rather wide tubes arising from the main trunks of the central chymiferous cavity, and following the middle of the lateral surface of the compressed digestive sac in a vertical course up to the margin of the mouth, as *Fig.* 21 *r r* shows. Toward the abactinal pole, however, the main cavity extends in the form of a funnel, and terminates with two holes near the centre of the circumscribed area. This funnel lies vertically in the centre of the animal, and extends therefore in its central axis. It assumes nearly the same appearance in whatever position it is seen, excepting only its abactinal termination, which is furcate when seen from the side, as in *Fig.* 22 f^1 f^2, and simple when seen in front, as in *Fig.* 23 f^1. This part of the cavity with its main lateral trunks being, as it were, the centre of the circulation, we may view it as a hollow axis branching right and left, and extending along the centre in two parallel forks, one on each side of the digestive cavity, as far as the mouth; so that, when examined from the side, only one of the two actinal forks is visible behind the tentacular socket, while the short abactinal forks, which are at right angles with the former, are both distinctly seen, and *vice versâ*. The main lateral stems and their ramifications present their broad side in the last position, and appear foreshortened in the other.

The two main lateral trunks (*Fig.* 23 *c c*) branch off at right angles from the central cavity, and extend sideways and for some distance horizontally, with a slight inclination towards the actinal pole, changing however their position to some extent, according to the state of contraction or distension of the digestive cavity. Six branches, or rather three, if we take their closer connection into account, arise on each side from these main trunks, besides those which are close to the digestive cavity. The fact is, that after giving off the cœliac tubes and before branching again, the two main trunks form, at their extremity, sideways, a sort of dilatation, from which arise two lateral branches extending horizontally backward and forward, and two others close together which extend in a vertical direction. The branches extending horizontally forward and backward give out, not far from their origin, two other branches, which also extend horizontally, but bend sideways, nearly at right angles with the former. All these branches originate so near the point where they communicate with the primitive main trunks, that they might, with almost equal propriety, be considered as arising directly from it. The termination of the main trunk may, indeed, contract or dilate in such a manner as to appear alternately divided into three, four, five, or six branches. In its most contracted state, for instance, when seen from the actinal pole, as in *Fig.* 21, there are distinctly six branches visible, arising from the main horizontal trunk, the two vertical ones appearing like very short tubes, because their whole length is foreshortened upon their origin, though they are actually as long as the others, while the four horizontal branches are seen for their whole extent,—two and two however, united by their