

overlapped by a process from above and below, which covers it or encloses it within a groove, as has been previously described.

In *Aristeus semidentatus* the ophthalmus is hemispherical, and the peduncle suddenly narrows and tapers to the base. In *Penæus canaliculatus* the ophthalmopod is triarticulate and laterally compressed, the joints articulating with each other obliquely. It has rather a complicated appearance, having the ophthalmus situated obliquely at its extremity, the inner surface of which is flat, with a concave margin furnished with a small projecting pigmented process forming a connected imperfect ocellus near the middle of the arch. (Fig. III.). In *Hepomadus glacialis* the ophthalmopod is pear-shaped and flattened; and at the angle formed between the cylindrical and compressed portions there is a small papilla. A similar but more important papilla

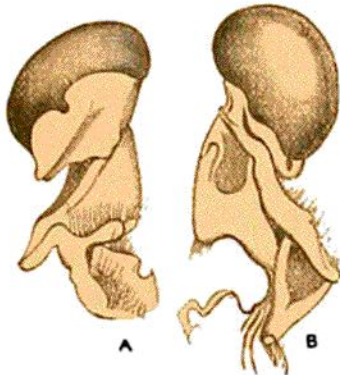


FIG. III.—*Penæus canaliculatus*. Ophthalmopod—  
A inner, B outer surface.

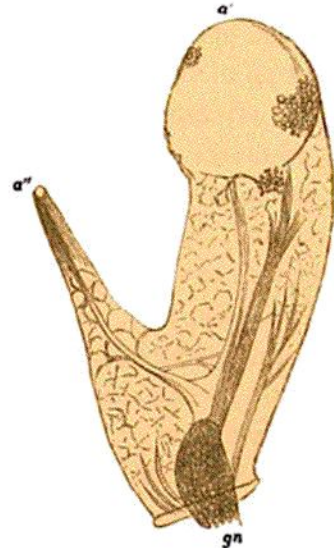


FIG. IV.—*Gennadas intermedius*. Ophthalmopod—  
a', ophthalmus; a'', ocellus; gn, optic ganglion.

may be found in *Benthesicymus* and *Gennadas*, which culminates in some, if not in all species into a prominently pointed tubercle, as shown in Fig. IV., having a small circular lens at its extremity (Pl. LVII. fig. 3a; Pl. LVIII. fig. 1a), to which a distinct branch of the optic nerve, originating in a ganglion at the base within the ophthalmopod, may be distinctly traced. This secondary organ consists of a single lens, is very translucent, and has no trace of pigment. It appears to be present only in deep-sea specimens, but it is not confined to those of the Dendrobranchiate division, inasmuch as a similar protuberance may be seen in *Bentheocaris* (Pl. CXXIII. figs. 3a, 4a), and in *Hymenodora* (Pl. CXXXVII.) among the Phyllobranchiata. This circumstance has induced me to believe that this pedicular ocellus may be an altered condition of the sessile ocellus so common among the species of the latter division, and traces of which