amount of power necessary for its conversion into that product. It is obvious, for example, that the chemical changes which vegetable food must be made to undergo, in order to assimilate it to blood, must be considerably greater than those required to convert animal food into the same fluid, because the latter is itself derived, with only slight modification, immediately from the blood. We accordingly find it to be an established rule, that the digestive organs of animals which feed on vegetable materials are remarkable for their size, their length, and their complication, when compared with those of carnivorous animals of the same class. This rule applies, indeed, universally to Mammalia, Birds, Reptiles, Fishes, and also to Insects: and below these we can scarcely draw the comparison, because nearly all the inferior tribes subsist wholly upon animal substances. Many of these latter animals have organs capable of extracting nourishment from substances which we should hardly imagine contained any sensible portion. Thus, on examining the stomach of the earth-worm, we find it always filled with moist earth, which is devoured in large quantities, for the sake of the minute portion of vegetable and animal materials that happen to be intermixed with the soil; and this slender nutriment is sufficient for the subsistence of that animal. Many marine worms, in like manner, feed apparently upon sand alone; but that sand is generally intermixed with fragments of shells, which have been pulverized by the continual rolling of the tide and the surge; and the animal matter contained in these fragments, affords them a supply of nutriment adequate to their wants. It is evident, that when, as in the preceding instances, large quantities of indigestible materials are taken in along with such as are nutritious, the stomach and other digestive cavities must be rendered more than usually capacious. It is obvious also that the structure of the digestive organs must bear a relation to the mechanical texture, as well as to the chemical qualities of the food; and this we find to be the case in a variety of instances, which will hereafter be specified.