but in the present case the lay reader will be agreeably rewarded if his curiosity leads him to open the pages of the memoir, by the admirable and interesting series of reproductions from photographs of Antarctic scenery which appear upon the plates. The charts, as might be expected, are of the first class.

Wm. H. Dall.

SCIENTIFIC JOURNALS AND ARTICLES.

The June number (volume 12, number 9) of the *Bulletin of the American Mathematical* Society contains the following articles: 'Report of the April Meeting of the American Mathematical Society,' by F. N. Cole; 'Report of the April Meeting of the Chicago Section,' by H. E. Slaught; 'Groups in Which All the Operators are Contained in a Series of Subgroups such that any Two have only Identity in Common,' by G. A. Miller; 'Note on the Factors of Fermat's Numbers,' by J. C. Morehead; 'Theoretical Mechanics' (review of Whittaker's Treatise on the Analytical Dynamics of Particles and Rigid Bodies; with an Introduction to the Problem of Three Bodies), by E. B. Wilson; 'Some Recent Foreign Textbooks' (Course in Practical Mathematics, by F. M. Saxelby; and the following three books by Gustav Holzmüller: Die Planimetrie für das Gymnasium, Methodisches Lehrbuch der Elementar-Mathematik, Vorbereitende Einführung in die Raumlehre), by D. E. Smith; Notes; New Publications.

The July number (concluding volume 12) contains: 'Note on the Numerical Transcendents S_n and $s_n = S_n - 1$,' by W. Woolsey Johnson; 'On Certain Properties of Wronskians and Related Matrices,' by D. R. Curtiss; 'Significance of the Term Hypercomplex Number,' by J. B. Shaw; 'How Should the College Teach Analytic Geometry?' by H. S. White; 'Four Books on the Calculus' (Schröder's Die Anfangsgründe der Differentialrechnung und Integralrechnung; Fricke's Hauptsätze der Differential- und Integralrechnung; Junker's Repertorium und Aufgabensammlung; Thomae's Sammlung von Formeln und Sätzen aus dem Gebiete der elliptischen Funktionen), by H. E. Slaught; Shorter Notices (Stolz and Gmeiner's Einleitung in die Funktionentheorie; Bortolotti's Lezioni sul Calcolo degli Infinitesimi; Vahlen's Abstrakte Geometrie), by Oswald Veblen, (Cunningham's Quadratic Partitions), by J. C. Morehead; Errata; Notes; New Publications; Fifteenth Annual List of Papers Read before the Society and Subsequently Published; Index to Volume 12.

Bird-Lore for May–June contains articles on 'The Whip-Poor-Wills,' by A. D. Whedon; 'Stray Birds at Sea,' by F. M. Bennett; 'Photographing a Bluebird's Nest by Reflected Light,' by R. W. Hegner, and 'The Amount of Science in Oology,' by Thos. H. Montgomery, Jr. This article deprecates the ordinary collecting of eggs and calls attention to the small amount of really valuable work done by 'oologists'; oddly enough no mention is made of Nathusius and his studies of the microscopical structure of egg shells. There is the sixteenth paper, entirely devoted to statistic of dates of arrival, on the 'Migration of Warblers,' by W. W. Cooke.

The section devoted to the Audubon Societies gives a résumé of the various laws enacted, or that failed to pass, by various state legislatures during the past session. The 'leaflet' contains an account of the rose-breasted grosbeak.

The Museums Journal of Great Britain for May is largely devoted to a discussion of 'The Relation of Provincial Museums to National Institutions' and is interesting reading even if the matter does not apply to the United States. Incidentally it gives some idea of the work of the Victoria and Albert Museum. From the notes we learn of the reinstallation of the exhibition series of fishes in the British Museum, the old, dried, dingy specimens having been replaced by others colored from nature. In the United States we believe the Smithsonian Institution was the first to exhibit a series of casts of fishes, colored after nature, at the Exposition of 1876. Such casts, and fishes mounted by Denton's methods, seem to be the best methods of displaying fish at present. The British Museum has also recently placed on exhibition a group showing

the gardener bower bird of New Guinea with its natural surroundings.

The American Naturalist for June contains the following articles: 'Observations and Experiments on Dragon Flies in Brackish Water,' by R. O. Osburn; 'Reactions of *Tubularia crocea* (Ag.),' by A. S. Pearse, and 'The Pressure and Flow of Sap in the Maple,' by K. M. Wiegand. This reviews the various theories that have been propounded and gives a summary of the recorded facts and their probable explanations, osmotic phenomena being considered the cause of the observed pressure with the resulting flow of sap.

SOCIETIES AND ACADEMIES.

THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE.

THE seventeenth meeting of the Society for Experimental Biology and Medicine was held in the laboratory of the Department of Health of New York on Wednesday evening, May 23. The president, Simon Flexner, was in the chair.

Members present: Atkinson, Auer, Dunham, Ewing, Field, Flexner, Gies, Hatcher, Lee, Levene, Mandel, J. A., Meltzer, Meyer, Norris, Opie, Park, Richards, Salant, Terry, Wadsworth, Wallace.

Abstracts of Communications.[1]

Analogies between the Phosphorized Fats Obtained from the Brain and Kidney, with exhibition of products: EDWARD K. DUNHAM.

The author has found that substances closely related to the lipoids derived from the brain may be obtained by similar methods from the kidney. In this communication the author gave chiefly his analytic data for kidney products resembling Thudichum's sphingomyelin and paramyelin.

[1] The abstracts presented in this account of the proceedings have been greatly condensed from abstracts given to the secretary by the authors themselves. The latter abstracts of the communications may be found in current numbers of *The Journal of the American Medical Association, American Medicine,* the *New York Medical Journal* and volume three of the Society's Proceedings.

The Toxicity of Indol: A. N. RICHARDS and JOHN HOWLAND.

A series of experiments on rats, guinea pigs and rabbits have shown that if the capacity of the cells of utilizing oxygen is diminished as by potassium cyanid, or chloroform, the intensity and duration of symptoms following the injection of definite doses of either indol or phenol are increased.

The experiments were made as a part of a study of the etiological factors in recurrent vomiting in children. At the beginning of these seizures there are signs of diminished oxidation (increased elimination of uric acid, neutral sulfur, lactic acid, aceton bodies) and an abnormally intense indican reaction. It is believed that failure to oxidize completely substances of the type of indol, results in the production of distinct mental symptoms and in the partial excretion of the substances into the gastro-intestinal tract. The disturbance induced by such substances is capable of producing nausea and vomiting.

The Formation of Urea: L. B. STOOKEY and A. S. GRANGER. (Presented by R. A. Hatcher.)

Subcutaneous injection of liver-extracts (dog) was found to lead, in the dog, to an increased elaboration of nitrogenous end-products into urea. Liver-extracts which had been heated to 55° C. were not found to possess this stimulative action. These results might indicate an enzymatic formation of urea. Further experiments are in progress.

The Effects on Embryonic Development of the Roentgen Rays Acting on the Spermatozoa of the Toad Previous to Fertilization: C. R. BARDEEN.

The results of the author's experiments may be briefly summarized as follows:

1. The spermatozoa of the common toad retain power of movement and fertilization for from one half to nearly three hours in a dish of lake-water at room temperature. On hot days they die sooner than on cool days.

2. Spermatozoa when under exposure of Roentgen rays die sooner than when not thus exposed.

3. When spermatozoa are exposed to the