

The grass, which is devoured in large quantities by these animals, and which undergoes but little mastication in the mouth, is hastily swallowed, and is received into a capacious reservoir, marked 1 in the figure, called the *paunch*. This cavity is lined internally with a thick membrane, beset with numerous flattened papillæ, and is often divided into pouches by transverse contractions. While the food remains in this bag, it continues in rather a dry state; but the moisture with which it is surrounded contributes to soften it, and to prepare it for a second mastication; which is effected in the following manner. Connected with the paunch is another, but much smaller sac (2,) which is considered as the second stomach; and, from its internal membrane being thrown into numerous irregular folds, forming the sides of polygonal cells, it has been called the *honey-comb stomach*, or *reticule*. Fig. 313 exhibits the reticulated appearance of the inner surface of this cavity. A singular connexion exists between this stomach and the preceding; for, while the œsophagus appears to open naturally into the paunch, there is, on each side of its termination, a muscular ridge, which projects from the orifice of the latter, so that the two together form a channel leading into the second stomach; and thus the food can readily pass from the œsophagus into either of these cavities, according as the orifice of the one or the other is open to receive it.

It would appear from the observations of Sir E. Home, that liquids drank by the animal pass at once into the second stomach, the entrance into the first being closed. The food contained in the paunch is transferred, by small portions at a time, into this second, or honey-comb stomach, in which there is always a supply of water for moistening the portion of food introduced into it. It is in this latter stomach, then, that the food is rolled into a ball, and thrown up, through the œsophagus, into the mouth, where it is again masticated at leisure, and while the animal is reposing; a process which is well known by the name of *chewing the cud*, or *rumination*.