

many (at Degerloch, near Stuttgart, in 1847), later also in England (at Frome), in 1858. Similar teeth have lately been found also in the North American Trias, and have been described as *Dromatherium sylvestre*. These remarkable teeth, from the characteristic form of which we can conclude that they belonged to an insectivorous mammal, are the only remains of mammals as yet found in the older secondary strata, namely, in the Trias. It is possible, however, that besides these many of the other mammalian teeth found in the Jura and Chalk systems, which are still generally ascribed to Marsupials, in reality belong to Cloacal Animals. This cannot be decided with certainty owing to the absence of the characteristic soft parts. In any case, numerous Monotrema, with well-developed teeth and cloaca, must have preceded the advent of Marsupial animals.

The designation, "*Cloacal animals*" (Monotrema), has been given to the Ornithodelphia on account of the cloaca which distinguishes them from all other Mammals; but which on the other hand makes them agree with Birds, Reptiles, and Amphibia, in fact, with the lower Vertebrata. The formation of the cloaca consists in the last portion of the intestinal canal receiving the mouth of the urogenital apparatus, that is, the united urinary and genital organs, whereas in all other Mammals (Didelphia as well Monodelphia) these organs have an opening distinct from that of the rectum. However, in these latter also the cloaca formation exists during the first period of their embryonal life, and the separation of the two openings takes place only at a later date (in man about the twelfth week of development). The Cloacal animals have also been called "*Forked animals*," because the collar-bones, by means of the breast