

ing and vitalizing the different elementary substances. It is impossible to imagine that this organizing agency of the stomach can be chemical. This agency is *vital*, and its nature completely unknown."

CHAPTER IV.

EXAMINATION OF THE PROCESS OF REPRODUCTION IN ANIMALS AND PLANTS, AND CONSEQUENT SPECULATIONS.

Sect. 1.—The Examination of the Process of Reproduction in Animals.

IT would not, perhaps, be necessary to give any more examples of what has hitherto been the general process of investigations on each branch of physiology; or to illustrate further the combination which such researches present, of certain with uncertain knowledge;—of solid discoveries of organs and processes, succeeded by indefinite and doubtful speculation concerning vital forces. But the reproduction of organized beings is not only a subject of so much interest as to require some notice, but also offers to us laws and principles which include both the vegetable and the animal kingdom; and which, therefore, are requisite to render intelligible the most general views to which we can attain, respecting the world of organization.

The facts and laws of reproduction were first studied in detail in animals. The subject appears to have attracted the attention of some of the philosophers of antiquity in an extraordinary degree: and indeed we may easily imagine that they hoped, by following this path, if any, to solve the mystery of creation. Aristotle appears to have pursued it with peculiar complacency; and his great work *On animals* contains¹ an extraordinary collection of curious observations relative to this subject. He had learnt the modes of reproduction of most of the animals with which he was acquainted; and his work is still, as a writer of our own times has said,² "original after so many copies, and young after two thousand years." His observations referred principally to the external circumstances of generation: the anatomical examination was

¹ Bourdon, p. 161.

² *Ib.* p. 101.