

mentalist, Spallanzani, who found, in numberless trials, that the gastric juice taken from the stomach, and put into glass vessels, produced, if kept at the usual temperature of the animal, changes, to all appearance, exactly similar to those which take place in natural digestion.\* In animals which feed on flesh, the gastric juice was found to dissolve only animal substances, and to exert no action on vegetable matter; while, on the contrary, that taken from herbivorous animals, acted on grass and other vegetable substances, without producing any effect on flesh; but in those animals, which, like man, are omnivorous, that is, partake indiscriminately of both species of aliment, it appeared to be fitted equally for the solution of both. So accurate an adaptation of the chemical powers of a solvent to the variety of substances employed as food by different animals, displays, in the most striking manner, the vast provision of nature, and the refined chemistry she has put in action for the accomplishment of her different purposes.

In the stomachs of many animals, as also in the human, it is impossible to distinguish with any accuracy the organization by which the secretion of the gastric juice is effected: but where the structure is more complex, there may be observed a number of glandular bodies interspersed in various parts of the internal coats of the stomach. These, which are termed the *Gastric glands*, are distributed in various ways in different instances: they are generally found in greatest number, and often in clusters, about the cardiac orifice of the stomach; and they are frequently intermixed with

\* The accuracy of this conclusion has been lately contested by M. De Montégre, whose report of the effects of the gastric juice of animals out of the body, does not accord with that of Spallanzani; but the difference of circumstances in which his experiments were made, is quite sufficient to account for the discrepancy in the results; and those of M. De Montégre, therefore, by no means, invalidate the general facts stated in the text, which have been established by the experiments, not only of Spallanzani, but also of Reaumur, Stevens, Leuret, and Lassaigue. See Alison's *Outlines of Physiology and Pathology*, p. 170.