The arrow indicates the course of the respiratory current, which, however, may sometimes be temporarily reversed, especially in burrowing species.

The typical members of the family *Portunidae* (Swimming

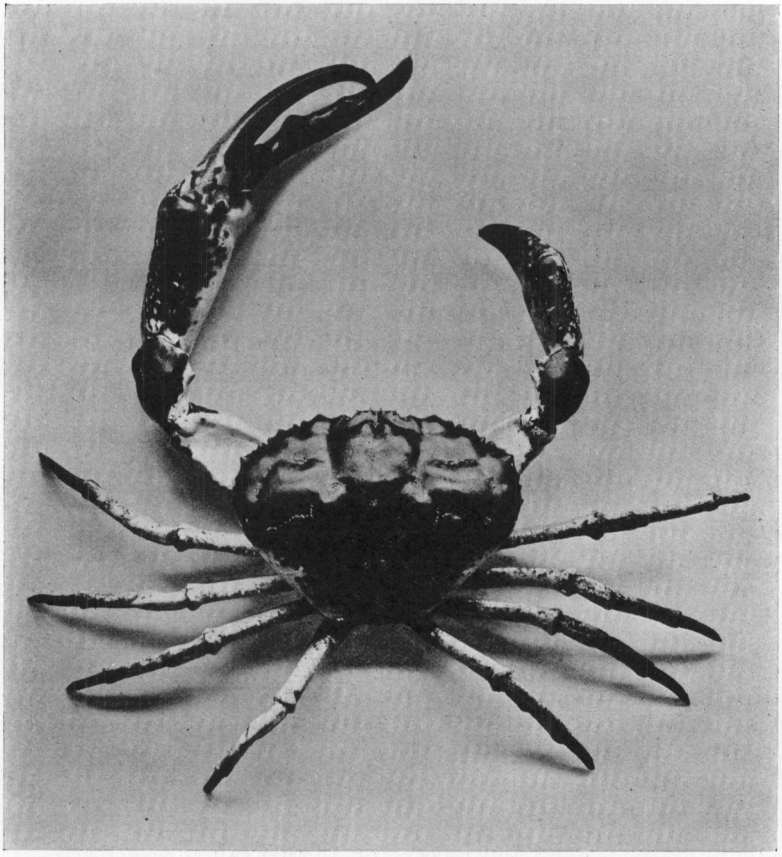


FIG. 46.

Pseudocarcinus gigas, from Tasmania. The carapace of this specimen is just over a foot in width. [Above Wall-cases Nos. 5 and 6.]

Crabs) may be recognised by the flattened, paddle-shaped, last pair of legs. Two British species of the genus *Portunus* are exhibited : the colours of *P. depurator* have been carefully copied from a living individual, and the specimen is mounted on a sample

of the shell-gravel on which it was actually caught. The large *Neptunus pelagicus* is the commonest edible Crab in many parts of the East. The Common Shore Crab, *Carcinus maenas*, is also referred to this family, although the paddle-shape of the last legs is not so marked as in the more typical Portunidae.

Podophthalmus vigil (Fig. 47) is remarkable for the great length of the eye-stalks, which is quite unusual among the Cyclometopa, and gives this Crab a curious likeness to the genus *Macrophthalmus* among the Ocypodidae (*see* Table-case No. 16). The resemblance, however, is quite superficial, for in this case

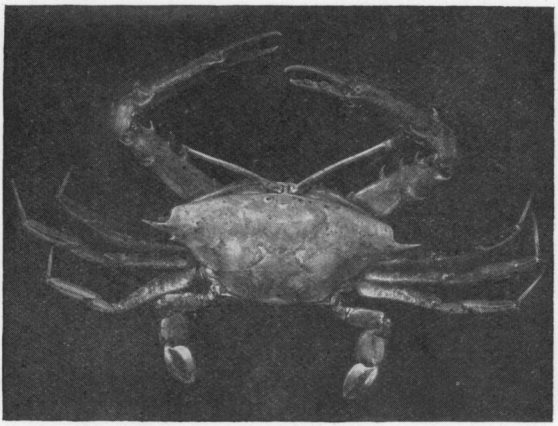


FIG. 47.

Podophthalmus vigil (reduced). [Table-case No. 15.]

it is the first of the two segments of the eye-stalk which is elongated, while in *Macrophthalmus* it is the second.

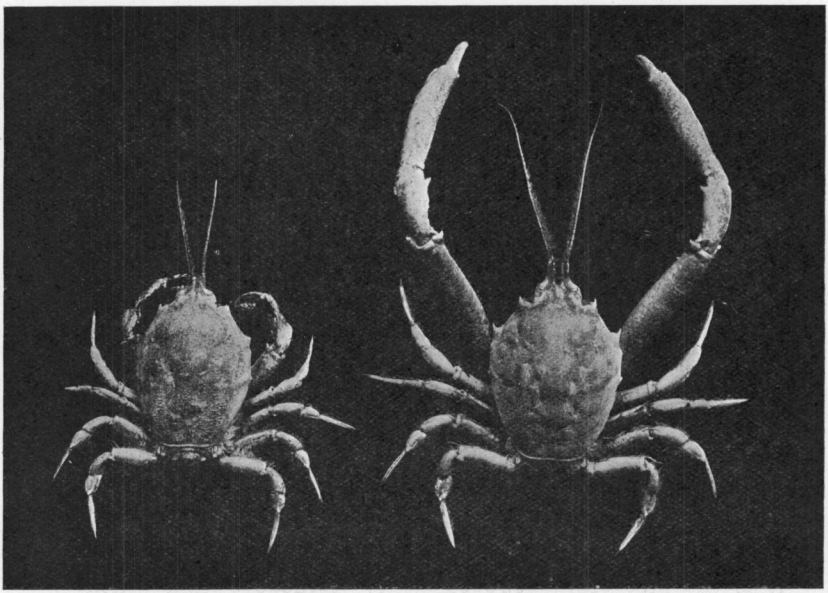
The genus *Platyonychus*, of which a group of specimens is mounted in Wall-case No. 5, also belongs to this family.

The *Cancridae* are distinguished from the preceding families by having the antennules folded longitudinally instead of transversely. To the typical genus *Cancer* belongs to the Edible Crab of British coasts, of which a large specimen is exhibited in Wall-case No. 5. The wide distribution of the genus is illustrated by species from the Azores and from New Zealand.

The family *Potamonidae* (*Thelphusidae*) comprises the River Crabs. In the shape of the carapace, which is generally more or less square, and in having the front bent downwards, these

Crabs show some resemblance to the next Tribe, Catometopa. They are widely distributed in fresh waters throughout the Tropics. *Potamon edule* (better known as *Thelphusa fluviatilis*) occurs in Italy and other parts of Southern Europe.

The family *Corystidae* includes Crabs which are allied to the Cancridae, but have long antennae, and the third maxillipeds are elongated, extending over the front edge of the mouth-frame. The latter character recalls the Oxystomata, which the members of this family also resemble in their sand-burrowing habits.



Female. Male.

FIG. 48.

Corystes cassivelaunus (slightly reduced). [Table-case No. 15.]

Corystes cassivelaunus (Fig. 48) is a common British species. The claws or chelipeds are much elongated in the male. The antennae are much longer than is usual in the Brachyura, and each bears a double row of bristles so arranged that when the antennae are brought together they form a tube, through which respiration can be carried on while the animal is buried in sand.

In the tribe CATOMETOPA the carapace is typically more or

less quadrate, with the front strongly bent downwards; the mouth-frame is square; the genital ducts of the male open on the sternum. A large proportion of the Crabs belonging to this tribe live on land, in fresh water, or between tide-marks on tropical shores. Only the chief families are illustrated in this Case.

The family *Geocarcinidae* (or *Gecarcinidae*) comprises the true Land Crabs, although some members of the other families also are almost entirely terrestrial in habits. The carapace is more or less transversely oval, and the front is of moderate breadth. The branchial regions of the carapace are generally swollen, and the lining membrane of the gill-chamber is richly supplied with blood-vessels, and acts as a lung. Typical genera are *Geocarcinus*, *Cardisoma*, and *Uca*.

The Crabs of the family *Grapsidae* are the most typical Catometopa. The carapace is nearly quadrilateral, with the front very broad and the orbits near the antero-lateral corners. Many species are estuarine or fluviatile in habitat. The species of *Grapsus* and allied genera are common shore Crabs in all the warmer seas.

The genus *Sesarma* and its allies include, for the most part, amphibious fresh-water Crabs, abundant in the tropical regions of the Old and New Worlds.

Varuna litterata is widely distributed throughout the Indo-Pacific region, and seems to be equally at home in fresh water and in the sea. It is often found clinging to drift-wood at the surface of the sea.

The little *Planes minutus* also lives at the surface of the open sea, clinging to floating weed or drift-wood, or to the bodies of large marine animals such as turtles. It is especially abundant in the Sargasso Sea, but is widely distributed in the warmer regions of all the oceans, and is occasionally carried to the South and West coasts of the British Islands. It is related of this species that "Columbus, finding this alive on the Sargasso floating in the sea, conceived himself not far from some land, on the first voyage he made on the discovery of the West Indies" (Sloane, Nat. Hist. Jamaica, ii. p. 2).

In the family *Ocypodidae* the front is generally narrow and the eye-stalks are often very long. Most of the species are amphibious shore Crabs, burrowing and often gregarious in their habits. Several species of the typical genus *Ocypoda* are exhibited.

The species of *Gelasimus*, often called "Fiddler Crabs" or "Calling Crabs" (Fig. 49), are common on most tropical shores, living in vast numbers in salt marshes or between tide-marks, where they make burrows in the sand or mud. A group of specimens of two species is mounted in Wall-case No. 5. The genus is of interest as exhibiting in an extreme degree two characters which are more or less marked in nearly all Crabs —the unequal development of the chelae or pincers on the two sides of the body, and their greater size in the male sex.

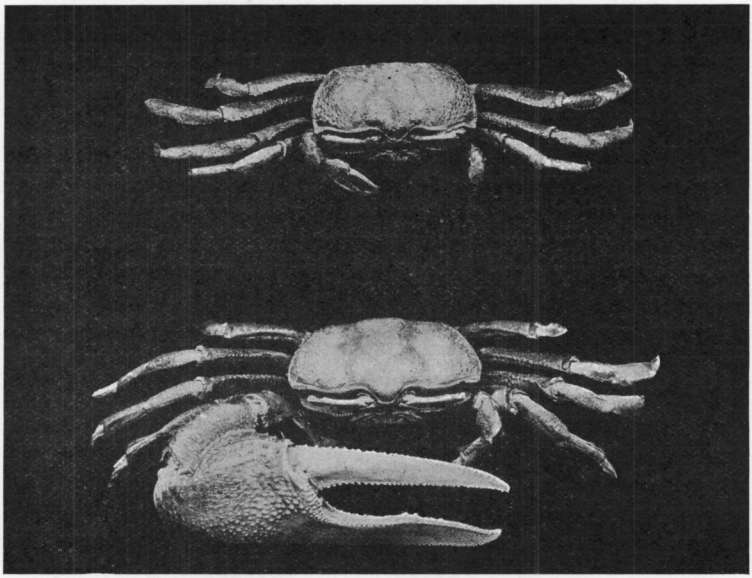


FIG. 49.

Gelasimus tangeri, male (below) and female (above). [Table-case No. 16.]

The large, brightly coloured claws are used by the males in fighting with each other, and are also believed to serve to attract the females.

Gelasimus tangeri occurs on the Spanish coast near Cadiz, where there is a regular "fishery" for these Crabs. Only the large claws of the males are taken, and are prepared for the market by cooking and then drying. After the claw has been torn away, the Crab grows a new one in its place, but these regenerated claws are smaller, and are regarded as of inferior quality.