

In the presence of much chromlipin (lipochrome) this method does not work so well as it requires from 12 to 24 hours for the insoluble lipins to separate out and as a rule the precipitate goes to the bottom of the container instead of rising to the surface. It appears from this observation that the presence of chromlipin in some way changes the physico-chemical conditions of the associated lipins.

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**Note on the effect of the internal secretions upon the volume of the pancreas.**

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We have studied the action of infusions of the various dried glands upon the volume of the pancreas. The animals used were etherized cats. The injections were made per jugular. The volume of the pancreas was registered with a modified piston recorder.

Infundibulin (pituitrin) causes a marked increase in the volume of the pancreas. Adrenalin produces a decrease in volume for a short time and then an increase. The pineal gland infusion increases the volume. Infusion of thyroid momentarily decreases and then increases the volume. Iodothyryn also increases the volume. Thymus does the same.

Secretin depresses blood-pressure for a short time and increases the volume of the pancreas to a marked extent.

Infusion of pancreas decreases the volume for a moment and then increases the volume of the pancreas. The renal cortex decreases the blood-pressure for a moment, but increases the volume of the pancreas to a marked extent.

Prostatic infusion had no effect on pancreatic volume. Tonsillar infusion lowered blood-pressure and slightly increased volume of pancreas.

Mammary gland infusion decreased blood-pressure for a short time but caused a marked increase in pancreatic volume.

Spleen infusion had no effect on volume of the gland. The same may be said for orchitic extract.

Parathyroid infusion decreases blood-pressure for a short time, also decreases pancreatic volume for a short period, and then greatly increases it.

Infusion of corpus luteum decreases blood-pressure momentarily and increases the volume of the pancreas.

Pineal infusion increases the flow of pancreatic juice.

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### **The origin of the cardiac impulse in the turtle's heart.**

(PRELIMINARY COMMUNICATION.)

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Recent work has emphasized the sinoauricular node as the seat of origin of the cardiac impulse in the normal heart. This structure must be considered anatomically as forming a connection or junction between remains of the primitive sinus, which has disappeared as a separate chamber in the mammalia, and the auricle. Since indications of the presence of a sinoauricular junction, composed of tissue differentiated histologically from the ordinary cardiac muscle, is found not only in those hearts in which the sinus has disappeared as a separate chamber, but also in the amphibia and reptiles, where a separate sinus venosus is present, it becomes of essential importance to determine whether or not in these animals the heart beat arises as it does in the mammalian heart, that is in the sinoauricular junction. This problem may be attacked by determining that region which shows initial electric negativity when connected with the string galvanometer. We have had this problem in mind for some time, but have been unable to proceed with it because of the difficulty in securing material with sufficiently large hearts to test this point satisfactorily. Recently we have been able to secure one large turtle in which the heart was of sufficient size. In this the right half of the sinus was 35 millimeters long and 20 millimeters wide at its