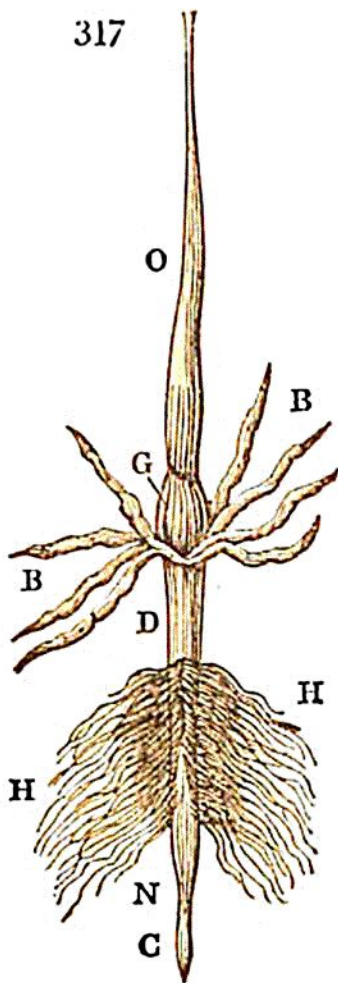


To engage in a minute description of the endless variations in the structure of the digestive organs, presented in the innumerable tribes which compose this class of animals, would be incompatible with the limits of this treatise. I



shall content myself, therefore, with giving a few illustrations of their principal varieties, selected from those in which the leading characters of structure are most strongly marked. I shall, with this view, exhibit first one of the simplest forms of the alimentary organs, as they occur in the *Mantis religiosa*, (Linn.) which is a purely carnivorous insect belonging to the order of Orthoptera. Fig. 317 represents those of this insect, freed from their attachments, and separated from the body. The whole canal, as is seen, is perfectly straight: it commences by an oesophagus (o,) of great length, which is succeeded by a gizzard (g;) at the lower extremity of this organ the upper hepatic vessels (b, b,) eight in number, and of considerable diameter, are inserted: then follows a portion of the canal (d,) which may be regarded either as a digesting stomach, or a chyloferous duodenum: farther downwards, the second set of hepatic vessels (h h,) which are very numerous, but as slender as hairs, are received; and after a small contraction (n) there is again a slight dilatation of the tube (c) before it terminates.

has been repeated by every succeeding anatomist; that almost all the insects belonging to the tribe of *Grylli*, possessed the faculty of ruminating their food; but this error has been refuted by Marcel de Serres, who has offered satisfactory evidence that in no insect is the food subjected to a true rumination, or second mastication, by the organs of the mouth. See *Annales du Muséum*, xx. 51 and 364.