

less than two diameters of the eye. The subsemicircular mouth is entirely at its lower side, the bones of the upper jaw being covered by the general integument which leaves only the extremity of the maxillary free, without forming labial folds. On the other hand, the mandible possesses a distinct fold on each side. The end of the maxillary is opposite to the middle of the eye.

Each jaw and the palate are armed with a series of small lancet-shaped teeth which are arranged with beautiful regularity. Those of the upper jaw are twenty-eight in number on each side, and have their sharp and acute points obliquely directed outwards. Those of the lower jaw are somewhat smaller, more erect, and twenty-five in number on each side. The palatine series is parallel to the intermaxillary series, and consists of fifty-four teeth. This bone is more movable than the upper jaw, opposed to the mandible, and evidently performs the function of a jaw.

The broad flexible gill-cover with its integument joins that of the other side, forming a broad bridge across the isthmus, from which it is entirely free. The supporting bones are so thin that none of them can be distinguished externally under the firm thick integument. There are four gills, but no pseudobranchia. The gill-rakers are moderately long, soft, and remote from each other, the anterior arch bearing about eighteen.

Dorsal spines short, distant from each other; among a series of seven specimens I count six in one, seven in four, and eight in two; a minute soft ray is generally visible behind the last dorsal spine. The anal fin commences immediately behind the vent and opposite to the space between the second and third dorsal spines (in a specimen with seven dorsal spines); the anal spines gradually increase in length behind, the last being two-ninths of the length of the head; there are thirteen in three examples, fourteen in three, and fifteen in one. The soft rays are all simple, and about one hundred and sixty in number; the extremities of the last are attached to the base of the extremely narrow caudal fin. The longest are at about the middle of the length of the fin and two-sevenths of the length of the head. Pectoral composed of twelve rays, of which the longest are in the upper half of the fin; its base is narrow and its length half of that of the head. Ventral fins far back, but not reaching to the vent; each consists of one spine and six or seven rays, of which the inner and outer one are simple, the latter being frequently transformed into a spine; the other rays are dichotomous. The two ventrals are broad, close together, and united by the interradiial membrane, which stretches across from one fin to the other. The scales are very thin and small, cycloid, suboval in shape, and cover almost every part of the body and head. Lateral line well developed, running a little above the middle of the depth and disappearing about the middle of the length of the tail.

Colour brown, inside of cavities black. Length, 18 to 20 inches.

Not rare in the deep water off the coasts of South Australia and New Zealand.