deep sea, crawl about protected by a borrowed shell, and on this, lives an animal allied to a Sea Anemone (*Epizoanthus parasiticus*), so that the combination is closely similar to that so familiar in shallow seas. *Pycnogonid* larvæ rear themselves as parasites within Hydroid colonies in the depths, just as in the shallows.

The depths of the sea being mostly dark, many of the animals inhabiting them are blind, like cave animals, and have their eyes reduced to mere rudiments. Many of these, such as some blind fish and Crustacea, are provided with enormously long and delicate feelers or hairs, in order that they may feel their way about with these, just as a blind man does with the aid of his stick.

Other deep-sea animals have their eyes enormously enlarged, and thus make the best of the little light there is in the depths. This light is, no doubt, as suggested in the early days of deep-sea dredging by Dr. Carpenter, Sir Wyville Thomson, and Mr. Gwyn Jeffreys,* that emitted by phosphorescent animals, especially Alcyonarians.

All the Alcyonarians dredged by the "Challenger" in deep water, were found to be brilliantly phosphorescent when brought to the surface, and their phosphorescence was found to agree in its manner of exhibition with that observed in the case of shallow-water forms. There seems no reason why these animals should not emit light when living in deep water, just as do their shallow-water relatives.

The light emitted by phosphorescent animals is quite possibly in some instances to be regarded only as an accidental product, and of no use to the animal producing it, although of course, in some cases, it has been turned to account for sexual purposes, and may have other uses occasionally. There is no reason why a constant emission of light should be more beneficial than a constant emission of heat, such as takes place in the case of our own bodies, and it is quite conceivable that animals might exist to which obscure heat-rays might be visible, and to which men and Mammals generally, would appear constantly luminous.

However, whether be the light beneficial to them or not, it seems certain that the deep sea must be lighted here and there by greater or smaller patches of these luminous Alcyonarians, with wide intervals, probably, of total darkness intervening; very possibly the animals with eyes congregate round these sources of light.

The nature of the light existing in the depths, has an important bearing on the question of the colouring of deep-sea

* "Proc. Roy Soc., 1869," p. 431.