

first stomach. The contrivance by which rumination is effected is very beautiful; and is connected with the peculiar arrangement already mentioned of the four stomachs, with respect to the œsophagus: but, as it would not be easy to give, in few words, more than a general outline of the stomachs of ruminating animals; for a particular description of them, we must refer the reader to anatomical works. The only other modification of the stomach which we shall notice, is that which exists in some birds; as for example, in the common fowl. The common domestic fowl, as well as many similar birds, has a sort of preliminary stomach, termed the *crop*, formed by an expansion of the œsophagus. In the crop, the hard seeds, and other compact substances which birds devour, are macerated and softened, and perhaps undergo further changes, before they enter the proper stomach, to be next considered. The proper stomach, or *gizzard*, of birds, is a hollow muscle of great strength, lined with a firm and thick epidermis, disposed in rugæ, and admirably adapted for triturating the hard matters which constitute their food. The small stones, these birds constantly swallow, seem also to promote this triuration.

We have given the above short sketch of the structure of the stomachs of animals, not only that we might impart to the general reader a faint conception of the extraordinary design