titles. The text of the third Section is an extract from the address delivered by Professor G. H. Darwin (February 9, 1909) in presenting to Poincaré the gold medal of the Royal Astronomical Society of London. It is a brief review of his contributions to analytic and celestial mechanics. This is followed by a list of 85 titles of his publications in this field. The fourth Section opens with another extract from the report of M. Rados relating to Poincaré's contributions to mathematical physics. The list of his writings in this domain comprises 78 titles. The text of the fifth Section is a review by M. Emile Faguet of Poincaré's most recent book on the philosophy of science entitled "Science et Méthode." His writings in this field comprise 51 titles. His book "Science and Hypothesis" has been translated into five foreign languages. The Section devoted to necrology simply gives a list of 17 addresses and notices by Poincaré, on the life and work of Laguerre, Halphen, Tisserand, Weierstrass, Cornu, Berthelot, Kelvin, etc. The last section gives a list of 51 titles on miscellaneous subjects.

Aside from the inspiration to be derived from a reading of the text of this volume, the complete list of Poincaré's writings is valuable for reference. The volume also contains a fine heliogravure portrait of Poincaré.

## J. W. YOUNG.

Des Notations Mathématiques, Énumération, Choix et Usage. Par Désire André. Paris, Gauthier-Villars, 1909. xviii + 501 pp.

THE present work is practically confined, as regards both subject matter and method of treatment, to the needs of teachers of secondary mathematics. The paucity of historical references and the prolix treatment of many of the subjects tend to detract from its usefulness as a work of reference, and its general method of treatment seems better suited to the wants of those who are interested in seeing self-evident things stated in a clear and attractive form than of those who are seeking abstruse information. The perusal of such a work during periods of relaxation may, however, tend to make matters of secondary importance appear more attractive to the mathematician and thus it may lead to a keener appreciation of the entire mathematical structure.

The number of historical references is not only small but some of those which are given are apt to mislead the reader.