

It was supposed that the skeletal structures united in the same manner as the archentera. The evidence furnished by *Toxopneustes* however clearly shows that in this species at least no fusion of the skeletal parts occurred. Instead some very interesting changes took place which may be stated briefly as follows: One of the pair of fused larvæ developed normally in every detail, the other developed in nearly every instance, incompletely. An almost perfect series of fused larvæ were obtained in which the incomplete pluteus lacked more and more of the characteristic parts that constitute the perfect larval skeleton; and the order of their disappearance was in the reverse order of their appearance in ontogeny.

The union of the two larvæ involved the approximation of their branched and complex skeletons, whose parts frequently overlapped but never fused.

89 (785)

Metabolism studies in a case of myotonia atrophica.

By **JACOB ROSENBLOOM** and **BENSON A. COHOE**.

[*From the St. Francis Hospital, and the Laboratory of Biochemistry of the University of Pittsburgh, Pittsburgh, Pa.*]

In a thirteen day metabolism study on an individual suffering from myotonia atrophica, we have studied the nitrogen metabolism, and urinary nitrogen partition, the sulphur metabolism and urinary sulphur partition, and the calcium, magnesium, phosphorous, chlorine and fat metabolism. The creatinine excretion was normal. The only striking metabolic anomaly noted in this study was the marked loss of calcium.

90 (786)

Sugar from lactic acid in human diabetes.

By **NELLIS B. FOSTER, M.D.**

[*From the Medical Service of The New York Hospital.*]

The evidence presented by experimental diabetes seems to indicate that in the transformation of amino-acids into glucose lactic acid is an intermediary step. It has also been suggested