with grayish, and not contrasting noticeably with the lesser coverts; six middle rectrices uniform cinereous, the outer pair with exterior webs uniform white. Wing, 9; tail, 3.80; culmen, 1.04; tarsus, 1.07; middle toe, with claw, 1.40. Hab.—Eastern South Pacific (off coast of Peru).

The comparison with E. defillipiana resting only on the description and a colored plate, it may be, therefore, that some of the differential characters adduced in the above comparative diagnosis would not be found to hold good on actual examination of specimens. This is particularly liable to be the case regarding the coloration of the rectrices in E. defillipiana, which are not described with sufficient detail, while the figure may not be perfectly accurate so far as this feature is concerned.

The most nearly related species with which I have been able to compare Œ. fisheri is Œ. gularis Peale. The latter, however, is very distinct, the coloration being in almost every respect dissimilar, while the bill is much stouter through the base, and the tarsi and toes decidedly shorter.

A Petrel captured in Livingston County, New York, in April, 1880, described by Mr. Brewster in the Bulletin of the Nuttall Ornithological Club for April, 1881, and there referred to E. gularis, seems, judging from the description, to belong rather to E. fisheri. Should such prove to be the case, Mr. Brewster was evidently wrong in his determination. The specimen in question was compared with the type of E. gularis, and the differences of plumage ascribed to difference of age of the two specimens; but no fact in ornithology can be more thoroughly established than that, with the possible exception of the Albatrosses, the Petrels have no distinct progressive stages of plumage, the young assuming with their first feathers the fully adult livery.

DESCRIPTION OF A SPECIES OF WHITEFISH, COREGONUS HOVI (GILL) JORDAN, CALLED "SMELT" IN SOME PARTS OF NEW YORK.

## By TARLETON H. BEAN.

Our attention has recently been called by the Rev. W. M. Beauchamp to a species of "smelt" in some lakes in New York, and finally Mr. J. C. Willetts has forwarded numerous specimens of this fish from Skaueateles. This is not an *Osmerus*, as the common name would imply, but a little-known *Coregonus*, and worthy of description.

The largest New York specimen of this fish now in the collection is numbered 32162 in the National Museum Register; it was obtained in Seneca Lake, in June, 1878, by Prof. H. L. Smith, who sent it to the Museum. Seven additional examples were received October 2, 1882, from Skaneateles, N. Y., whence they were forwarded by Mr. J. C. Willetts. The catalogue number of these specimens is 32165. The individuals

received from Mr. Willetts vary in length from  $5\frac{1}{2}$  to  $6\frac{1}{2}$  inches. Three of these examples have the air bladder much distended and filling the greater portion of the abdominal cavity.

The specimen received from Professor Smith, which we take as the basis of our description, is 10 inches long.

The species is most closely related to *C. artedi*, but differs from it and from all other species known to me in many important characters which have been only vaguely indicated in most of the published descriptions. It is much more widely separated from *C. artedi* than is the var. *sisco* of Jordan.

Description.—Body elongate, moderately compressed, slender. Head less compressed than body, its greatest width equaling one-half the distance from tip of lower jaw to nape; the lower jaw projecting considerably even when the mouth is closed. Mouth large, the maxillary reaching to the vertical through the anterior margin of the pupil. Preorbital bone long and slender, more than one-third as long as the head. Supraorbital as long as the eye, four times as long as broad.

The greatest height of the body is considerably less than the length of the head, and is contained five times in the total length without caudal. The greatest width of the body is less than one-half its greatest height. The least height of caudal peduncle equals the length of the orbit and about one-third of the greatest height of the body. Scales small, nine in an oblique series from the dorsal origin to the lateral line, eighty-two tube-bearing scales, and eight in an oblique series from the ventral origin to the lateral line.

The length of the head is one-fourth of the total length to the end of the lateral line. The distance of the nape from the tip of the snout is nearly one-third of the distance from the tip of the snout to the origin of the first dorsal. The length of the maxilla is one-third of the length of the head. The mandible is one-half as long as the head. Lingual teeth present. The eye is as long as the snout and one-fourth as long as the head. Gill rakers long and slender, the longest five-sixths as long as the eye; there are fifty-five on the first arch, thirty-five of which are below the angle. The insertion of the dorsal is nearer the tip of the snout than the end of the middle candal rays. The longest ray of the dorsal equals the greatest length of the ventral and is contained seven times in the total length to the end of the middle candal rays (six and two-third times in length to end of lateral line).

The length of the pectoral is one-sixth of the standard body length.

The insertion of the ventral is midway between the tip of the snont and the end of the middle caudal rays. When the ventral is extended the distance of its tip from the vent is only one-fourth of the length of the fin. In this respect this species differs widely from *C. artedi*.

COLORS.—Back grayish silvery; sides silvery; dorsal and caudal with darker tips.

Radial formula.—D. iii, 9; A. ii, 13; V. i, 12; P. i, 16; scales 9-82-8.

## Measurements.

Greatest width	•	Milli- meters.	Hundredth of length.
Body:         Greatest height         41           Greatest width         18           Height at ventrals         49           Least height of tail         15           Head:         15           Greatest length         52           Distance from snout to nape         36           Greatest width         20           Width of interorbital area         12           Length of snout         14           Length of poerculum         13           Length of mandible         26           Doral mater of eye         13           Distance from snout         112           Length of hase         20           Length of base         20           Length of longest ray         33           Length of longest ray         33           Length of longest ray         20           Length of longest ray         33           Length of longest ray         20           Length of longest ray         20           Length of longest ray         20           Length of longest ray         <			
Greatest width	Body:		10
Height at ventrals	Greatest height	41	1
Least height of tail	Greatest width	18	
Head	Height at ventrals	40	1
Greatest length		15	
Distance from snout to nape   36   Greatest width   20		E9	9
Greatest width	Distance from sport to pane	92	2-
Width of interorbital area	Greatest width	20	1
Length of snout	Width of interorbital area	19	
Length of maxillary   18   Length of maxillary   26   19   Diameter of eye   13   Dorsal (first)	Length of snout	. 14	
Length of mandible	Length of operculum	13	
Diameter of eye   13	Length of maxillary	18	
Dorsal (first):	Length of mandible	26	1
Distance from suont		13	
Length of base   20     Length of longest ray   33     Length of longest ray   11     Anal:			
Length of longest ray   33   1   1   2   2   2   2   2   2   2   2	Distance from shout	112	ā
Length of last ray	Length of base	20	1 .
Anal:  Distance from snont  Length of base  Length of longest ray  Length of longest ray  Length of longest ray  Early of longest ray  Length of fast ray  Length of set ray  Length of external rays from end of scales  Length of external rays  Distance from snont  Distance from snont  Distance from snont  Length  Length  Distance from snont  Length  Length  Di			1
Distance from snont	Anal:	11	
Length of base	Distance from snont	162	7
Length of longest ray	Length of base	24	i
Length of last ray   8	Length of longest ray	20	_
Length of middle rays from end of scales   12     Length of external rays   44     Pectoral:   45     Distance from snout   52     Length   36     Ventral:   5     Ustance from snout   118     Length   92     Ustance from snout   128     Length   129     Length   129     Origin from anal origin   48     End of extended ventral to anal origin   15     Dorsal   16     Dorsal   16     Ventral   16     Ventral   17     Number of scales in lateral line   17     Number of scales in lateral line   18     Canada   18     Canada   19	Length of last ray		
Length of external rays   44   Pectoral     Pectoral:			
Pectoral:         52         5           Distance from snout         52         5           Length         36         5           Ventral:         8         5           Distance from snout         18         5           Length         92         9           Origin from anal origin         48         5           End of extended ventral to anal origin         15           Dorsal         11, 13           Pectoral         1, 13           Ventral         1, 16           Ventral         1, 12           Number of scales in lateral line         1, 2           Number of transverse rows above lateral line         2           Number of transverse rows above lateral line         2	Length of middle rays from end of scales	12	
Distance from snout	Length of external rays	44	2
Length		#0	
Ventral?     118     5       Distance from snout     118     5       Length     32     1       Origin from analorizin     48     2       End of extended ventral to analorizin     15       Dorsal     11, 19       Anal     11, 13       Vectorial     1, 16       Vectorial     1, 16       Number of scales in lateral line     1, 16       Number of transverse rows above lateral line     82       Number of transverse rows above lateral line     6			
Distance from snout	Zentral	. 30	1
Length		118	5
Origin from anal origin			1
End of extended ventral to anal origin   15     Dorsal               Dorsal               Anal                 Pectoral                 Ventral                 Ventral                 Number of scales in lateral line           Number of transverse rows above lateral line           Number of transverse rows above lateral line             and                         and                         and                         and                         and                         and                         and                       and                       and                       and                       and                       and                     and                     and                     and                   and                   and                     and                   and                   and                   and                 and                 and                 and                 and               and                 and               and               and               and               and               and             and             and             and             and           and           and           and           and           and           and         and         and         and         and         and         and         and         and       and       and       and   and   and     and     and   and     and   and     and   and     and   and     and     and   and     and   and     and     and     and     and     and     and     and     and     and     and     and     and	Origin from analorigin	48	. 2
Anal   ii, 13   Pectoral   i, 16   Ventral   i, 16   Ventral   i, 12   Number of scales in lateral line   52   Number of transverse rows above lateral line   9	End of extended ventral to anal origin	. 15	-
Pectoral	Oorsal	iii. 9	
Ventral i, 12 Number of scales in lateral line 82 Number of transverse rows above lateral line 9	knal	ii, 13	
Number of scales in lateral line	'ectoral	i, 16	
Number of transverse rows above lateral line 9	entral	i, 12	
Number of transverse rows above lateral line 9	tumber of scales in lateral line	82	
	sumber of transverse rows above lateral line	9	

## NOTE ON A POTSDAM SANDSTONE, OR CONGLOMERATE, FROM BERKS COUNTY, PENNSYLVANIA.

## By GEORGE P. MERRILL.

This sandstone is a coarse compact rock of a greenish gray color, though many of the included pebbles are of a rose-red tint. The cementing material, which is of a greenish color, shows under the microscope a fibrous structure and remains always light between crossed Nicols. It bears very many inclosures of rounded and angular grains of hematite, which by reflected light are of a bluish luster somewhat resembling menaccanite, but giving no distinct reaction for titanic acid when subjected to the proper tests. They are of all sizes up to a millimeter in diameter. A section through one of the rose-colored pebbles shows it to be traversed in all directions by numerous fractures in which are included, as if deposited by infiltration, innumerable minute