3 and 5). They are ail oviparous, their oblong egg-shells being produced at each corner into a long thread by which the egg is fastened to some fixed object. Some of the tropical species are ornamented with

a pretty pattern of coloration.

The two British species, the

Lesser and the Larger Spotted

Dog-Fish *(Sc. canicula* and

*Sc. catulus),* belong to the

most common fishes of the

coast, and are often con­

founded with each other.

But the former is finely dotted

with brown above, the latter having the same parts covered with larger rounded brown spots, some of which are nearly

as large as the eye. As regards size, the latter exceeds somewhat the other species, attaining to a length of 4 feet. Dogfishes may become

extremely troublesome

by the large numbers in

which they congregate at

fishing stations ; nor do

they compensate for the

injury they cause to

fishermen, being but

rarely used as food, ex­

cept at certain seasons

by the poorer classes

of the Mediterranean

countries, in China and

Japan, and in the Ork­

neys, where they are dried

for home consumption.

The Black-mouthed Dog-Fish *(Pristiurus melanostomus)* is another European species which is rarely caught on the British coasts, and is recognized by a series of small, fiat spines with which each side of the upper edge of the caudal fin is armed.

The Tiger-Shark *(Stegostoma tigrinum)* is one of the commonest and handsomest sharks in the Indian Ocean. The ground colour is a brownish-yellow, and the whole fish is ornamented with black or brown transverse bands or rounded spots. It is a littoral species, but adult specimens, which are from 10 to 15 feet long, are not rarely met far from land. It is easily recognized by its enormously long bladelike tail, which is half as long as the whole fish. The teeth are small, trilobed, in many series. The fourth and fifth gill-openings are close together.

The genus *Crossorhinus,* of which three species are known from the coasts of Australia and Japan, is remarkable as the only instance in this group of fishes in which the in­teguments give these inactive ground-sharks, whilst they lie concealed watching for their prey, what may be called a “ celative ” rather than a “ protective” resemblance to their surroundings. Skinny frond-like appendages are developed near the angle of the mouth, or form a wreath round the side of the head, and the irregular and varied coloration of the whole body closely assimilates that of a rock covered with short vegetable and coralline growth. This peculiar development reminds us of the similar condition in the sea- devil *(Lophius),* where it serves also to conceal the fish from its prey, rather than to protect it from its enemies. The species of *Crossorhinus* grow to a length of 10 feet.

The so-called Port Jackson Shark *(Cestracion)* is likewise a littoral form. Besides the common species (C. *philippi),*

three other closely allied kinds from the Indo-Pacific are known. This genus, which is the only existing type of a separate family, is one of special interest, as similar forms occur in Primary and Secondary strata. The jaws are armed with small obtuse teeth in front, which in young individuals are pointed, and provided with from three to five cusps. The lateral teeth are larger, pad-like, twice as broad as long and arranged in oblique series (fig. 7),—an

arrangement admirably adapted for the prehension and mastication of crustaceans and hard-shelled animals. The fossil forms far exceeded in size the living, which scarcely attain to a length of 5 feet. The shells of their eggs are not rare in collections, being found thrown ashore like those of our dog-fishes. The shell is pyriform, with two broad lamellar ridges each wound edgewise five times round it (fig. 8). .

The Spiny or Piked Dog-Fish *(Acanthias)* inhabits, like the majority of littoral genera of sharks, the temperate seas of both the northern and southern hemispheres. For some part of the year it lives in deeper water than the sharks already noticed, but at uncertain irregular times it appears at the surface and close inshore in almost incredible numbers. Couch says that he has heard of 20,000 having been taken in a sean at one time ; and in March 1858 the newspapers reported a prodigious shoal reaching westward to Uig, whence it extended from 20 to 30 miles seaward, and in an unbroken phalanx eastward to Moray, Banff, and Aberdeen. In the deep fjords of Norway, and indeed at every station of which a shoal of these fishes has taken temporary possession, line-fishing has to be suspended during the time of their visit, as they cut the lines with their scissors-like teeth. As expressed by the name, these