

are found in the well-known four stomachs of the animals that ruminate and have divided hoofs; as the cow and the sheep. We shall endeavour to give a general description of these four stomachs. The first stomach is denominated the *Paunch*, and in the adult animal is by far the largest. The second stomach follows, and may be regarded as a globular appendage to the paunch; from which it is distinguished, principally, by the regular and beautiful distribution of its internal membrane into polygonal cells. The third stomach is the smallest of the four; and is the most remarkable in its structure: its capacity is much diminished by numerous and broad duplicatures of its internal membrane, which are placed lengthwise, and vary in breadth in a regular order. The fourth stomach is next in size to the paunch, and is lined with a villous membrane, similar to the villous membrane of the human stomach, which this fourth stomach may be supposed to represent; the three preceding stomachs having been evidently intended to prepare the refractory food of the animal for the true digestive process, undergone in this last stomach. Every one is acquainted with the fact that animals furnished with the gastric arrangements above described, *ruminate*; that is to say, have the faculty of masticating a second time, and at their leisure, that food which had been hastily swallowed, and deposited in their