

investigations of this subject in the terrapin go, the following statements may be made; and as this subject seems to me of the utmost importance to medicine, I shall give the results very much in the words of my original paper:—

1. “*The action of the heart being slow, the acceleration is very marked; if rapid, it may be slight or wholly wanting. It follows the same laws in this respect, in fact, as the accelerating sympathetic—i.e., the degree of acceleration is inversely as the rhythm at the moment of stimulation.*”

2. “*The after acceleration always lasts a considerable time, and in some cases a very long period.*”

3. “*The heart being feeble, and its nutrition suffering, vagus stimulation then produces its most marked effects on both rate and force of beat, but especially on the latter.*”

4. “*Stimulation of the vagus removes peculiarities of rhythmic sequence.*”

5. “*Stimulation of the vagus gives rise to increased diastolic relaxation.*” This refers to the effect during actual stimulation; it is never a genuine after-effect, though it may for a few seconds outlast the stimulation.

As a primary effect of stimulation, must be noted also: (a) Weakening of the cardiac pulsations without alteration of the rate of beat; (b) A similar weakening or slowing, or both, prior to actual stand-still.

Eichorst and Zander had noted degenerative changes in the heart after section of both vagi. Traube had also pointed to isolated facts of similar import, and with a fine insight read their meaning in the dim light of his day.

Gaskell and Heidenhain, whose work was published about the same time, had, though with different explanations, pronounced the vagus the *trophic* nerve of heart.

Ransom has furnished unmistakable evidence for the truth of such a view as applied to the cephalopod mollusk, *Octopus*.

In my own experiments on the chelonians, the heart has been studied in all conditions of nutrition—most of the cases being kept under observation for two and often for three days; these observations have also been extended to the fish and the alli-