

independent students for the advancement of knowledge and the sympathetic study of man's instruments of musical expression. It is already clear that the problems are not so simple as would appear from the ordinary presentation of Helmholtz's theories; for the materials accumulated in the forty years since he wrote require an ampler framework.

CHARLES KARSON WEAD.

SCIENTIFIC JOURNALS AND ARTICLES.

THE February number (volume 12, number 5) of the *Bulletin of the American Mathematical Society* contains the following articles: Report of the Twelfth Annual Meeting of the American Mathematical Society, by F. N. Cole; 'Note on Certain Groups of Transformations of the Plane into Itself,' by Peter Field; Report of the Meran Meeting of the Deutsche Mathematiker-Vereinigung, by E. A. Miller and Elijah Swift; 'The Present and the Future of Mathematical Physics,' by Henri Poincaré (translated by J. W. Young); Shorter Notices (Königsberger's Jacobi Festschrift, by James Pierpont; Schlömilch's Uebungsbuch zum Studium der höheren Analysis, by James Pierpont; Hedrick-Goursat's Course in Mathematical Analysis, by Wm. F. Osgood; Willis's Elementary Modern Geometry, Part I., by Virgil Snyder; Classen's Zwölf Vorlesungen über die Natur des Lichtes, by E. B. Wilson); Notes; New Publications.

The March number of the *Bulletin* contains: Report of the December Meeting of the Chicago Section of the American Mathematical Society, by T. F. Holgate; 'The Groups Containing Thirteen Operators of Order Two,' by G. A. Miller; Review of Huntington's Types of Serial Order, by Oswald Veblen; Review of Fine's College Algebra, by E. V. Huntington; Review of Freund's Translation of Ball's History of Mathematics, by D. E. Smith; Shorter Notices (Abhandlungen zur Geschichte der mathematischen Wissenschaften, by D. E. Smith; Bucherer's Elemente der Vektor-Analyse, by E. B. Wilson; Annuaire du Bureau des Longitudes pour l'An 1906, by E. W. Brown; Jordan's Astronomical and Historical Chronology, by E. W. Brown); Notes; New Publications.

The Museums Journal of Great Britain for January has for its leading article a paper on 'The Relation of Provincial Museums to Local Institutions,' by John Minto. While the subject is one that appeals to foreign museums rather than to those of this country, yet the article itself is a most excellent essay on the objects of museums and fairly teems with good things. Most museum officials will appreciate such sayings as "Most of our museums, I regret to say, are lamentably deficient in storage accommodation." "Each group of objects (in a teaching collection) should have in view the teaching of some definite lesson." "There are many instances of museums which, having secured the services of local enthusiasts for a period of years * * * have on the severance of the connection fallen upon evil days," and (this should be in large type) "It will take years to do away with the idea of museums still entertained by many * * *, as storehouses of curiosities. * * *" The many notes show that, aside from the Manchester Museum, there seems to be a liberal and growing support of such institutions in England. As for the Manchester Museum, those who know the extent and high standard of its work will be surprised to learn from its report the mere pittance that it receives for its support. In discussing Dr. Holland's recent article on 'Museums and Outside Experts,' the comment is made: "Needless to say, all type-specimens should invariably be returned to the museum, but it is usual to allow the expert to retain a selection of duplicate specimens. In our opinion, however, nothing should be handed over to the expert until all the material has been returned by him to the museum."

A JOURNAL entitled *Annales de Paléontologie* has been established at Paris, under the editorship of M. Boule, professor in the Museum of Natural History.

SOCIETIES AND ACADEMIES.

THE NEW YORK ACADEMY OF SCIENCES. SECTION OF GEOLOGY AND MINERALOGY.

Meeting of October 9, 1905.—In the absence of Vice-President Hovey, President J. F.