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Werner has given a sufficiently elastic idea of the action of atoms upon one another to account for many of the facts which at present are anomalies. The chapters on isomerism and steroisomerism too are suggestive and a number of interesting new relations have been presented. It is unfortunate, however, that the direct evidence for his theory is given in this book in so unsatisfactory a manner. His use of physico-chemical arguments is frequently very careless, his proofs for the constitution of compounds are often unconvincing, and the great mass of material is presented in no very clear and orderly fashion. The result is that the reader, if not previously acquainted with Werner's ideas and work, finds that the book leaves merely a confused impression. For a clear, brief presentation of the subject the reviewer recommends the reading of a lecture delivered by Werner before the Deutsche chemische Gesellschaft (Ber., 40, 15). The book will then be valuable as an amplification of his paper.

Herman Schlesinger

UNIVERSITY OF CHICAGO

A Manual of Biological Projection and Anesthesia of Animals. By AARON HODGMAN COLE, A.M., Instructor in Biology and Projection in the Chicago Normal School. Chicago, Neeves Stationery Company. Pp. 200. \$1.50.

The author of this little volume is to be congratulated on having produced a very useful and timely manual on the technique of projection. The scope of the work will be seen from the following partial table of contents: outline of methods and comments of educators on results obtained; available lights and their limitations; solar projection apparatus and its management, methods of darkening rooms, different types of screens; artificial lights and their management; methods of anesthetizing typical animals and plants; how to collect a large variety of species of animals and plants suitable for micro-projection and keep them alive in aquaria; directions for making different types of glass cells in which live animals and plants are mounted for projection; the knack of mounting and projecting various microscopical preparations, including live plants and animals; the projection of pictures and other opaque objects by the use of reflected light.

From the viewpoint of composition, with the possible exception of a few involved and somewhat obscure sentences, the book is clearly written and the subject-matter well arranged, although, in a few instances, there is a tendency toward what appears to be unnecessary repetition. However, the author doubtless feels-and justly so-that this may be forgiven in the interest of clearness. There seems to be no possible contingency in method or material that the author has not anticipated and given explicit directions for obviating, from which it is evident that the book is the outcome on his part of years of practical experience in projection work. The "ready reference table" (p. 180) for mounting and projecting a large number of objects, ranging from bacteria to living chick embryos, should prove of great convenience to the manipu-The text is farther elucidated by the lator. aid of twenty-eight figures and diagrammatic sketches.

In the words of the author, "every method described is the outgrowth of a need felt in teaching in some grade in grammar and high school, college and popular educational work, and each one has been tested in practise." This statement in itself is indicative of the wide range of uses to which the projection microscope may be put to-day.

M. F. GUYER

## SOCIETIES AND ACADEMIES

## THE NEW YORK ACADEMY OF SCIENCES

THE New York Academy of Sciences held its annual meeting on Monday evening, December 16, at the Hotel Endicott, about seventy members and their friends being in attendance.

The report of the corresponding secretary showed that during the last year the academy had lost, by death, one honorary member, Professor Asaph Hall, and three corresponding members, Professor George Chapman Caldwell, Professor W. H. Chandler and Dr. Charles B. Warring. The names of two