

first edition of 1889, the cross-references are increased in number, some new subdivisions are introduced, and the typographical work is much improved.

This classification is prefaced by a very brief account of the work of the congress of 1889. The resolutions adopted by this congress are given in full; they explain the scope and general plan of the bibliography, which is to be by subjects in logical order and not by authors. Nothing, however, is said about the execution of the plan; nor is there any information given in this new edition as to the progress that may have been made with the work.

The permanent committee charged with the compilation of the *répertoire* is at present (February 15, 1893) constituted as follows: President, Poincaré; Secretary, d'Ocagne; Honorary Members, Prince R. Bonaparte, Prince B. Boncompagni, Darboux, Haton de la Goupillière; Members—from Austria, Em. Weyr; Belgium, Catalan, Le Paige; Denmark, Gram; France, the President of the French Mathematical Society, D. André, Fouret, Charles Henry, G. Humbert, Königs, Laisant, Raffy; Germany, Lampe, Valentin; Great Britain, Glaisher, J. S. Mackay; Greece, Stephanos; Holland, Bierens de Haan, Schoute; Italy, Guccia; Norway, Holst; Portugal, G. Teixeira; Russia, Ligin; Sweden, Eneström; United States, Craig.

NOTES.

A REGULAR meeting of the NEW YORK MATHEMATICAL SOCIETY was held Saturday afternoon, June 3, at half-past three o'clock. In the absence of the president, Professor J. M. Van Vleck occupied the chair. Mr. Charles P. Steinmetz read a paper entitled "On the flow of an incompressible liquid between coaxial cylindrical surfaces." Professor W. Woolsey Johnson communicated a paper entitled "Negative reciprocal equations" by Commander J. E. Craig, U. S. N.

Professor Van Vleck read an extract of a recent letter from Professor Felix Klein, in which Professor Klein stated that he expected to visit America during the present summer and to attend the mathematical congress at Chicago. T. S. F.

THE international congress on mathematics, astronomy, and astro-physics at Chicago will be held in the new Art Institute building on the lake front during the week beginning August 21, 1893. There seems to be every indication of a most successful session. The programme in mathematics will include a series of reviews of the recent development of particular branches of the science. Every one interested in