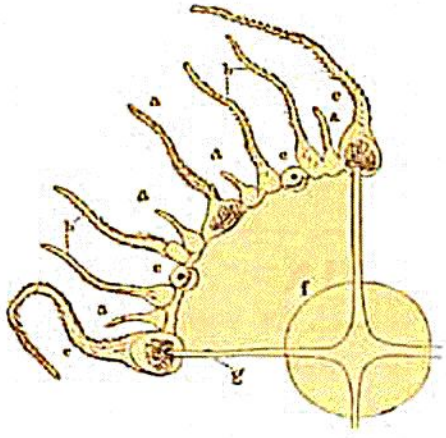
base, as in the latter, had a large cavity communicating with the circular tube. On both sides of, and in immediate juxtaposition to, each eye (*c*), there was a tentacle (*b*) nearly as far advanced as the secondary ones (*a*), but the base was as yet only slightly swollen, and contained scarcely any pigment cells within its cavity. Of these, the third group, there were sixteen, two for each of the eight compound eyes (*c*). The fourth, and youngest group (*d*), amounted to sixteen, one on each side of every primary (*c*) and secondary (*a*) tentacle. They were scarcely more than one third as long as those of the third group, and had perfectly transparent bases, which, however, were very nearly as broad as the bases of the third group. All the tentacles of the first, second, and third groups, bristled with well-developed lasso-cells, and, in the fourth group, these bodies were in a rudimentary state, just far enough advanced to appear like minute specks in the walls of the tentacles. The highly refractive corpuscules of the eyes (*c*) numbered no less than six or seven in each eye, and were arranged parallel-wise to the edge of the disk. There was also a pigment spot at the base of each eye, which was already so dense as to be more conspicuous than the refractive corpuscules. It thus appears that, after the first, the others, secondary tentacles, follow regularly in pairs. The mode of development of tentacles is very simple, and may be comprehended at a glance by inspecting the figures which we have given (Pl. XXXI. *Figs.* 10 and 11), to illustrate this process. The outer wall (*Fig.* 10, a^1) of the edge of the disk, together with the inner one (b^1), protrude in the form of a double-walled papilla (*a b*); this papilla continues to grow for a while by the same process with which it commenced; and in this way a hollow, double-walled (*Fig.* 11, *a b*), broad cone is produced. From this hollow base the solid portion, or tentacle proper, is developed; but we have not traced its cellular growth, and therefore cannot point out any thing beyond the general increase in proportions, size, and appearance, as we have done above for the medusa with forty tentacles. As the animal increases in size, the bell gradually broadens, as may be seen in our figures of a specimen one eighth of an inch in diameter (wood-cut 47). It has fifty-two tentacles, twelve between every two of the primary ones; the upper, or abactinal half (*b*) of the disk, is still as high as one fifth the transverse diam-

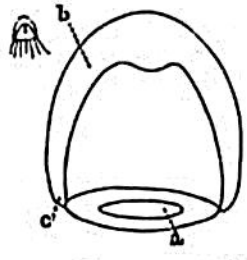
Fig. 46.



Quarter segment of a very young TIARORSIS.

a b d secondary tentacles. — *c c* primary tentacles. — *g* chymiferous tubes. — *e* compound eyes. — *f* opening of the veil.

Fig. 47.



Young TIARORSIS with fifty-two tentacles, and magnified disk.