

vessels, opening on the inner surface of the small intestines, take up the chyle, and carry it, as has already been described, to the receptacle of the chyle, and from thence, by the thoracic duct, it joins the blood-vessels. The refuse of the aliment which has been taken up by these lacteal vessels, passes on through the large intestines, and at length is rejected from the body. It is conjectured that in the colon, or large gut which follows after the smaller intestines, the fatty matter of the body is secreted. Digestion is not brought about, as has by some been supposed, by any mechanical means, as by the grinding powers of the coats or sides of the stomach, nor by heat alone, nor fermentation, nor by the simple solution of the food in the fluid, but it is evident that it undergoes a series of chemical actions in the stomach and bowels, whereby its nature and properties *a. c.* completely changed; and thus animal and vegetable substances, however different, are reduced to one peculiar kind of fluid, the chyle, which, though it may be found to vary slightly according to the kind of food, is, in its general properties, always the same. The gastric juice varies in different animals. In those which feed on vegetable matters, it dissolves those substances only; whereas grain and vegetables pass through the stomach of a carnivorous animal without undergoing any change. It has this singular property, too, that although it readily dissolves dead animal matters, and reduces them in a short time to a thin pulp, it will not usually act on the living fibre; so that, after death, the coats of the stomach have been found dissolved into holes, by the same juice, that, when living, had no such effect. A stomach of some kind or other is found in all animals; for it is by this organ that nutrition and growth are solely promoted. There are some very simple animals whose whole body consists of a membrane formed into an oval hollow bag, or stomach, with a simple outlet for the mouth to take in nourishment, and no other organ whatever. Of this kind, too, is the polypus, which has a mouth and hollow stomach, with several tentacula or arms, by which it seizes the worms and grubs on which it feeds; these it swallows, abstracts their juices, and then voids the remainder from its mouth. The common leech has its whole body divided into a number of small cells, like a piece of honeycomb; and these receive the water