

general cornea is peculiarly adapted to the uses of an animal destined to live at the bottom of the water: to look downwards was as much impossible as it was unnecessary to a creature living at the bottom; but for horizontal vision in every direction the contrivance is complete.* The form of each eye is nearly that of the frustum of a cone (see Pl. 45, Figs. 9 and 10.), incomplete on that side only which is directly opposite to the corresponding side of the other eye, and in which if facets were present, their chief range would be towards each other across the head, where no vision was required. The exterior of each eye, like a circular bastion, ranges nearly round three-fourths of a circle, each commanding so much of the horizon, that where the distinct vision of one eye ceases, that of the other eye begins, so that in the horizontal direction the combined range of both eyes was panoramic.

If we compare this disposition of the eyes with that in the three cognate Crustaceans, by which we have been illustrating the general structure of the Trilobites, we shall find the same mechanism pervading them all, modified by peculiar adaptations to the state and habits of each; thus in the Branchipus (Pl. 45, Fig. 3, b, b'), which moves with rapidity in all directions through the

* The faceted eyes of Bees are disposed most favourably for horizontal vision, and for looking downwards.—Lib. Ent. Knowl. v. xii. p. 130.