American fauna, must be admitted to be well founded. It was certainly "new to the American fauna", unless it had been previously ascertained to be entitled to be so ranked. Unless Dr. Gambel's attributing this bird to California be admitted, which it cannot be without confirmation, no one can properly make any such claim. The Berlandier eggs—there were no birds—are unidentified, though probably genuine, but of Mexican origin. It is also included in Dr. Coues's Birds of the Northwest, where, however, it is only given as occurring "north *to* the Rio Grande"—not "north *of* the Rio Grande". As Dr. Coues gives no authority for regarding it as known to be North American, but stops at the boundary line, the inference is that its presence was conjectural and not positive.—T. M. B.

252. Podilymbus podiceps, (Linn.)

Occurs in winter.—(DRESSER, Ibis, 1866, 46.)

AUGUST 1, 1878.

ON A NEW SERRANOID FISH, EPINEPHELUS DRUMMOND-HAYI, FROM THE BERMUDAS AND FLORIDA.

By G. BROWN GOODE and TARLETON H. BEAN.

The National Museum possesses two specimens of a Serranoid fish, apparently undescribed, for which we propose the name *Epinephelus Drummond-Hayi*, dedicating the species to Colonel H. M. Drummond Hay, C. M. Z. S., of Leggieden, Perth, Scotland, formerly of the British Army, by whom the species was first discovered at the Bermudas in 1851.

The species is easily recognized by its numerous, small, star-like, white spots on a dark ground, a type of coloration not found in any other representative of this family hitherto described.

A collection of water-color drawings, lent to the Smithsonian Institution by Colonel Drummond Hay, contains an excellent sketch of one of these fishes, which was taken by him on the outer reef of the Bermudas in 1851. This specimen weighed 52½ pounds. The drawing is on the scale of one-fifth.

The smaller specimen (No. 16,795) is fifteen and three-quarters inches long. It was received in May, 1876, from Mr. E. G. Blackford, and was for some days on exhibition in the large glass refrigerator in the Government Building on the Exhibition Grounds in Philadelphia. It was said to have been brought from Southern Florida by one of the New York market fleet. A cast of this fish was made, as well as an accurate sketch in water-colors.

A second specimen (No. 21,255) was received early in May, 1878, from Mr. Silas Stearns of Pensacola, Fla. Its length is sixteen and three-quarters inches. The following description has been prepared from these two specimens. We have seen other specimens of this species in the

New York Aquarium, which were said to have been brought from the Bermudas. The fish belongs to the genus *Serranus* as defined by Günther, and to the genus *Epinephelus* as limited by Gill, having, in distinction from the allied genus *Trisotropis*, nine rays in the anal as well as other characters.

There is a remarkable uniformity in the measurements of the two specimens as given in tabular form below. That from Pensacola has longer fins, and the snout also a trifle longer. This is perhaps due to some slight distortion of the specimens, owing to the greater length of time which the first had been in alcohol.

Epinephelus Drummond-Hayi, *sp. nov.*, Goode & Bean.

Diagnosis.—Length of head about one-third of total length (including caudal), and three-eighths of length without caudal. Greatest height of body equal to length of head. Least height of tail equal to half the length of external caudal rays, and approximately to that of snout. Præoperculum finely and evenly serrated; denticulations somewhat coarser at the angle. Suboperculum and interoperculum denticulated for a short distance on each side of their common junction. Maxillary bone nearly and mandibular quite reaching to a line drawn vertically through the centre of the orbit.

Eye circular, its diameter contained six and one-third times in the length of the head, and slightly less than the width of the interorbital area, which is half the distance from the snout to the centre of the orbit.

Distance of dorsal from snout equal to the greatest height of the body, and twice the length of the mesial caudal rays or of ventral fin. The length of the first spine is less than half that of the second, and more than one-third that of the fourth, and longest. The length of the first ray is equal to or greater than that of the longest spine; that of the last ray, to the diameter of the eye.

The distance of anal from snout equal to twice the height of the body at the ventrals; the length of its first spine about equal to that of the first of the dorsal; the length of the third spine equal to that of the snout. The length of the first ray is about equal to that of the maxillary; that of longest ray nearly half the length of head; that of the last ray nearly equal to that of the second anal spine.

Caudal truncate when expanded; slightly emarginate when in natural position; covered with small scales nearly to its tip.

Length of median rays half that of the head, that of external rays equal to two-thirds the distance from snout to pectoral, and also to the length of that fin.

The distance of ventral from snout about twice its own length.

Radial Formula.—D. XI, 16; A. III, 9; C. + 14 +; P. I, 16; V. I, 5.

Scales in lateral line, 125; above lateral line, 32; below, 56–57.

Color, light umber-brown, everywhere densely spotted with irregular,

somewhat stellate, white spots, except upon the lips and under margin of the body. There are about forty of these patches between the gill-opening and the base of the caudal. A slight tendency to coalesce may be observed in the spots upon the sides.

At Pensacola, this fish is called the Hind; at the Bermudas, it is the "John Paw".

Table of Measurements.

Current number of specimen	16,795.		21,255.	
Locality	Bermuda.		S. Stearns. Pensacola, Fla.	
	Millim.	100ths.	Millim.	100ths.
Extreme length (to base of caudal)	335	.....	360	.....
Length to end of middle caudal rays	399	.....	426	.....
Body:				
Greatest height (behind ventrals)	.....	38	.....	38
Height at ventrals	.....	35	.....	36
Least height of tail	.....	11	.....	11
Head:				
Greatest length	.....	38	.....	38
Width of interorbital area	.....	7	.....	7
Length of snout	.....	10½	.....	11
Length of operculum (to end of flap)	.....	12	.....	12
Length of maxillary	.....	17	.....	17
Length of mandible	.....	21	.....	20½
Distance from snout to centre of orbit	.....	14	.....	14
Diameter of eye	.....	6	.....	6
Dorsal (spinous):				
Distance from snout	.....	38	.....	39
Length of base	.....	27	.....	29
Length of first spine	.....	4	.....	4½
Length of second spine	.....	10	.....	11
Dorsal (soft):				
Length of base	.....	21	.....	24
Length of first ray	.....	13	.....	13
Length of longest ray	.....	(6th) 14	.....	(4th) 15
Length of last ray	.....	6	.....	6
Anal:				
Distance from snout	.....	70	.....	70
Length of base	.....	16	.....	16
Length of first spine	.....	4½	.....	4½
Length of second spine	.....	8½	.....	9
Length of third spine	.....	10½	.....	10
Length of first ray	.....	16	.....	17
Length of longest ray	.....	(3d) 18	.....	(4th) 18½
Length of last ray	.....	8	.....	8
Caudal:				
Length of middle rays	.....	19	.....	19
Length of external rays	.....	22	.....	22
Pectoral:				
Distance from snout	.....	33	.....	34
Length	.....	21	.....	22
Ventral:				
Distance from snout	.....	38	.....	40
Length	.....	19	.....	19
Branchiostegals	7	.....	7	.....
Dorsal	XI, 16	.....	XI, 16	.....
Anal	III, 9	.....	III, 9	.....
Caudal	+14+	.....	+14+	.....
Pectoral	1-16	.....	1-16	.....
Ventral	1-5	.....	1-5	.....
Number of scales in lateral line	125	.....	125	.....
Number of transverse rows above lateral line	(32)	.....	32	.....
Number of transverse rows below lateral line	(56)	.....	57	.....

WASHINGTON, *May* 25, 1878.