coppery *red*, this color fading out on the thoracic region. Base of fins and different parts of the body sometimes with obscure small whitish spots.

Measurements.

(No. ——, United States National Museum, from Santa Barbara.)

Extreme length	10.40 inches.
Length to base of caudal	8.70 inches = 1.00
Greatest depth	.38
Least depth	.11
Length of head	.35
Diameter of eye	.085
Length of snout	.10
Width of interorbital area	.055
Length of supraocular ridge	.05
Length of occipital ridge	.06
Length of maxillary	.18
Distance from snout to dorsal	.325
Length of base of dorsal	.57
Height of longest spine	.13
Height of longest ray	.155
Length of base of anal	.135
Height of second spine	.14
Height of longest ray	.22
Length of caudal	.205
Width of base of pectoral	.11
Length of pectoral	.265
Length of ventral	.24

This species is found in great abundance about the island of Santa Catalina, where eight examples were obtained by the writers. Another was taken at Santa Barbara, where the species is considered rare by the fishermen. It seems to be intermediate between the still rougher-headed *S. nigrocinctus*, on the one hand, and the smoother *S. fasciatus* and *S. melanops* on the other.

ON THE OCCURRENCE OF CEPHALOSCYLLIUM LATICEPS (DUMÉRIL) GILL, ON THE COAST OF CALIFORNIA.

By DAVID S. JORDAN and CHARLES H. GILBERT.

While we were engaged in making collections on the coast of Los Angeles County, California, a shark was described to us by a Wilmington fisherman as having the habit when caught of filling himself with air "till he was big as a barrel," so that if thrown back in the water he would float away on the surface, belly upward, etc., exactly after the fashion of the species of *Tetrodon*. On cross-questioning, the fisherman assured us that the animal was a genuine shark, with the mouth underneath and many sharp teeth, and that he had frequently taken them near Wilmington.

At last one of these animals was brought in to us by a fisherman

named Vicente Leonardo, who took it in a gill-net off Santa Catalina Island. It proved to be a species of the genus *Cephaloscyllium* Gill, and apparently identical with the type of the genus (*Scyllium laticeps* Duméril). This species has been hitherto recorded, so far as we know, only from Tasmania.

The following is a description of our specimen (No. ———, United States National Museum):

Head short and broad, broader than long, and not half as deep as broad; snout very blunt, not projecting much beyond the mouth; eyes oblong, small, the spiracles behind them well developed; no nictitating membrane; nasal openings not confluent, their flaps separated by a broad space, the breadth of which is two-thirds the length of the snout; nasal flaps conspicuous, without cirrus; mouth very broad, not strongly curved, with only a trace of labial fold at the angle; skin at the angle of the mouth thin, smooth, pale, and raised into little cross-folds.

Teeth similar in both jaws, small, sharp, with a long central cusp and a small basal cusp on each side. About four series of teeth. Teeth $\frac{30+30}{27+27}$.

First dorsal beginning over middle of ventrals; second dorsal beginning behind front of anal and ending a little before end of anal; base of pectorals low and horizontal, the last two gill openings above them. Caudal fin short.

Color dark grayish-brown, with five pairs of dark bars across the back, their form irregular; the central pair bounded by straight lines and forming a cross-shaped figure; middle part of each fin blackish; entire surface of body and fins covered with round black spots of different sizes, these larger and less numerous on the belly; on the sides are also whitish spots, smaller and less numerous than the black ones.

This specimen was a female, with the ova nearly ripe. The stomach when received by us was much inflated. The intestines contained numerous specimens of a small gasteropod shell.

Other fishermen about Wilmington tell me that they take this shark occasionally, about two or three times a year, and that when fully inflated it is half as broad as long, a statement not hard to believe.

A fisherman at Santa Barbara, Mr. A. Larco, tells me that he also knows this shark. He has in his possession two egg-cases, with the eggs, which he says were taken from one of this species. These egg-cases are "wheel-barrow shaped," like the egg-cases of rays, and provided with long tendrils.

Measurements.

Length	37 inches = 1.00
Greatest depth (partly distended)	.22
Greatest width (partly distended)	.25
Length of head	.15
Greatest width of head	.18
Length of snout (from mouth)	.04
Length of branchial area	.08

Width of mouth	.14
Diameter of eye	.03
Distance from snout to first dorsal	.62
Length of base of first dorsal	.08
Distance between dorsals	.09
Length of base of second dorsal	.05
Height of second dorsal	.065
Length of base of anal	.065
Height of anal	.08
Length of caudal	.18
Length of pectoral	.21
Length of ventral	.11

ON THE OIL-SHARK OF SOUTHERN CALIFORNIA (GALEORHINUS GALEUS).

By DAVID S. JORDAN and CHARLES H. GILBERT.

Along the coast of Southern California a large species of shark appears in the spring in great schools. At certain places along the coast, especially about Newport Landing, in the southern part of Los Angeles County, the pursuit of this shark becomes a matter of considerable economic importance. They are taken easily with a hook, and sometimes great numbers of them may be surrounded and brought in with a seine. They are valued for their livers and fins. A single liver when the animals first arrive, in March, will yield a gallon of oil. As much as 4,000 gallons of this oil have been procured at Newport in a single season. The fins of this species are sold to the Chinamen, who find them a great delicacy, and pay for them 12½ cents a pound.

The present writers have succeeded in obtaining one of these "oil-sharks," and find the species to be the European tope, *Galeorhinus galeus* (*Galeus canis* and *vulgaris* of authors). It is singular that our only knowledge of the occurrence of this species on the west coast of America till now has been the indication by Dr. Günther of the presence in the British Museum of "*o.* Young. San Francisco. From Mr. Gruber's collection." Yet, in the waters of California south of Point Conception it is doubtless more numerous in individuals than all other species of sharks combined.

Measurements of an adult male oil-shark.

Length	63 inches = 1.00
Depth (greatest)	.14
Length of head	.18
Length of snout (below, from mouth)	.075
Length of snout (from eye)	.08
Width of mouth	.07
Length of spiracle	.0075
Diameter of eye	.025
Distance from snout to first dorsal	.33
Length of base of first dorsal	.073