tions. In the calculations fractions of less value than one-half were dropped and those of a value of one-half or more were called one. It will be observed from the groups described—and the same is true of the other groups—that when the number of scales is the same on each side or not more than a difference of one, the actual column exceeds the calculated, and as the difference increases, the calculated column exceeds the actual. A comparison of the corresponding groups in the two columns in every case gives the same results as in those described, all of which demonstrates the tendency to bilateral symmetry or a marked correlation in the variation of the two sides.

PRELIMINARY NOTE UPON THE ARRANGEMENT OF RODS AND CONES IN THE RETINA OF FISHES. BY C. H. EIGENMANN AND GEORGE HANSELL.

[Abstract.]

A variety of fish eyes were examined, and it was found that in most cases the rods and cones are arranged in a regular pattern. This pattern is either that described by Hannover and Ryder for fishes or a slight modification of this pattern.

DEGENERATION IN THE EYES OF THE AMBLYOPSIDÆ, ITS PLAN, PROCESS AND CAUSES. BY CARL H. EIGENMANN.

[Summary only.]

1. There are at least six species of "blind fishes," Amblyopsidæ, inhabiting North America, three with well-developed eyes and three with mere vestiges.

2. The three species with vestigial eyes are descended from generically distinct ancestors with well-developed eyes.

3. These species can be more readily distinguished by the structure of their eyes than by any other characteristic.

4. The most highly-developed eye is much smaller and simpler than the eye of normal-eyed fishes.

5. The structure of their eyes may be represented by the following key to the genera and species.

a. Vitreous body and lens normal, the eye functional. No scleral cartilages. Eye permanently connected with the brain by the optic nerve. Eye muscles normal. No optic fibre layer. Minimum diameter of the eye .700 μ.

Chologaster.