- 36. The Amphitheet Pyramidal Ground-Forms.—The ground-forms whose geometrical type is the amphithect pyramid, are distinguished from the regular pyramidal forms, just discussed, chiefly by the form of the basal plane, which is not a regular, but an amphithect or elongated polygon (in the simplest case a rhombus). Hence in this case the alloplar main axis of the body is crossed by two transverse axes which are isopolar and at right angles, but are unequal; they cannot, however, be distinguished as sagittal and frontal axes as is the case in the zeugites. In the animal as well as in the vegetable kingdom, an important part is played by this ground-form, e.g., in the Ctenophora, where it is the rhombic pyramid. Among the Radiolaria it is not common, though it is clearly expressed among the Nassellaria in a number of Stephoidea (Stephanida and Tympanida), as well as in many Spyroidea (e.g., the bipedal Zygospirida). It is very accurately developed among the PHÆODARIA in the bivalved Phæoconchia (Pls. 121-128), where the two valves of the shell (dorsal and ventral) are generally exactly alike, their median keels corresponding to the poles of the sagittal axis. In the slit between the two valves lie the two secondary openings (right and left) of the tripylean central capsule, corresponding to the two poles of the frontal axis, and the main axis stands perpendicularly to both these, its oral pole being indicated by the astropyle, or principal aperture. (See Gener. Morphol., Bd. i. pp. 479-494.)
- 37. The Amphipleural Ground-Forms.—By the term amphipleural ground-forms are to be understood those usually defined as "bilaterally radial"; their geometrical type is a half amphithect pyramid. The best known examples of this form in the animal kingdom are the bilateral five-rayed Echinoderms (Spatangus, Clypeaster), in the vegetable kingdom the symmetrical five-rayed flowers (Viola, Trifolium). The three dimensive axes have the same relation as in the zygopleura, to be next discussed, and which also resemble them in being divisible only by one plane (the sagittal median plane) into two They differ, however, the amphipleural body not being made up of two equal halves. antimeres, but of at least three pairs of antimeres (or three parameres), being therefore primitively radial. Hence each of the symmetrical halves of the body contains more than one antimere. Among the Radiolaria this form does not occur in the Spumellaria, Acantharia, or Phæodaria; it is very common, however, among the Nassellaria; many Cyrtoidea multiradiata and Spyroidea multiradiata show this bilaterally radial ground-form, inasmuch as the body consists of two symmetrical halves, and is also composed of numerous (usually three, six, nine, or more) radial parameres. In the multiradiate Dicyrtida and Tricyrtida the cephalis (the first joint) is usually bilateral, whilst the thorax (the second joint) is multiradial. (See Gener. Morphol., Bd. i. pp. 495-506.)
- 38. The Zygopleural Ground-Forms.—As zygopleural or dipleural ground-forms, as opposed to the amphipleural, are classed those zeugites or centroplana which are known