

OUR BODILY FRAME

from the older class of amphibia, like birds and reptiles : yet they are distinguished from all the other tetrapods by a number of very striking anatomical features. Externally, there is the clothing of the skin with hair, and the possession of two kinds of skin glands—the sweat glands and the sebaceous glands. A local development of these glands on the abdominal skin gave rise (probably during the Triassic period) to the organ which is especially characteristic of the class, and from which it derives its name—the *mammarium*. This important instrument of lactation is made up of milk glands (*mammæ*) and the “mammæ-pouches” (folds of the abdominal skin); in its development the teats appear, through which the young mammal sucks its mother’s milk. In internal structure the most remarkable feature is the possession of a complete diaphragm, a muscular wall which, in all mammals—and *only* in mammals—separates the thoracic from the abdominal cavity; in all other vertebrates there is no such separation. The skull of mammals is distinguished by a number of remarkable formations, especially in the maxillary apparatus (the upper and lower jaws, and the temporal bones). Moreover, the brain, the olfactory organ, the heart, the lungs, the internal and external sexual organs, the kidneys, and other parts of the body present special peculiarities, both in general and detailed structure, in the mammals; all these, taken collectively, point unequivocally to an early derivation of the mammals from the older groups of the reptiles and amphibia, which must have taken place, at the latest, in the Triassic period—at least twelve million years ago! In all these important characteristics *man is a true mammal*.

The numerous orders (12-33) which modern system-