*Verhandlungen des ersten internationalen Mathematiker-Kongresses in Zürich vom 9 bis 11 August, 1897.* Herausgegeben von FERDINAND RUDIO. Leipzig, B. G. Teubner, 1898. 8vo, viii + 306 pp.

THE Zürich congress will always possess an especial interest as the first international congress. The present stately octavo volume is the *official* report of the same, prepared by Professor Rudio, one of the two general secretaries.

The first eighty pages recount in an agreeable manner the events of the congress and are very interesting reading. The address of welcome by the president, Professor Geiser, and the paper by Professor Rudio "On the object and organization of international congresses" are given in full. Professor Geiser made felicitous reference to the great names of Jacob, Daniel, and Johann Bernoulli, and of Euler and Steiner as mathematicians of the past of whom Switzerland was justly proud. Their portraits grace the present volume and form a valuable addition.

The remaining 225 pages are devoted to the scientific addresses and papers read at the congress. The address of Poincaré has already appeared in the *Acta Mathematica*, but is also given here. Those of Klein and Hurwitz, I have not seen in print elsewhere. I wish to call particular attention to Hurwitz's paper. This is without doubt the most careful and broadly conceived sketch at hand of the recent developments, in a certain well defined field, of the general theory of functions. Over 130 references to original sources are given in the course of the memoir.

The volume contains either in full or in abstract about thirty papers read in the various sections. I note only a few of general interest : H. Weber, Genera of algebraic bodies ; E. Schröder, Pasigraphy ; L. Stickelberger, Discriminants of algebraic numbers ; F. Meyer, Algorithms similar to continued fractions ; T. Reye, Quadratic complexes ; A. Stodola, Relation of technical sciences to mathematics ; H. Zeuthen, Barrow's method of inverse tangents ; G. Eneström, Mathematical bibliography ; G. Loria, Historical sketch of plane curves.

Some of the papers have appeared elsewhere and are given here only as abstracts. All will regret that Picard's paper on algebraic functions of several variables is given only in the briefest form. The first volume of the Fonctions algébriques de deux Variables which has since appeared will not console us for the loss of this brilliant aperçu which was listened to with intense interest by almost the whole congress.