

the peripheric side; but the wall is continuous with the outer wall (page 235, *Fig. 87* $\beta' \beta''$) of the tentacular apparatus, and thus the circle is completed.

The next system that demands our consideration is the largest of all; and we may call it the *radial system*, from the fact that it radiates equally on all sides, from the digestive cavity and the axial funnel to the peripheric systems. When seen from the actinal (*Fig. 21*) or abactinal pole, the cells seem to radiate in direct lines from an imaginary centre; but in a profile view (*Fig. 23*), the true course of these bodies ($m^2 t l^1$) is discovered to be in two oblique directions, one of which, radiating from the digestive cavity ($b c$), recedes from the actinal toward the opposite pole, and the other, radiating from the axial funnel (f), is inflected toward the digestive cavity as it passes on to the periphery. Besides the general direction of these two courses, there is another peculiarity which is quite remarkable: the axis of each cell, instead of being a straight line, is curved (*Fig. 24*); so that the main trend of these bodies does not recede in a direct course from the two polar ends of the body, but in long arches. The degree of flexure in these two courses varies in different parts of the body, and may be most appropriately described in connection with the details of this system, to which we now proceed. The shortest span which the radial system makes, lies between the corners of the mouth (*Fig. 21* a^1) and digestive cavity, and those bands of the interambulacral system which are in the plane of the latter organ, and therefore at right angles to the plane which passes through the tentacular sockets (j) and the two chymiferous tubes ($r r$) on each side of the digestive cavity. In this region the cells pass to the periphery in a course which recedes but little from the mouth, and which curves very slightly toward the centre of the body. In the same plane, at the opposite pole, the span is longer, on account of the smaller dimensions of the axial funnel (*Fig. 23* f), but the trend of the cells is about the same: in fact, they have the same trend and curve as at right angles to this plane (*Fig. 23* l^1) and at all intermediate angles.

But, to return to the actinal pole, we would remark that we find the trend of the radial system (*Fig. 21* $m m^2$) very much modified as we trace it through ninety degrees from the plane of the digestive cavity; for the recession becomes gradually more noticeable, until it reaches its maximum in the region where (*Fig. 23* m^2) the cells pass to the tentacular sockets (j) with a trend of forty-five degrees to the axis of the body. The span, which is so short opposite the corners of the mouth and digestive cavity, gradually increases in length, until it attains to the longest reach in passing to the chymiferous tubes ($l^1 l^3$ and $l^4 l^5$) which embrace the tentacular sockets (j); and then the latter, by obstructing the way, suddenly shorten it by more than one half.

This will be more fully comprehended as we now proceed to describe the several