

structure, but at the same time are admirably fitted to the habits of the animal. Occasionally, as in the fowl tribe of birds, the grinding apparatus is placed, not in the mouth, but in the stomach itself; this organ being, as it were, expressly contrived for trituration; while some of the functions the stomach performs in other animals, are transferred to contiguous parts.

The structure and mechanism of the stomach, and of the alimentary canal, then claim our particular attention. In carnivorous animals, whose food requires comparatively little assimilation, the alimentary canal is short, and of a simple structure. On the other hand, in vegetable feeders, that canal is long and complicated; but perfectly adapted for macerating their food, and for extracting from it, every thing that can be converted into nourishment. Nor is there an adherence to any model, but the whole alimentary structure is throughout varied; as if in order to demonstrate the power and the wisdom of Him, by whom the organization of animals has been contrived. Thus the alimentary canals of the cow, and of the horse, are formed on entirely different models; though the food of both animals is nearly the same.

We proceed in the next place, to the consideration of the *chemical changes*, which the food undergoes in the stomach and duodenum. In these changes we discover arrangements not