



HEART AND ARTERIAL TRUNKS OF A CHELONIAN—(AFTER GEGENBAUR).

v	Ventricle.	l p	Left Pulmonary.
r, l	Right and left auricles.	r s	Right subclavian.
r a	Right aorta.	l s	Left subclavian.
l a	Left aorta.	c	Carotids.
r p	Right pulmonary.		

The sinus and sinus extension are concealed in this view.

The structure of the heart of the land tortoise, both muscular and nervous (ganglia), has been thoroughly studied by Gaskell, and the following quotation from his paper (*Jour. of Phys.*, Vol. III, Nos. 5 and 6) will give both the site and functions of these intra-cardiac nervous structures:—

“ We are led, therefore, to the conclusion that the heart contains two kinds of nerve centres—the one motor, the other trophic; motor nerve cells of different excitabilities, the most excitable in the sinus and at the junction of the sinus with the auricles; less excitable in the basal wall, between the auricles, and least excitable at the junction of auricles and ventricle; trophic nerve cells which regulate the formation processes in the auricular muscle at all events, and which are distributed throughout along the course of the nerve fibres from the sinus to the ventricle. The vagus acts on both classes of nerve cells—in the one case altering the rate of the motor discharges, and, therefore, the rate of rhythm; in the other, causing modifica-