deeply interesting results obtained by them. Moreover, it is suggestive of many possibilities of future discovery.

S. Lawrence Bigelow.

SCIENTIFIC JOURNALS AND ARTICLES.

The Journal of Experimental Zoology, Vol. III., No. 2 (July, 1906), contains the following articles: 'Observations and Experiments Concerning the Elementary Phenomena of Embryonic Development in *Chætopterus,*' by Frank R. Lillie. This is a study of the origin and behavior of formative stuffs in the early development of an annelid by direct observation, and by various experiments, *e. g.,* analysis by centrifugal force, by staining intra vitam, and by suppressing the process of cleavage without prejudice to other embryonic processes. The standpoint is that a complete account of embryonic development would trace everything back to the chromosome complex of the species. 'Regeneration of Grafted Pieces of Planarians,' by Lilian V. Morgan. A complete head may regenerate from a posterior cut surface of planarians if a very short piece is grafted in a reverse direction on a larger piece. 'Experiments on the Behavior of Tubicolous Annelids,' by Charles W. Hargitt. 'Inheritance of Dichromatism in *Lina* and *Gastroidea,*' by Isabel McCracken, Stanford University. In this paper the author records the results of an attempt to determine the behavior in heredity of the alternate characters in dichromatic species. Two dichromatic beetles, *Lina lapponica* and *Gastroidea dissimilis,* were bred under controlled conditions through a series of generations, four in the former, seven in the latter. The investigator finds an accumulative dominance of one color over the other from generation to generation, or a prepotency of the dominating color that apparently eventually eliminates the recessive color from the dominant line. The recessive color behaves like a typical Mendelian recessive.

DISCUSSION AND CORRESPONDENCE.

WHEN DID FRANKLIN INVENT THE LIGHTNING-ROD?

The bi-centenary of Benjamin Franklin's birth has served to recall attention to the varied achievements of this remarkable man, but it would hardly be expected that new facts could be learned regarding the invention of the lightning-rod, upon which his popular fame as a natural philosopher chiefly rests.

Franklin's classic experiment with the electrical kite, by which he demonstrated the identity of lightning and artificial electricity, was performed at Philadelphia during the summer of 1752. The date June, which is frequently quoted, seems to have been authorized by Priestley in his *History of Electricity.* On the contrary, his French contemporary, De Romas, who claimed the idea of the electrical kite, maintained that Franklin did not fly his kite in June, nor until after he had heard of the success of the French experimenters, Dalibard and Delor, who, in May, 1752, collected the electricity during a thunderstorm by metal rods, according to a method which he himself had suggested. Authorities differ as to whether Franklin knew of this when he obtained the same results with his kite, Park Benjamin, on page 589 of his 'Intellectual Rise in Electricity,' asserting that Franklin desired to confirm the French experiments. If this be true the kite experiment could hardly have been executed at Philadelphia so soon as the following month, that is in June, but, at all events, no mention of it occurs anywhere until a letter describing it, written there in October to Peter Collinson at London, was read before the Royal Society on December 21, 1752. This communication, which appeared in the *Gentleman's Magazine* for December, 1752, and in the *Philosophical Transactions* for the same year, was reprinted with Franklin's 'Experiments and Observations in Electricity,' of which the second part of the first edition was published at London in 1753. While it seems to have passed unnoticed that the letter describing the electrical kite in the *Philosophical Transactions* is dated October 1 and the same letter in the collected papers bears the date October 19, a date subsequently adopted by his biographers, it was reserved for a German bibliographer, Professor Hellmann, to point out, in publishing a facsimile of this