When the mass, after being thoroughly ground down by the teeth, is again swallowed, it passes along the æsophagus into the third stomach (3,) the orifice of which is brought forwards by the muscular bands, forming the two ridges already noticed, which are continued from the second stomach, and which, when they contract, effectually prevent any portion of the food from dropping into either of the preceding cavities. In the ox, this third stomach is described by Sir E. Home, as having the form of a crescent, and as containing twenty-four septa, or broad folds of its inner membrane. These folds are placed parallel to one another, like the leaves of a book, excepting that they are of unequal breadths, and that a narrower fold is placed between each of the broader ones. Fig. 314 represents this plicated structure in the interior of the third stomach of a bullock. Whatever food is introduced into this cavity, which is named, from its foliated structure, the many-plies stomach, must pass between these folds, and describe three-fourths of a circle, before it can arrive at the orifice leading to the fourth stomach, which is so near that of the third, that the distance between them does not exceed three inches. There is, however, a more direct channel of communication between the resophagus and the fourth stomach (4,) along which milk taken by the calf, and which does not require to be either macerated or ruminated, is conveyed directly from the æsophagus to this fourth stomach; for, at that period, the folds of the many-plies stomach are not yet separated, and adhere closely together; and, in these animals, rumination does not take place, till they begin to cat solid food. It is in this fourth stomach, which is called the reed, that the proper digestion of the food is performed, and it is here that the coagulation of the milk takes place; on which account the coats of this stomach are employed in dairies, under the name of rennet, to obtain curd from milk.

A regular gradation in the structure of ruminating stomachs may be traced in the different genera of this family of quadrupeds. In ruminants with horns, as the bullock