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'Notes on *Baptanadon marshi*, n. s.,' *American Journal of Science*, July, 1903.

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SCIENTIFIC BOOKS.

Lehrbuch der vergleichenden Histologie der Tiere. Von Dr. KARL CAMILLO SCHNEIDER, Privatdozent an der Univ. Wien, mit 691 Abbildungen im Text. Jena, Verlag von Gustav Fischer. 1902.

This comparative histology is another instance of the astonishingly brief time in which, in Vienna, a great work may be brought to completion. The heavy volume of 939 pages contains also a bibliography of 36 pages and an index.

The work is divided into a general and a special part. The plan has been to bring together in the general part the weightiest results for comparison by a presentation of the leading points of view, while in the special part leading groups are treated by taking up typical representatives in detail.

This plan has not been carried out completely, however. A number of groups, especially the Tunicata, and still further the Trematoda, Acanthocephala, Rotatoria, Siphunculoidea, Cephalopoda, Myriapoda, Arachnoidea, Scyphomedusa, Ophiuroidea, Echinoidea, Bryozoa, Brachiopoda, typical fishes, reptiles and birds, have not been considered at all or only superficially. Even the remaining types have not been worked up with the completeness one might wish. Still the work is a remarkable and valuable one. The text, to a considerable extent, is based on the researches of the author, while the literature, to which extensive reference is made, has served chiefly as control. Wherever the author has been dependent on literature

alone for his view, credit is given and the literature cited.

In the general part, the incompleteness of the chapter on 'Organology' is noticeable. While in many respects the material has not been sufficiently worked up, in other respects it has been carried beyond the borders of comparative histology. In the general part, the chapter on 'Architectonics,' the different planes of organization of the Metazoa have been discussed, and at the close of the chapter a system (page 238) has been devised which is the key to the systematic arrangement of the special part.

Histology, in this book, is not considered entirely in the sense of microscopic anatomy, but primarily as morphological cytology. Tissues are associations of cells of the same sort. In discussing tissues the author concerns himself first with their structural characteristics, but secondly, also with their relation to the composition of the entire organism.

The dividing of the Metazoa into two principal groups, the Pleromata and the Cœlenterata, is based, for a great part, on histologic grounds.

It is very evident the author has worked with a plan or outline in hand which has enabled him to produce a well-written, usable book. Of the 691 illustrations many are excellent, while only a few give one the feeling that the work was done under pressure. As a work of reference the book is very valuable, for it embodies not only much that is original, but the results of hundreds of investigators have been worked over and embodied in the text. As a text-book it is, of course, entirely too bulky to be considered. Still when one considers the remarkable activity in Germany in the field of microscopic anatomy as illustrated in Oppel's 'Vergleichende Mikroskopische Anatomie der Wirbeltiere,' three large volumes with a total of 2,400 pages in which the author has but completed his consideration of the alimentary tract, one is led to feel that in another decade Schneider's work may be a primer.

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Societies and Academies.

American Mathematical Society.

The tenth summer meeting and fourth colloquium of the American Mathematical Society were held at the Massachusetts Institute of Technology during the week August 31 to September 6, 1903. Forty-seven members of the society attended the sessions of the regular meeting, which occupied the first two days of the week. The colloquium opened on Wednesday morning, with a total attendance of thirty-one. Three courses of lectures were given, as follows: Professor E. B. Van Vleck, of Wesleyan University, six lectures on 'Selected Topics in the Theory of Divergent Series and of Continued Fractions'; Professor H. S. White, of Northwestern University, three lectures on 'Linear Systems of Curves on Algebraic Surfaces'; Professor F. S. Woods, of the Massachusetts Institute of Technology, three lectures on 'The Connectivity of Non-Euclidean Space.'

The following persons were elected to membership in the society: Professor D. P. Bartlett, Massachusetts Institute of Technology; Professor C. E. Comstock, Bradley Polytechnic Institute, Peoria, Ill.; Mr. H. N. Davis, Harvard University; Mr. W. J. Graham, New York, N. Y.; Mr. N. J. Lennes, Chicago, Ill.; Mr. T. J. McCormack, La Salle, Ill.; Dr. L. I. Neikirk, University of Pennsylvania; Dr. A. B. Pierce, University of Michigan; Professor W. J. Rush, Iowa College; Miss M. E. Trueblood, Mt. Holyoke College; Mr. C. B. Upton, Columbia University; Dr. Oswald Veblen, University of Chicago; Mr. R. H. Williams, Columbia University. Seventeen applications for membership were received.

The committee on definitions of college entrance requirements in mathematics, appointed at the summer meeting of 1902, presented a report, which was received and recommended for publication. The report will appear in the *Educational Review* and in the *Bulletin* of the society. A committee was appointed to prepare for the October meeting a list of nominations of officers and members of the Council for the year 1904.