

to a pulpy fluid called *chyme*, which varies in its nature with the food. Hence the function of the stomach has been named *chymification*. With this, the function of digestion is complete in many of the lower animals, and chyme is circulated throughout the body; this is the case in Polypi and Jelly-fishes, and some Worms and Mollusks. In other animals, however, the chyme thus formed is transferred to the intestine, by a peculiar movement, like that of a worm in creeping, which has accordingly received the name of *vermicular* or *peristaltic motion*.

209. The form of the small intestine (*i*) is less variable than that of the stomach. It is a narrow tube, with thin walls, coiled in various directions in the vertebrate animals, but more simple in the invertebrates, especially the insects. Its length varies, according to the nature of the food, being in general longer in herbivorous than in carnivorous animals. In this portion of the canal, the aliment undergoes its complete elaboration, through the agency of certain juices which here mingle with the chyme, such as the bile secreted by the liver, and the pancreatic juice, secreted by the pancreas. The result of this elaboration is to produce a complete separation of the truly nutritious parts, in the form of a milky liquid called *chyle*. The process is called *chyliification*; and there are great numbers of animals, such as the Insects, Crabs, and Lobsters, some Worms, and most of the Mollusks, in which the product of digestion is not further modified by respiration, but circulates throughout the body as chyle.

210. The chyle is composed of minute, colorless globules

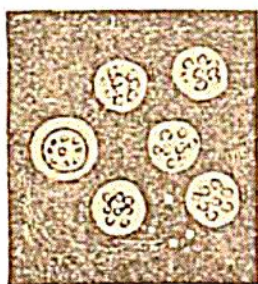


Fig. 53.

of a somewhat flattened form, (Fig. 53.) In the higher animals, the Vertebrates, it is taken up and carried into the blood by means of very minute vessels, called *lymphatic vessels* or *lacteals*, which are distributed every where in the walls of the intestine, and communicate