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XVI.—*Descriptions of Three new Marine Fishes from South Africa.* By C. TATE REGAN, B.A.

Scyllium natalense.

Allied to *S. quagga*, Alc. Head broad, depressed; snout elliptical, with obtusely pointed tip, its length, measured from the middle of the upper jaw, slightly more than $\frac{1}{2}$ its greatest breadth and equal to $2\frac{2}{3}$ times the width of the interspace between the nasal valves. Diameter of eye $\frac{2}{3}$ the length of snout. A fold at each angle of the mouth, extending along the lower jaw for $\frac{2}{5}$ of the distance from angle to symphysis and less than $\frac{1}{2}$ as far along the upper jaw. Teeth tricuspid, the middle cusp the longest. First dorsal originating above posterior $\frac{1}{3}$ of base of ventral, second dorsal a little in advance of posterior end of base of anal; dorsal fins subequal, the length of the base of each about $\frac{2}{5}$ of the distance between them. Length of base of anal $1\frac{1}{2}$ times that of second dorsal and $1\frac{2}{3}$ times in its distance from the caudal. Pectoral extending a little more than $\frac{1}{2}$ the distance from its base to origin of ventral; ventral with its outer edge evenly rounded anteriorly and becoming very oblique posteriorly. Greyish; back with broad transverse brown bands with darker edges and with less distinct intermediate bands composed of brown marbling or reticulations. Upper surface of head covered with reticulations, except for the first cross-band, which lies between the posterior halves of the eyes and has a convex posterior edge. The second band is represented by 2 oval patches at the level of the gill-openings, nearly meeting in the middle line; the third is at the level of the posterior part of the pectoral; the fourth, in front of the dorsal fin, is broken up into a median circular or oval and a pair of lateral semioval patches; the fifth and seventh are through the bases of the dorsal fins, and there are 2 or 3 on the tail. Pectoral and ventral each with a large dark blotch; each dorsal fin with a dark blotch on its upper portion.

Total length 325 mm.

Two specimens from the coast of Natal, presented to the British Museum by Mr. J. F. Quekett.

Trigla Queketti.

Depth of body $5\frac{1}{3}$ times in the length, length of head $3\frac{2}{3}$ times. Snout $1\frac{1}{2}$ times as long as eye, the diameter of which

is $3\frac{3}{5}$ times in the length of head. Præorbital ending in 2 spines anteriorly; depth of suborbital equal to diameter of eye; maxillary extending to below anterior edge of eye; interorbital space slightly concave, its width $\frac{3}{4}$ the diameter of eye. Dorsal IX, 19; the second spine the longest, $\frac{5}{7}$ the length of head. Anal 18. Pectoral and ventral extending to origin of anal. Caudal very slightly emarginate. About 95 scales in a longitudinal series and 27 plates along the bases of the dorsal fins; scales of the lateral line not enlarged and not spiny. Greyish; pectoral blackish, except at its upper and lower margins; other fins immaculate.

Length to base of caudal 260 mm.

A single specimen from the coast of Natal, presented to the British Museum by Mr. J. F. Quekett.

PETALICHTHYS, gen. nov.

Closely allied to *Scombresox*. Body elongate, strongly compressed. Both jaws produced into a long slender beak; a series of small pointed teeth in each jaw; palate toothless; gill-openings very wide; gill-rakers moderate. Scales small, deciduous; lateral lines approximated ventrally, ending above the last rays of anal. Dorsal with 18 rays, elevated anteriorly, the posterior rays short, subequal, strongly branched, but not disconnected. Anal with 22 rays, commencing in advance of the dorsal and similar to it. Pectoral short, of 11 rays. Ventrals close together, 6-rayed, inserted far back. Caudal forked.

Petalichthys capensis.

Depth of body about $15\frac{1}{2}$ times in the length, length of head about $3\frac{1}{5}$ times. Snout, measured from anterior edge of eye to tip of upper jaw, $2\frac{1}{2}$ times as long as rest of head. Lower jaw projecting beyond the upper; maxillary completely hidden beneath the præorbital. Diameter of eye greater than interorbital width and $\frac{1}{2}$ the length of postorbital part of head. About 22 gill-rakers on the lower part of anterior arch, the longest $\frac{1}{3}$ the diameter of eye. Length of pectoral nearly equal to depth of body. Origin of ventrals equidistant from posterior part of pectoral and base of caudal. Silvery; darker above.

Length to base of caudal 320 mm.

A single specimen from Port Elizabeth, presented to the British Museum by Mr. Drege.

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Such an examination of the pharyngeals as is possible without injury to the specimen shows that they are apparently similar to those of *Scombrox*, whilst the middle and posterior dorsal and anal rays are of the same type as the ray immediately preceding the first finlet in the dorsal and anal fins of *S. saurus*.

XVII.—On the Affinities of the Genus *Draconetta*, with Description of a new Species. By C. TATE REGAN, B.A.

IN 1903 Jordan and Fowler (Proc. U.S. Nat. Mus. xxv. p. 939) instituted a new genus, *Draconetta*, for a single species, *D. xenica*, known only from one example of 2½ inches, taken at a depth of 100 fathoms in Suruga Bay, Japan. This genus was made the type of a distinct family, regarded as allied to the Callionymidæ.

In the British Museum collection there is a *Draconetta*, received from the Smithsonian Institution as *Callionymus himantophorus*, Goode and Bean, and stated to have been dredged in the North Atlantic, and which is described below under the name *D. acanthopoma*.

An examination of this example seems to leave no room for doubt that *Draconetta* is closely allied to *Harpagifer*, which genus it resembles in the naked body, the position of the fins, the restricted gill-openings, &c., and in having the operculum and suboperculum reduced and each represented by a strong spine. In *Draconetta*, as in *Harpagifer*, there is a single nostril on each side situated at the apex of a tubular papilla; other apertures which have the appearance of nostrils are the pores of the sensory canal system, which is well developed on the head.

Draconetta differs from *Harpagifer* in the more slender body, the complete absence of a lateral line, the large contiguous eyes, and the more pungent dorsal spines.

Harpagifer has been placed by Boulenger in the Nototheniidæ, and after re-examination of the skeletons it appears to me beyond doubt that it is closely related to *Notothenia*; consequently the family Draconettidæ should be given up.

Draconetta acanthopoma, sp. n.

Depth of body 5¾ times in the length, length of head 3½ times. Eyes large, contiguous, their diameter ⅔ the length

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Scyllium natalense.

Allied to *S. quagga* Ale. Head broad, depressed ; snout elliptical, with obtusely pointed tip, its length, measured from the middle of the upper jaw, slightly more than $\frac{1}{2}$ its greatest breadth and equal to 2 times the width of the interspace between the nasal valves. Diameter of eye $\frac{1}{2}$ the length of snout. A fold at each angle of the mouth, extending along the lower jaw for $\frac{1}{2}$ of the distance from angle to symphysis and less than $\frac{1}{2}$ as far along the upper jaw. Teeth tricuspid, the middle cusp the longest. First dorsal originating above posterior end of base of ventral, second dorsal a little in advance of posterior end of base of anal ; dorsal fins subequal, the length of the base of each about $\frac{1}{2}$ of the distance between them. Length of base of anal 1 times that of second dorsal and $\frac{1}{2}$ times in its distance from the caudal. Pectoral extending a little more than $\frac{1}{2}$ the distance from its base to origin of ventral ; ventral with its outer edge evenly rounded anteriorly and becoming very oblique posteriorly. Greyish ; back with broad transverse brown bands

with darker edges and with less distinct intermediate bands composed of brown marbling or reticulations. Upper surface of head covered with reticulations, except for the first cross-band, which lies between the posterior halves of the eyes and has a convex posterior edge. The second band is represented by 2 oval patches at the level of the gill-openings, nearly meeting in the middle line ; the third is at the level of the posterior part of the pectoral ; the fourth, in front of the dorsal fin, is broken up into a median circular or oval and a pair of lateral semioval patches ; the fifth and seventh are through the bases of the dorsal fins, and there are 2 or 3 on the tail. Pectoral and ventral each with a large dark blotch; each dorsal fin with a dark blotch on its upper portion.

Total length 325 mm.

Two specimens from the coast of Natal, presented to the British Museum by Mr. J. F. Quekett.

Trigla Quehetti.

Depth of body 5[^] times in the length, length of head 31 times. Snout 1[^] times as long as eye, the diameter of which

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is 3[^] times in the length of head. Praeorbital ending in 2 spines anteriorly ; depth of suborbital equal to diameter of eye ; maxillary extending to below anterior edge of eye ; interorbital space slightly concave, its width | the diameter of eye. Dorsal IX, 19 ; the second spine the longest, ^ the length of head. Anal 18. Pectoral and ventral extending to origin of anal. Caudal very slightly emarginate. About 95 scales in a longitudinal series and 27 plates along the bases of the dorsal fins ; scales of the lateral line not enlarged and not spiny. Greyish ; pectoral blackish, except at its upper and lower margins ; other fins immaculate.

Length to base of caudal 260 mm.

A single specimen from the coast of Natal, presented to the British Museum by Mr. J. F. Quekett.

Petalichthys, gen. nov.

Closely allied to *Scomhresox*. Body elongate, strongly compressed. Both jaws produced into a long slender beak ; a series of small pointed teeth in each jaw ; palate toothless ; gill-openings very wide ; gill-rakers moderate. Scales small, deciduous ; lateral lines approximated ventrally, ending above the last rays of anal. Dorsal with 18 rays, elevated anteriorly, the posterior rays short, subequal, strongly branched, but not disconnected. Anal with 22 rays, com-

menting in advance of the dorsal and similar to it. Pectoral short, of 11 rays. Ventrals close together, 6-rayed, inserted far back. Caudal forked.

Petalichthys capensis.

Depth of body about 15[^] times in the length, length of head about 3[^] times. Snout, measured from anterior edge of eye to tip of upper jaw, 2[|] times as long as rest of head. Lower jaw projecting beyond the upper ; maxillary completely hidden beneath the preorbital. Diameter of eye greater than interorbital width and [^] the length of postorbital part of head. About 22 gill-rakers on the lower part of anterior arch, the longest [^] the diameter of eye. Length of pectoral nearly equal to depth of body. Origin of ventrals equidistant from posterior part of pectoral and base of caudal. Silvery ; darker above.

Length to base of caudal 320 mm.

A single specimen from Port Elizabeth, presented to the British Museum by Mr. Drege.

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Draconetta differs from *Harpagifer* in the more slender body, the complete absence of a lateral line, the large contiguous eyes, and the more pungent dorsal spines.

Harpagifer has been placed by Boulenger in the *Nototheniidae*, and after re-examination of the skeletons it appears to me beyond doubt that it is closely related to *Notothenia* ; consequently the family *Draconettidae* should be given up.

Draconetta acanthopoma, sp. n.

Depth of body 5f times in the length, length of head 3^ times. Eyes large, contiguous, their