

servatories in the north of Siberia and in America was recommended, as well as stations on selected islands, and a form for publishing all the data was prescribed.

As the Innsbruck meeting was devoted to serious work, formal social functions were wisely omitted. The president, however, entertained his colleagues in the characteristic German manner on one evening, and between the sessions excursions were arranged to some neighboring portions of the Tyrol. Unusual sociability prevailed from the fact that almost all the members of the conference lodged in the same hotel where meals were taken together, and in this way old acquaintances were strengthened and new ones formed, the personal relations being, after all, the chief advantage to be derived from these reunions.

A. LAWRENCE ROTCH.

BLUE HILL METEOROLOGICAL OBSERVATORY,  
June 8, 1906.

#### SCIENTIFIC BOOKS.

##### THE BELGIAN ANTARCTIC EXPEDITION.

*Résultats du voyage du S. Y. 'Belgica' en 1897-1898-1899, sous le commandement de A. DE GERLACHE DE GOMERY. Rapports scientifiques. Botanique: Les Phanérogames des Terres Magellaniques.* Par E. DE WILDMAN. Anvers, 1905. 4°, 222 pp., xxiii pls. *Travaux hydrographiques et instructions nautiques.* Par G. LECOINTE. 1er fascic. Anvers, 1905. 4°, 110 pp., xxix pls. and atlas of charts.

During the short stay of the expedition in the Magellanic region M. E. Racovitska obtained rather exhaustive collections of the flowering plants of this region. The flora is not very numerous in species, but is of interest from the point of view of geographical distribution, since it establishes for some species a singularly wide distribution. A glance at the charts of the Magellanic archipelago will show the conditions leading to an intimate connection between the continental South American flora and that of the archipelago.

The posthumously published essay of the late Nicholas Alboff (1897) contained some important discussions of the relations of the Fuegian flora. In this connection Alboff observed that if it were no longer possible to base one's ideas of Antarctic plant distribution on Hooker's memorable 'Flora Antarctica' alone, without falling into error, it is also true that the considerable additions to our knowledge of that flora which have since been made (including his own) are still insufficient for the purpose. Investigations since Alboff's paper have all tended, as he expected, to connect the flora of the archipelago more and more closely with that of the continent. M. de Wildman concludes from his study of the Racovitska collections that it is still too early to attempt to discuss the general question of the geographical subdivisions into which it is probable the Fuegian flora will ultimately be subdivided. He gives tables, however, at the end of his memoir by which the reader may rapidly obtain an idea of what is known of the distribution of the species enumerated.

The memoir divides itself into a systematic enumeration of the phanerogams collected by the *Belgica*; a similar enumeration of the known phanerogamic flora of the region, and the statistical tables. The work is published in the elegant style heretofore noted in the reports of this expedition, and the plates are particularly fine and detailed.

The sheets of the hydrography by Commander Lecoite were printed as early as 1903, but owing to the pressure of duties devolving upon him as director of the Royal Observatory, the proposed plan has not been fully worked out. It was, therefore, thought best to issue the sheets as far as printed without waiting any longer. They comprise the hydrography of the voyage from Europe to Terra del Fuego and thence to Bransfield Strait; an account of the operations in Gerlache Strait; and lastly the subsequent proceedings.

One does not expect to find much of interest in the computations of chronometer rates, or observations for position, however necessary;

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