

3. *Arachnids*.

Having the body in two parts, cephalothorax and abdomen (but in the lowest, Mites, only one, — the abdomen and thorax not separate segments) : as Spiders, Scorpions, Mites, Ticks.

4. *Limuloids*.

Limuloids are a nearly extinct tribe of species, related more nearly to the Arachnids than to Crustaceans. The only species in American waters is the *Limulus polyphemus*, or Horse-shoe, common on the coast of southern New England and to the southward. Limuloids differ from Crustaceans in not passing through the *Nauplius* stage in embryological development ; in having no antennæ corresponding to the first pair in Crustaceans ; and in having the two antennæ of the second pair chelate ; that is, terminating in pincers, and used for conveying food to the mouth, — a degenerate service for sense-organs.

A Paleozoic group, under the tribe of Limuloids, includes the *Eurypterids* — aquatic species having the long, jointed body of a Caligus among Crustaceans, but occasionally several feet in length. For figures, see pages 556, 623. They have two antennæ, like the Limulus, or none, and, moreover, the basal joints of part or all of the legs are the animal's jaws. Although aquatic species, they are related to the Scorpions, a division of Spiders. See further, page 513.

5. *Crustaceans*.

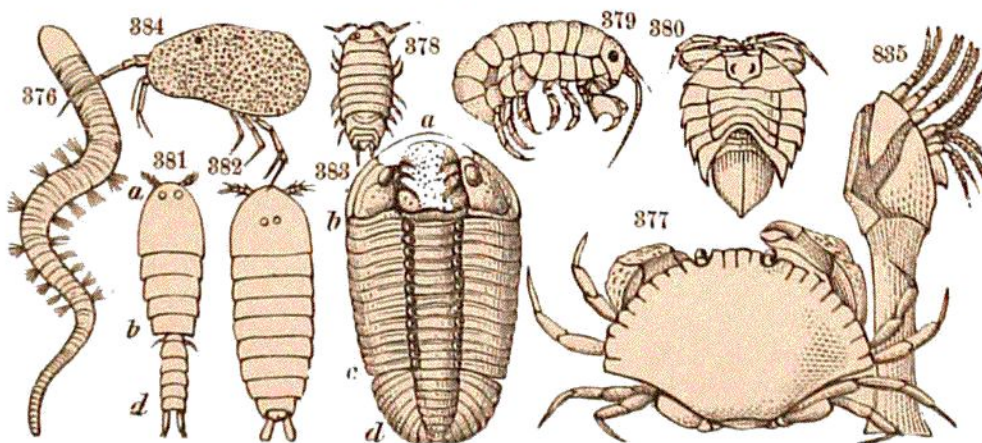
The class of Crustaceans is divided into : —

(1) Decapods (so-named from the Greek for *ten-footed*), as the Crabs, Lobsters, Shrimps, usually having 5 pairs of feet.

(2) Tetradeapods (named from the Greek for *fourteen-footed*), as the Sow-bugs and Sand-fleas.

(3) Entomostracans, irregular in number of feet, and usually without a regular series of abdominal appendages.

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ARTICULATES. — (1) *Worms* : 376, *Arenicola marina*, or Lob-worm ($\times \frac{1}{2}$). (2) *Crustaceans* : 377, Crab, species of *Cancer*; 378, an Isopod, species of *Porcellio*; 379, an Amphipod, species of *Orchestia*; 380, an Isopod, species of *Serolis* ($\times \frac{1}{2}$); 381, 382, *Sapphirina Iris*; 381, female; 382, male ($\times 6$); 383, Trilobite, *Calymene Blumenbachii*; 384, *Cythere Americana*, of the Cypris family ($\times 12$); 385, *Anatifa*, of the Cirriped tribe.

In an early stage of development, many young Crustaceans have a 6-footed free-swimming form, called a *Nauplius*, 2 of the feet being functionally antennæ and 4 of them legs, the third pair afterward becoming jaws. All Entomostraca pass through this Nauplius stage, and also a few of the higher kinds.

Among the *Decapods*, Crabs are called *Brachyurans*, — from the Greek for *short-tailed*, the abdomen being small and folded up under the body ; the Lobsters and Shrimps,