36 (photographs).

TETRAGONOPTERIDAE***Alestes rutilus* Boulenger**

Depth $3\frac{2}{3}$. Eye 3 in head. Scales 26 in lateral line. Dorsal origin midway between nostrils and caudal base. A. III, 17. Lower caudal lobe $2\frac{1}{2}$ in rest of fish, greatly exceeds upper lobe. Length 48 mm.

This specimen differs somewhat from Boulenger's figure of the type³ in its prolonged lower caudal lobe and a few more anal rays.

CYPRINODONTIDAE***Micropanchax macrurus manni* Schultz**

Twenty-four, 15 to 28 mm. Compared with the photographic figure of the type⁴ the most prominent feature is the narrow dark edges to the scales, forming a well-reticulated design. The large eye with its dark to blackish color in the preserved specimens is another character. In small specimens the dark edges of the scales have become more or less indistinct, or have vanished, due to the preservative.

***Epiplatys spilauchen* (Duméril)**

Four, 35 to 53 mm. to ends of broken caudals. The largest agrees well with figure 47 of the male as given by Boulenger.

***Epiplatys sexfasciatus* Gill**

One, 19 mm. to end of broken caudal.

***Epiplatys annulatus* (Boulenger)**

Three, 18 or 19 mm. Agree in most every way with the figure of the type as given by Boulenger.⁵ This interesting minute species appears to have been known previously only from Sierra Leone.

***Epiplatys matlocki* new species**

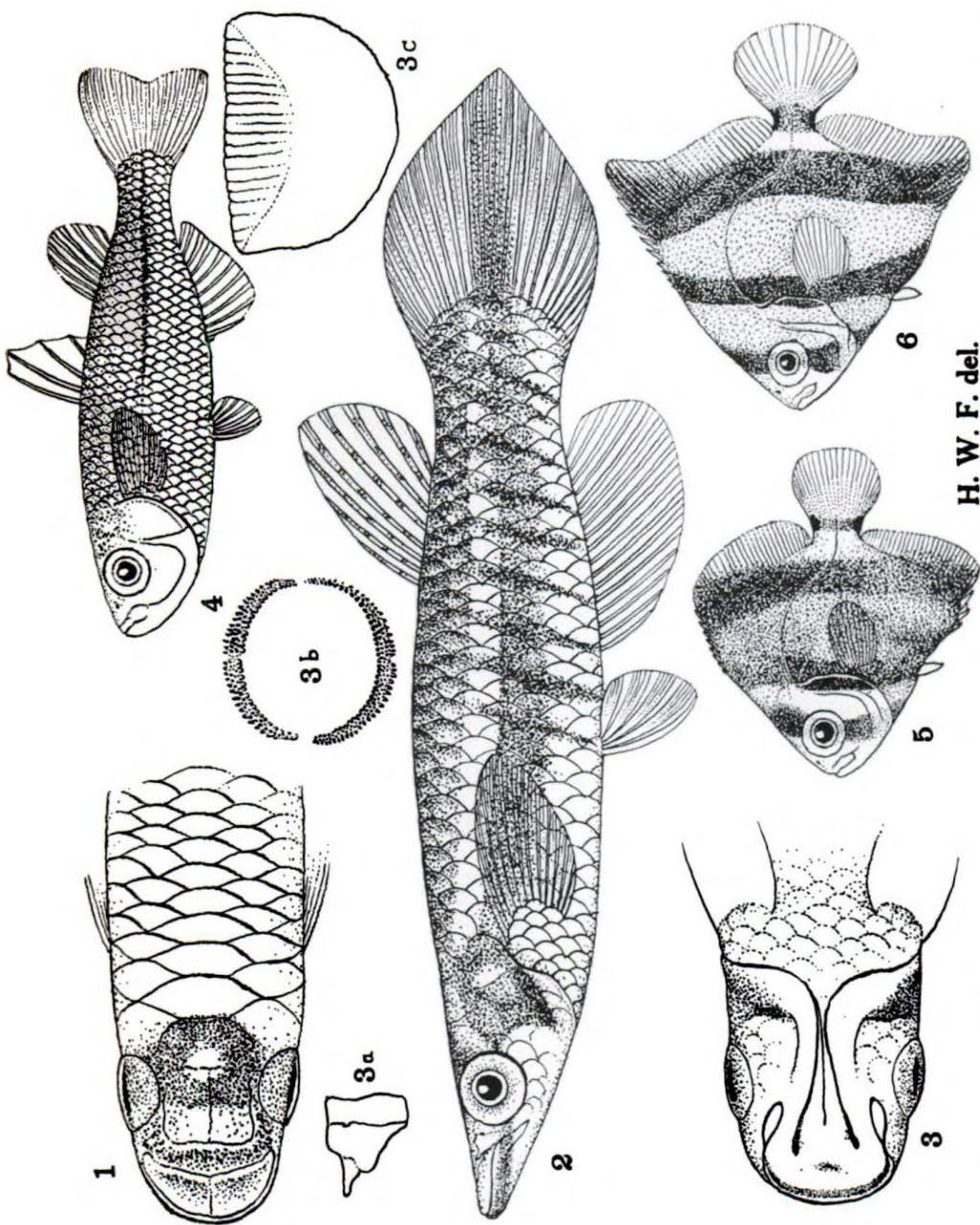
Figures 1 to 3c.

Depth $4\frac{1}{2}$ to 5; head 3 to $3\frac{1}{10}$, width $1\frac{2}{3}$ to $1\frac{3}{4}$ in its length. Snout $2\frac{3}{4}$ to 3 in head from snout tip; eye 3 to $3\frac{1}{2}$, 1 to $1\frac{1}{4}$ in snout, not quite reaching upper profile of head; mouth long, cleft horizontal and when closed, lower jaw slightly protruding in front; maxillary reaches below front of eye; teeth fine, small, uniform, with an outer row of close-set, small, slightly curved conic ones, followed by a band of small, short, obtuse teeth, in about 4 or 5 irregular series counted transversely at middle of jaw; preorbital with free flexible point, directed forwards; top of head and front predorsal region flat-

³ Cat. Fresh-water Fishes of Africa, pt. 4, 1916, p. 183, fig. 116. North Sherbo district, Sierra Leone.

⁴ Proc. U. S. Nat. Mus., vol. 92, 1942, p. 336, pl. 36, fig. 4. Harbel, Liberia.

⁵ Cat. Fresh-water Fishes of Africa, pt. 4, 1916, p. 326, fig. 189.



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Epiplatys matlocki new species. Fig. 1.—Head above. Fig. 2.—Lateral view. Fig. 3.—Head below (all from type); 3a, preorbital, 3 mm.; 3b, dentition, 7 mm.; 3c, lateral scale, 4 mm. *Mugil saliens* Risso. Fig. 4.—Lateral view (length 30 mm.). *Psettias sebae* (Cuvier). Fig. 5.—Lateral view (length 13 mm.). Fig. 6.—Same (length 19 mm.).

tened and level, and under surface of head broadly convex; interorbital width $1\frac{2}{3}$ to $2\frac{1}{10}$ in head measured from snout tip. Gill opening extends forward opposite front edge of eye. Lower gill rakers 8, short, lanceolate, simple points.

Scales 25 + 3 in median axial lateral series; 8 transversely; predorsal scales 18; head scaly above and on sides. Of fins only caudal with basal band of scales. Scales with 18 to 20 basal parallel striae.

D. 8 or 9, depressed fin reaches caudal base, origin slightly before last fourth in standard length; A. 17, fin origin median between pectoral origin and caudal base, length of fin base $1\frac{1}{2}$ in total head length; caudal ends in median point behind, subequal with total length of head; pectoral rays 13, fin $1\frac{1}{3}$ to $1\frac{1}{2}$ in total head length; ventral $2\frac{1}{5}$ to $2\frac{1}{4}$, rays 5; least depth of caudal peduncle $2\frac{1}{8}$ to $2\frac{1}{4}$.

Color in alcohol brown, paler to whitish on under surfaces. Snout above and interorbital space dark brown, also dark brown area on side of head. Lips brown. On side of trunk and tail, arched down just below axial line, is a broad dark brown band from head to middle of caudal base. This is crossed by about 9 to 11 slightly inclined, narrow transverse bands, quite distinct in young and usually the last as pair of basal caudal spots. Iris dark gray, evidently whitish in life. Dorsal, anal and caudal fins with rays more or less brownish. Each dorsal ray with 4 or 5 brown spots. Paired fins pale.

A.N.S.P., no. 72110, type. Robertsport, Liberia. 1946. Mr. Charles R. Matlock, Jr. Length 68 mm.

A.N.S.P., nos. 72111 to 72124, paratypes. Same data as type. Length 22 to 43 mm.

Characterized by its very depressed spatulate muzzle, flattened both above and below, the lateral eyes well encroaching below, the brown lips and the dark bar across the chin.

The species is apparently closest to *Epiplatys fasciolatus* (Guenther), but is well distinguished from the figure of the type as published by Boulenger.⁶ That shows differently a single row of large infraorbital scales and length of anal fin base $1\frac{1}{4}$ in total length of head. More striking differences seem to be in the color pattern. All my specimens, first in formaline but now in alcohol, show the dark brown infero-axial band from the head to the base of the caudal fin; the dark transverse inclined bands are all much wider than shown in Boulenger's figure, moreover none is arched above or bent backward as the last 3 are there so definitely indicated. In small examples, in addition to the brown border of the lower lip there is also a transverse brown bar across the chin just before the level of the front edges of the eyes,

⁶ Cat. Fresh-water Fishes of Africa, pt. 3, 1915, 52, fig. 38, male.

as viewed from below, and this extends back to the hind portion of each maxillary. At present the caudal and anal are without spots, though traces of them are still seen on the dorsal fin rays.

According to Schultz the specimens I listed from St. Paul's River as *Aplocheilus spilauchen*⁷ were a misidentification for *Epiplatys fasciolatus* (Guenther), with which he associates them.

(Named for Mr. Charles R. Matlock, Jr., who obtained the types.)

***Epiplatys melantereon* new species**

Figures 7 to 9.

Depth $4\frac{1}{4}$ to $5\frac{1}{4}$; head $3\frac{1}{2}$ to 4, width $1\frac{1}{3}$ to $1\frac{1}{2}$. Snout short, broad, length $3\frac{1}{2}$ to $5\frac{2}{5}$ in head from snout tip; eye 3 to $3\frac{1}{8}$, nearly touching upper profile of head; maxillary little inclined or subvertical, reaches opposite front edge of eye; mouth cleft short as closed, with lower jaw projecting; teeth minute, conic, pointed, apparently in narrow bands, not over 3 or 4 counted transversely, with outer ones slightly curved, of mostly uniform appearance; interorbital width $1\frac{2}{5}$ to $1\frac{1}{2}$ in total head length. Gill opening extends forward about opposite center of eye.

Scales 27 or 28 + 2 in axial lateral series; 7 or 8 transversely; 22 predorsal; cheek with 2 rows of scales. Most scales fallen.

D. 7, origin about last third in standard length and depressed fin reaches $1\frac{1}{4}$ to caudal base; A. 10, origin midway between hind preopercle edge and caudal base, fin base length subequal with total head length; caudal $3\frac{2}{5}$ in rest of fish, and ends in median point behind; pectoral rays 14?, fin $1\frac{2}{5}$ in head; ventral rays 6, origin little nearer front end of closed mandible than to caudal base, fin $2\frac{1}{3}$ in total head length; least depth of caudal peduncle 2.

Color in alcohol dull brown, with more or less uniform appearance. Most of scales show traces of a small pale spot, perhaps crimson? in life. Fins all pale grayish to whitish. A black blotch on front of chin. Dark transverse bar at caudal base. Some of specimens show traces of a dark axial band. Pectoral variegated with some darker or grayish markings transversely. Top of head dark brown. Eyes dark gray, apparently whitish in life?

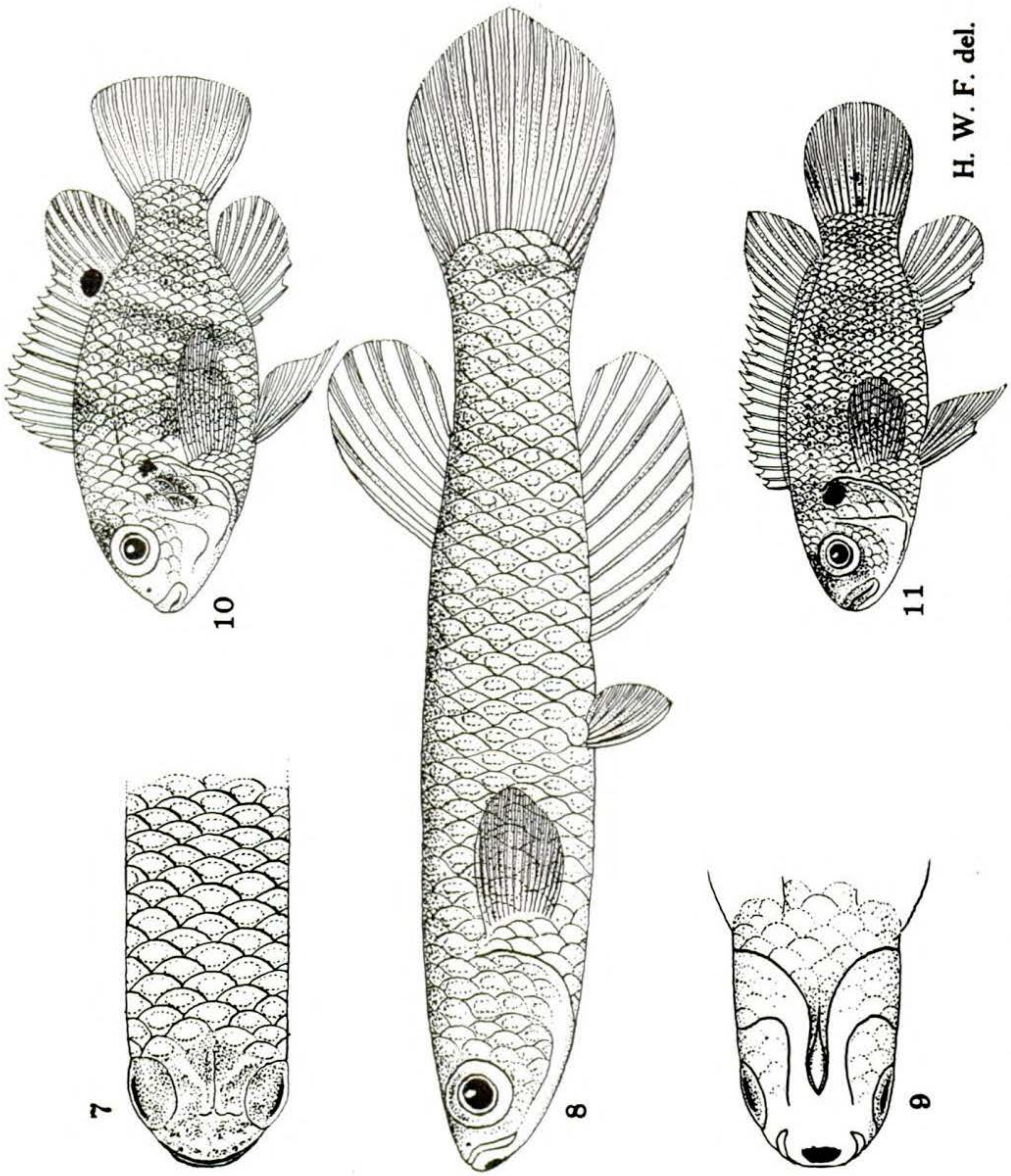
A.N.S.P., no. 72125, type. Robertsport, Liberia. 1946. Charles R. Matlock, Jr. Length 25 mm.

A.N.S.P., nos. 72126 and 72127, paratypes. Same data as type. Length 19 or 20 mm.

This species may be distinguished by its very short obtuse snout and the conspicuous black spot on the chin. It does not appear to be allied with any of the known species of its genus and is surely not to be identified with the Liberian species *E. liberiensis* (Boulenger) and *E. bifasciatus* (Steindachner).

(μέλας black; ἀνθρακῶν chin, with reference to the black spot on the chin.)

⁷ Proc. U. S. Nat. Mus., vol. 56, 1919, p. 249.



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Epiplatys melantereon new species. Fig. 7.—Head above. Fig. 8.—Lateral view. Fig. 9.—Head below (all from type). *Tilapia melanopleura* Duméril. Fig. 10.—Young (43 mm.). *Pelmatochromis buettikoferi* Steindachner. Fig. 11.—Lateral view.

MUGILIDAE**Mugil saliens** Risso

Figure 4.

Depth 4; head $3\frac{1}{10}$. Eye $2\frac{1}{8}$ in head from tip of upper jaw. Scales $32 + 3$ in axial lateral series. Twenty-four, 17 to 30 mm.

These specimens are all in poor preservation, with their scales mostly fallen off and their fins broken, therefore very imperfect. The soft vertical fins appear largely scaleless. I have tentatively identified these young mullets with the present species as the more perfect ones show the pectoral fin $\frac{2}{3}$ the length of the head.

Mugil grandisquamis Valenciennes

Five, 36 to 66 mm. to end of broken caudal. Scales 22 to $24 + 3$ in lateral axial series. All with more or less damaged edges and ends of vertical fins.

MONODACTYLIDAE**Psettias sebae** (Cuvier)

Figures 5 and 6.

Three, 13 to 19 mm. An interesting comparison is here afforded with the figure by Fleischmann, from a Cameroon specimen 35 mm. long, published by Pietschmann in 1913 as *Psettus sebae*. There the transverse blackish bands are all shown as much narrower.

CICHLIDAE**Tilapia melanopleura** Duméril

Figure 10.

One, 43 mm. As described by Boulenger in 1915, "a large black spot at the anterior part of the soft dorsal," which forms an ocellus in my specimen.

One, 23 mm. Depth 2. Faded pale. Black basal blotch on front of soft dorsal still evident.

Hemichromis fasciatus Peters

One, 93 mm. to end of broken caudal. The dark spots, one on each scale on the back and upper and middle sides of the body, form more or less distinct longitudinal bands.

One, 45 mm. Narrow transverse black bands very distinct and contrasted, extend well down to the lower side, though without any other bars present in the resulting pale intervals. Subdued dark longitudinal axial band present.

Pelmatochromis buettikoferi Steindachner

Figure 11.

One, 42 mm.

ELEOTRIDAE***Eleotris vittata*** Duméril

Five, 24 to 44 mm. These specimens are variable and the larger ones have a distinct black scapular blotch. In one large specimen the caudal has a blackish transverse basal band or bar, and a black blotch on the upper fulcra besides another on the lower fulcra. In a small specimen the whole median part of the caudal is blackish.

GOBIIDAE***Bathygobius soporator*** (Valenciennes)

Three, 22 to 125 mm. Largest with scales 37 + 3 in axial lateral series.

Periophthalmus papilio Bloch

One, 155 mm. Mr. Matlock's notes are as follows:

"Olive in color, with variable scattered spots and dots on the sides. Lips with blue. Found nearby in a small grassy branch leading to a larger stream close to a salt water lake. Dunkie, my servant boy, says that they do not like the salt water and move away from it. However, the tide influences the water, where they stay, about 2 feet. A native boy tasted the water where this specimen was caught and termed it 'salty.' I have observed this fish very close to salt water in another place, but have not seen it inland where the water is absolutely fresh. They are found abundantly nearby, scampering at great speed and climbing small reeds."