lives upon totally different kinds of food, so we find that the structure of its alimentary canal, like that of the moth, undergoes a material change during these metamorphoses. The intestinal canal of the tadpole is of great length, and is collected into a large rounded mass, composed of a great number of coils, which may easily be distinguished, by the aid of a magnifying glass, through the transparent skin. During its gradual transformation into a frog, this canal becomes much reduced in its length; so that when the animal has attained its perfect form, it makes but a single convolution in the abdominal cavity.

A similar correspondence exists between the length of the canal, and the nature of the food in the class of Birds. At the termination of the small intestine there are usually found two cæca, which, in the gallinaceous and the aquatic fowls, are of great length: those of the ostrich contain in their interior a spiral valve. Sir E. Home is of opinion that in these animals the functions of the pyloric portion of the stomach are performed by the upper part of the intestine.

In the intestines of the Mammalia contrivances are employed with the apparent intention of preventing their contents from passing along too hastily: these contrivances are most effectual in animals whose food is vegetable, and contains little nourishment, so that the whole of what the food is capable of yielding is extracted from them. Sir E. Home observes that the colon, or large intestine of animals which live upon the same species of food, is of greater length, in proportion to the scantiness of the supply. Thus, the length of the colon of the Elephant, which inhabits the fertile woods of Asia, is only 26½ feet; while, in the Dromedary, which dwells in the arid deserts of Arabia, it is 42 feet. This contrast is still more strongly marked in birds. The Cassowary of Java, which lives amidst a most luxuriant supply of food, has a colon of one foot in length, and two cæca, each of which is six inches long, and one quarter of an inch in