

man. A *certain proof* of this is furnished by the Amphioxus, which in spite of its blood relationship to Man still passes through the stage of the gastrula with a simple intestine and a double intestinal wall. (Compare Plate X. Fig. *B* 4.)

SIXTH STAGE : Gliding Worms (Turbellaria).

The human ancestors of the sixth stage which originated out of the Gastræada of the fifth stage, were low worms, which, of all the forms of worms known to us, were most closely allied to the Gliding Worms, or Turbellaria, or at least upon the whole possessed their form value. Like the Turbellaria of the present day, the whole surface of their body was covered with cilia, and they possessed a simple body of an oval shape, entirely without appendages. These acelomatous worms did not as yet possess a true body-cavity (coelom) nor blood. They *originated* in the early primordial period out of the Gastræada, by the formation of a middle germ-layer, or muscular layer, and also by the further differentiation of the internal parts into various organs; more especially the first formation of a nervous system, the simplest organs of sense, the simplest organs for secretion (kidneys) and generation (sexual organs). The proof that human ancestors existed of a similar formation, is to be looked for in the circumstance that comparative anatomy and ontogeny point to the lower acelomatous Worms as the common primary form, not merely of all higher Worms, but also of the four higher tribes of animals. Now, of all the animals known to us, the Turbellaria, which possess neither a body-cavity nor blood, are most closely allied to these primæval acelomatous Primary Worms.