

What is depicted in Plate (fig. 1) as *ganglion cardiacum basale* must be regarded as the results of the fusion of the inferior cervical ganglion and the first thoracic (G. stellatum).

All of the ganglia, except this one, are very ill-defined cordiform swellings, scarcely recognizable but for the branches they give off.

The accelerating branch from the middle cervical ganglion is very much more constant and very much better defined even in *C. mydas* than in the Terrapin. The branch has not in my specimens ever been paired.

The vagus ganglion on its main stem is slightly better marked than the one corresponding to it on the sympathetic. It gives off a very great number of strong branches to parts below (fig. 2.)-

The brachial plexus in the sea-turtle is exceedingly strong, and forms an interlacement of great complexity. The branches proceed from the fifth or sixth to the ninth metamere.

From the ganglion cardiacum basale, several branches proceed upwards to the different parts of the brachial plexus, and downwards to various parts, some of them probably to the heart.

VIII. *Cardiac Acceleration by stimulation of the Sympathetic.*

I. Stimulation of the sympathetic above the middle cervical ganglion produces no decided and constant effects on the cardiac rhythm; but influences the eye as in the Terrapin and land tortoise, *i.e.*, the lower lid is depressed and the upper lid elevated; at the same time, the pupil is moderately dilated. In consequence of the imperfect development of the nictitating membrane in the sea-turtle, little effect is seen in this structure; the dilation of the pupil has seemed to me to be less marked than in the Terrapin. It has now been shown that in all the Chelonians the main sympathetic has throughout similar functions, not only on the heart but on the eye.

2. Stimulation of the branch from the middle cervical ganglion has produced more constant effects than the cor-