

EVOLUTIONARY STAGES OF THE PRINCIPAL  
GROUPS OF VERTEBRATA.\*

STAGES OF THE PAIRED LIMBS.	CLASSES.	STAGES OF THE HEART.
I. <i>Adactyla</i> s. <i>Impinnata</i> . Without jaws and limbs.	1. <i>Acrania</i> .  2. <i>Cyclostomata</i> .	1. <i>Leptocardia</i> . Cold-blooded ; heart with one chamber ; without lungs.
II. <i>Polydactyla</i> s. <i>Pinnata</i> . With two pairs of fins.	3. <i>Pisces</i> .  4. <i>Dipnoi</i> .	II. <i>Ichthyocardia</i> . Cold-blooded ; heart two-chambered, with one atrium and one ventricle ; heart con- taining venous blood only ; without lungs.
III. <i>Pentadac- tylia</i> s. <i>Tetrapoda</i> . With two pairs of pen- tagastryle limbs (unless they have been lost by reduction).	5. <i>Amphibia</i> .  6. <i>Reptilia</i> .  7. <i>Aves</i> .  8. <i>Mammalia</i> .	III. <i>Amphicardia</i> . Cold-blooded ; heart with three complete chambers, namely, with two atria and one ven- tricle, or (Reptilia) two ventricles with still in- complete septum ; heart containing mixed ven- ous and arterialized blood ; with lungs.
		IV. <i>Thermocardia</i> . Warm-blooded ; heart with four complete chambers, namely, two auricles and two ven- tricles ; right half of the heart with venous, left half with arterialized, blood ; with lungs.

\* Abridged from Haeckel's 'Systematische Phylogenie  
der Vertebraten,' § 14.