The mesenteric glands of the Whale contain large spherical cavities, into which the trunks of the lacteals open, and where the chyle is probably blended with secretions proper to those cavities; but no similar structure can be detected in terrestrial mammalia.

It is only among the Vertebrata that lacteal vessels are met with. Those of Fishes are simple tubes, either wholly without valves, or if their be any, they are in a rudimental state, and not sufficiently extended to prevent the free passage of their fluid contents in a retrograde direction. The lacteals of the Turtle are larger and more distinct than those of fishes, but their valves are still imperfect, though they present some obstruction to descending fluids. In Birds and in Mammalia these valves are perfectly effectual, and are exceedingly numerous, giving to the lacteals, when distended with fluid, the appearance of strings of beads. The effect of these flood-gates, placed at such short intervals, is that every external pressure made upon the tube, assists in the propulsion of the fluid in the direction in which it is intended to move. Hence it is easy to understand how exercise must tend to promote the transmission of the chyle. The glands are more numerous and concentrated in the Mammalia, than in any other class.

From the mesenteric glands the chyle is conducted, by the continuation of the lacteals, into a reservoir, which is termed the *receptacle of the chyle;* whence it ascends through the *thoracic duct,** which passes along the side of the spine, in a situation affording the best possible protection from injury or compression, and opens into the great veins leading directly into the heart.

In invertebrated animals having a circulatory system of vessels, the absorption of the chyle is performed by veins instead of lacteal vessels.

The sanguification of the chyle, or its conversion into blood, takes place, during the course of the circulation, and

* This duct is occasionally double.