

Commensal, one that feeds with, not like a parasite at the expense of, another, 392, 579.

Commissures (commissura, a connection, a band), the longitudinal fibres connecting the various ganglia. In *Gammarus neglectus* Sars describes a cerebral ganglion, seven thoracic and four abdominal ganglia, with a pair of separate commissures between each and its successor. The last three are considerably longer than those in front. From all of them nerves are given off as well as from the ganglia. In their structure Sars distinguishes an outer membrane and an inner granular content, composed of numerous ganglionic cells. In the Caprellidae the abdominal commissures are naturally reduced to the vanishing point. 133, 489, 1646.

Complexly chelate or subchelate. "By this term [complexly] I mean, whenever the chelate character depends upon other joints than the propodos" (Brit. Mus. Catal. Amph. Crust., p. 262). For the German equivalents, see p. 597.

Condylipoda, condylipodes, condylopa, condylopes, condylopoda (κόνδυλος, knuckle or knob of a joint, πούς, a foot), "pattes noueuses," 72, 125.

Condylopa, 88.

Connective-tissue. "Immediately beneath the epithelial layer follows a tissue, disposed in bands or sheets, which extend to the subjacent parts, invest them, and connect one with another. Hence this is called *connective tissue*" (Huxley, The Crayfish, p. 178). Mayer describes it as a thin layer, not continuous but with lacunæ, under the whole epidermis in the head and body, present also in the antennæ and legs, except at their extreme points, throwing out attachments to the liver and stomach and heart, dividing the body into dorsal and ventral compartments, sheathing the ganglionic chain, and by its strong development in the branchiæ assisting in the purification of the blood, which is thus the longer exposed to the influence of the surrounding water. (Die Caprelliden, p. 130).

Coxopodite (coxa, the hip, πούς, a foot); the equivalents are first joint, side-plate, hanche, Basalglied, Hüftglied, Seitenplatte, erstes Coxalplatte, Coxa, Femur, Epimeron, Epimerum. It is a disputed question whether we have at the base of the Amphipod leg a lateral plate which is an outgrowth of the body-ring, carrying the more or less obsolescent first joint of the leg soldered to it, or whether the side-plate is itself a protective expansion of the first joint. 149, 289, 290, 365.

Crochet, 48, 140. See dactylopodite.

Crustacea (crusta, the hard surface of a body, the rind or shell, "Aquatilium tegumenta plura sunt. Alia . . . integuntur . . . crustis, ut locustæ," Plin. ix, 14), 6, 17, 52, 62, 66, 71, 78, 79, 125, 155, 169, 479, 552, 1655. See also Encycl. Brit., vol. vi. p. 333, 1878 (H. Woodward).

Crustaceology, a hybrid word used by Leach to include the natural history of Crustacea and Arachnides, 83.

Crustata. The word *Crustata* applied to animals appears first to occur in Pliny, xi, 62, "Et cochleæ dentes habent: indicio est etiam a minimis earum derosa vitis. At in marinis crustata et cartilaginea primores habere, item

echinis quinos esse, unde intelligi potuerit, miror." In Facciolati's Lexicon, the quotation, "in marinis crustata et cartilaginea primores dentes habent," makes Pliny assert the very thing of which he expresses himself as doubtful. Facciolati gives as an explanation of the word crustata, "h.e. pisces crusta, seu testa obducti." Jonston, De Exanguibus aquaticis, Lib. ii. c. 1, says, "Quæ Crustata Plinio, illa Latinis aliis Crustacea, quod molli crusta operta sint, Graecis μαλακόστρακα, eandem ob causam dicuntur. Medium inter Testacea et Mollusca sortita locum videntur. Nam quatenus foris crusta, etsi fragili et tenui obteguntur, cum testaceis conveniunt: quatenus molle carnosumque intus continent, mollibus comparantur." 2, 4, 193.

Cryptobranches (κρύπτω, I conceal, βράγχια, breathing-organs), 96.

Crystalline cones, Krystalkegel, cristallin, 154, 462, 481, 490, 495, 1638, 1652.

Crystallites, Cristallites, little plates, concentrically striped and radiated, found between the epithelium and cuticle in *Caprella* and some of the Gammaridæ. In diluted acetic acid they disappear with a lively evolution of gas. The markings can sometimes be subsequently traced in the cuticle (Hoek, Carcin., p. 98, 1879).

Cuisse. See Meropodite, 93, 140, 155.

Cupule membraneuse, 141, 543. See Calceolus.

Cuticle (cuticula, skin, diminutive of cutis); the outer layer of the integument, lining both the body externally, and internally the alimentary canal, with the exception of the midgut (Bruzolius, Mayer, Spencer), 574. According to Huxley, The Crayfish, pp. 33, 196, the exoskeleton or cuticle is "produced by the cells which underlie it, either by the exudation of a chitinous substance, which subsequently hardens, from them; or, as is more probable, by the chemical metamorphosis of a superficial zone of the bodies of the cells into chitin." It is this exoskeleton, and not the epidermis or true skin which secretes it, that is thrown off in the process of exuviation.

Cylinders, 480, 626. In the descriptive part of this Report the expression filamentary cylinders has been frequently used for the Riechzapfen or olfactory tubes, as they are generally supposed to be: but the single word filaments has been adopted in the later descriptions, since Leydig has applied the name cylinder to a different kind of appendage.

Cystibranches, Cystibranchia (κύστις, a bladder, βράγχια, breathing-organs), 95, 96, 99, 135.

Dactia (δάκνω, I bite), 282.

Dactylopodite (δάκτυλος, a finger or toe, πούς, a foot), seventh (sixth free) joint of the Amphipod leg; the equivalents are—sixth joint, seventh joint, claw, finger, nail, crochet, doigt, griffe, tarse, Klaue, Endklaue, dactylos, dactylus, unguis, 140, 149, 155, 290, 532.

Dactyloptera (δάκτυλος, finger, πτερόν, a wing), "this name is suggested for the two little wing-like plates on each pair of gnathopoda" (Spence Bate on *Phronima sedentaria*, Brit. Mus. Catal. Amph. Crust., p. 317), 1341.

Darmcanal, 489, 562, 598. See Alimentary Canal and Intestine.