

THE MATHEMATICAL WORK OF THOMAS JAN STIELTJES.

Œuvres complètes de Thomas Jan Stieltjes. Publiées par les soins de la Société Mathématique d'Amsterdam. P. Noordhoff, Groningen. Tome I, 1914: viii + 471 pp. Tome II, 1918: iv + 604 pp.

ONE can not assert that Thomas Jan Stieltjes was one of the great men of the earth. In fact he was not one of the greatest men in the narrower circle of his colleagues in mathematical investigation. But he was a man of fine talent who used the full strength of his powers in his researches; and in his short life (1856–1894) he did excellent work which deserves to be remembered. It is therefore fitting that his articles and memoirs should be brought together in the convenient form of a collected edition. In the two volumes of this work and in the two volumes which record the correspondence between Stieltjes and Hermite we have a complete record* of the scientific activity of Stieltjes and a clear and pleasing insight into his methods of work. The latter is more apparent in the letters, the less formal nature of which gave rise to a more intimate revelation of himself to his friend and later to the world.

His earlier work especially is marked by a careful and deep study of particular questions and the interest which he took in adapting algebraic and analytic formulas to numerical computation. This seems to have been due in considerable measure to the fact that he approached mathematics from the point of view of one engaged in astronomical work and only later gave up what was first conceived to be the object of his scientific life in favor of his studies in mathematics which during the years 1877 to 1883 gained a stronger and stronger grasp upon his thought.

Many of his discoveries were made empirically by incomplete induction from numerous examples developed from the beginning with the delight which he always evinced in numerical computation. In this respect his method has been compared

* See also the section devoted to the (unpublished) "method of Stieltjes" (pp. 357–362, 323) in Poincaré's memoir on the residues of double integrals in *Acta Mathematica*, volume 9, 1887.