Dr. True's studies, and these are that several American species which have been proposed are quite nominal and that, as a whole, the species of the Atlantic coast of North America can not be distinguished from those of European waters. Further, the whales of the Pacific coast, with the exception of the gray whale, bear an extremely close resemblance to those of the Atlantic, although at present material is not available to definitely determine whether or not they are specifically identical.

The eastern species admitted by Dr. True are the finback, *Balænoptera physalus* (Linn.); sulphurbottom, *B. musculus* (Linn.); little piked whale, *B. acuto-rostrata* Lacépède; pollack whale, *B. borealis* Lesson; humpback, *Megaptera nodosa* (Bonnaterre) and North Atlantic right whale, *Balæna glacialis* Bonnaterre. These scientific names are those recognized after a careful study of the literature and are practically those adopted in Dr. True's paper of 1898, since he noted that *M. nodosa* had been applied to the American humpback prior to the use of *M. longimana* for that taken on the European coast.

It is certainly a relief to see the species of cetacea rescued from the maze of synonymy in which they have for many years been involved, and if any one is so unfortunate as to come upon some unique work that would change any of the above names it is to be hoped that he will promptly destroy it and thus earn the gratitude of posterity.

The fifty plates, with from two to four figures on a plate, are devoted to reproductions from photographs of crania and other important parts of the skeletons, and many views of stranded whales and whales lying on the slips at whaling stations. The index is one that not even the *Nation* can criticize and Mr. True is to be congratulated upon the successful completion of a long and difficult piece of work. F. A. L.

TWO RECENT MOSS BOOKS.

Dr. A. J. Grout has just published a second edition of 'Mosses with a Hand-Lens,'* which includes also some of the more common hepatics. The new edition, which follows the same general plan as the first edition, is expanded, to included 169 of the 'more common and more easily recognized mosses of the northeastern United States,' as well as fifty-four of the hepaticæ of the same region.

The descriptions are non-technical, and only such characters are employed as, according to the experience of the author, can be determined by the use of a powerful hand-lens. The key to the families of mosses is followed by a *brief* introduction and a *short* consideration of the life history and general structure of mosses. The last topic could be somewhat expanded with profit to the student. The text contains something like 118 figures and 39 full-page plates, the latter reproductions very largely from the Bryologia Europæa, which is a sufficient guarantee of their excellence. Many of the figures are rather lacking in clearness of detail, but in the matter of typography and illustrations, the work is so much of an improvement over its predecessor that it deserves special commendation.

To those who are without the advantages of a compound microscope and can not afford the author's more complete book, 'Mosses with Hand-Lens and Microscope,' this little volume will prove a valuable aid. If it serves as a stimulus to a more detailed study of this very interesting group of plants, its existence will be justified.

Many students of mosses will probably welcome the appearance of 'Moose' by Dr. W. Migula.* Although the work is primarily intended for German students, it contains much that will be valuable for American students, and its reasonable price places it within the reach of all.

The first chapter deals with the structure of the moss-plant, and the general features of

* 'Mosses with a Hand-Lens.' Second edition with Hepatics, pp. xvi + 208. March, 1905. $1.75. Published by the author, 306 Lenox Road, Flatbush, Borough of Brooklyn, New York City. Also O. T. Louis Co., 59 Fifth Ave., New York City.

* Band I. 'Moose,' in Band V. of Professor Dr. Thome's 'Flora von Deutschland, Oesterreich, und der Schweiz.' Pp. vi + 512. 19 M. 1904. Friedrich von Zezschwitz. Gera, R.

taxonomic importance are clearly elucidated. Brief directions are then given for the collection of material and the determination of species, and this is followed by the taxonomic section which includes quite detailed descriptions of 916 species of mosses, with dichotomous keys to the families, genera and species. The system of classification adopted agrees very closely with that of Limpricht in Rabenhorst's 'Kryptogamen Flora von Deutschland.'

The second part of the work deals with the liverworts and in general arrangement follows that for the mosses. Keys and descriptions are given for 228 species. The work is bound in 'halbfranz,' and is embellished with 68 full-page lithographed plates, distributed throughout the text, of which 26 are executed in natural colors. The work is on the whole an admirable one, and it is only to be regretted that the production of such works is apparently not possible in our own country. It will form a valuable addition to the library of any student of mosses.

F. D. HEALD.

THE UNIVERSITY OF NEBRASKA.

SCIENTIFIC JOURNALS AND ARTICLES.

THE contents of the March issue of *Terrestrial Magnetism and Atmospheric Electricity* is as follows:

Portrait of Svante August Arrhenius, Frontispiece.

S. A. ARRHENIUS: 'On the Electric Charge of the Sun.'

C. CHREE: 'Review of Maunder's Recent Investigations on the Cause of Magnetic Disturbances.'

W. VAN BEMMELEN: 'Magnetic Survey of the Dutch East Indies.' (Third communication.)

J. ELSTER und H. GEITEL: 'Vorschläge für die Ausführung electrischer Beobachtungen während der bevorstehenden Sonnenfinsterniss.'

L. A. BAUER: 'Proposed Magnetic and Electric Observations during the Total Solar Eclipse of August 30, 1905' (Preliminary Information).

J. E. BURBANK: 'Earth Currents: and a Proposed Method for their Investigation.'

Biographical Sketch of Svante August Arrhenius.

Letters to Editor: Nachtrag zur Abhandlung 'Ueber den Einfluss der Torsion bei den Ablenkungen eines hängenden Magneten,' F. Bidlingmaier; Tortosa Observatorio del Ebro (Illustrated), R. Cirera; Principal Magnetic Disturbances recorded at Cheltenham Magnetic Observatory, December 1, 1904, to March 1, 1905, W. F. Wallis; Present Russian Magnetic Observatories, M. Rykatscheff.

SOCIETIES AND ACADEMIES.

THE AMERICAN PHYSICAL SOCIETY.

THE regular spring meeting of the Physical Society was held at the Ryerson Physical Laboratory of the University of Chicago on Friday, April 21, and Saturday, April 22, 1905. President Barus presided. The meeting was well attended, nearly all the colleges and universities within several hundred miles of Chicago being well represented. An informal dinner on Friday evening at the Quadrangle Club was a pleasant feature of the meeting. The program, which was the largest in the history of the society, is given below:

H. N. MCCOY, University of Chicago: 'On the Relation between the Radioactivity and Composition of Uranium Compounds.'

G. G. BECKNELL, Northwestern University: 'The Residual e.m.f. of the Carbon Arc.'

C. W. CHAMBERLAIN, Denison University: 'The Radius of Molecular Attraction.'

G. M. HOBBS, University of Chicago: 'The Relation between p. d. and Spark Length for Small Values of the Latter.'

CARL KINSLEY, University of Chicago: 'Short Spark Discharges.'

J. E. ALMY, University of Nebraska: 'The Influence of Electrodes upon Spark Potentials.'

J. E. ALMY, University of Nebraska: 'Note on the Potential Difference Required to Produce very Short Sparks.'

A. B. PORTER, Chicago: 'Some Oddities in Lenses.'

A. H. TAYLOR, University of Wisconsin: 'On the Possible Variation of Inductance Standards with Temperature.'

E. M. TERRY, University of Wisconsin: 'On the Variation of Capacity with Temperature.'

A. H. TAYLOR, University of Wisconsin: 'On the Comparison of Mutual Inductances.'

R. T. HERDEGEN, University of Wisconsin: 'The Comparison of the Mutual Inductance of a Pair of Coils with the Self-induction of One of Them.'

O. M. STEWART, University of Missouri: 'The Use of the Quadrant Electrometer in Measuring Current.'