of all solid parts, could, unfortunately, as little as the Skull-less animals leave fossil remains. From its whole organization and ontogeny it is quite evident that it represents a very important intermediate stage between the Skull-less animals and Fishes, and that its few still existing members are only the last surviving remains of a probably very highly developed animal group which existed towards the end of the primordial period. On account of the curious mouth possessed by the Hags and Lampreys, which they use for sucking, the whole class is usually called Round-mouthed animals (Cyclostoma). The name of Single-nostriled animals (Monorrhina) is still more characteristic. For all Cyclostoma possess a simple, single nasal tube, whereas, in all other Vertebrate animals (with the exception of the Amphioxus) the nose consists of two lateral halves, a right and a left nostril. We are therefore enabled to comprise these latter (Anamnionata and Amnionata) under the heading, double-nostriled animals (Amphirrhina). All the Amphirrhina possess a fully developed jaw-skeleton (upper and under jaw), whereas it is completely wanting in the Monorrhina.

Apart also from the peculiar nasal formation, and the absence of jaws, the Single-nostriled animals are distinguished from those with double nostrils by many peculiarities. Thus they want the important sympathetic nervous system, and the spleen which the Amphirrhina possess. Of the swimming bladder, and the two pairs of legs—which all double-nostriled animals have, at least in their embryonic conditions—not a trace exists in the Single-nostriled animals, which is the case also in the Skull-less animals. Hence, we are surely justified in completely