

THE PHYLOGENY OF THE SOUL

representative is the lancelet or amphioxus; the psychic organ remains a simple medullary tube, and contains a regularly segmented spinal cord, without brain.

II. Second stage—the *cyclostomata*: the oldest group of the craniota, now only represented by the *petromyzontes* and *myxinoïdes*: the fore-termination of the cord expands into a vesicle, which then subdivides into five successive parts—the great-brain, intermediate-brain, middle-brain, little-brain, and hind-brain: these five cerebral vesicles form the common type from which the brain of all craniota has evolved, from the lamprey to man.

III. Third stage—the *primitive fishes (selachii)*: similar to the modern shark: in these oldest fishes, from which all the gnathostomata descend, the more pronounced division of the five cerebral vesicles sets in.

IV. Fourth stage—the *amphibia*. These earliest land animals, making their first appearance in the Carboniferous period, represent the commencement of the characteristic structure of the *tetrapod* and a corresponding development of the fish-brain: it advances still further in their Permian successors, the *reptiles*, the earliest representatives of which, the *tocosauria*, are the common ancestors of all the amniota (reptiles and birds on one side, mammals on the other).

V.-VIII. Fifth to the eighth stages—the *mammals*. I have exhaustively treated, and illustrated with a number of plates, in my *Anthropogeny*, the evolution of our nervous system and the correlative question of the development of the soul. I have now, therefore, merely to refer the reader to that work. It only remains for me to add a few remarks on the last and most interesting class of facts pertaining to this—to the evolution of the soul and its organs within the limits of the class