Important parts of the mid, 'tween and fore brain (inferior lobes, central gray, striatum [?], etc.) belong to the same category as the tract and commissural cells of the medulla and cord. The nucleus of the posterior commissure and the olfactory apparatus cannot be compared with any structures in the cord or hind brain. There is no essential resemblance between the olfactory nerve and its central apparatus and the typical cranial nerves and their centers. The olfactory nerve has no segmental value.

The Development of the Postcaval Vein in Didelphys Virginiana: C. F. W. McCLURE.

The variations in the mode of origin of the postcaval vein of the common opossum are so extreme as to preclude our formulating a typical arrangement for the species as a whole. The different modes of origin which characterize the postcaval vein in the adult are briefly as follows:

1. The postcaval vein may be formed through a union of the iliac veins which takes place *ventral* of the common iliac arteries (type I.);

2. Through a union of the iliac veins which takes place *dorsal* of the common iliac arteries (type II.); or,

3. Through a union of the iliac veins which takes place both *dorsal* and *ventral* of the arteries in question (type III.).

A study of the embryonic development of the posterior tributaries of the postcava shows, I think, how these variations have been derived. Embryos of 8.5, 12, 15 and 22 millimeters in length were examined.

In an embryo 8.5 millimeters in length the umbilical artery, on each side, *passed through a complete foramen* in the postcardinal vein, so that one portion of the circumarterial venous ring lay *ventral* and another *dorsal* of the artery. This foramen was situated near the point of union of the external and internal iliac veins. In a subsequent stage the internal iliac veins approached each other in the median line and fused ventral of the caudal artery to form a common internal iliac vein.

The writer believes that the type of postcaval vein to be assumed by the adult depends upon the loss or persistence of those portions of the circumarterial venous rings which lie dorsal and ventral of the umbilical arteries.

If the atrophy affects the dorsal branches of the circumarterial venous rings, a postcava will result as in type I. If it is the ventral branches of the rings that atrophy, a postcava will result as in type II., but, if dorsal and ventral branches of the rings both persist, a postcava of type III. will be formed.

The Development of Pigmental Color in Insects: W. L. TOWER. (Read by title only.)

Progressive Variation in a Given Generation of some Plants and Animals: W. L. TOWER. (Read by title only.)

Observations on the Habits of Hyalella dentata Smith: SAMUEL J. HOLMES.

The observations on *Hyalella* that were made related to food habits, thigmotaxis, phototaxis, reactions to pressure and sexual habits. Experiments were performed with the end of determining the mode of sex recognition in *Hyalella.* That sight plays no important part in the process was proved by the fact that males whose eyes were blackened over with asphalt varnish succeeded as well as others in obtaining females. Neither did removal of the first and second pairs of antennæ in the males prevent their obtaining mates. It is therefore improbable that the males are guided to the females by the sense of smell. Several females, some of which were recently torn from males, were placed within a