

*Opere matematiche di* FRANCESCO BRIOSCHI. Pubblicate per cura del comitato per le onoranze a Francesco Brioschi (G. Ascoli, E. Beltrami, G. Colombo, L. Cremona, G. Negri, G. Schiaparelli). Volumes 1, 2, 3. Milan, U. Hoepli, 1901, 1902, 1904. xi + 416, viii + 456, x + 435 pp.

BRIOSCHI's life covered seventy-three years (1824–97), the last fifty filled with mathematical labor as teacher, writer, and editor. Taking his doctorate at Pavia in 1845, he became professor of applied mathematics in that university in 1852, and in 1862 was commissioned by the government to found and organize the Istituto tecnico superiore at Milan. There he filled until his death the chairs of hydraulics and analysis, and the office of director. Together with Tortolini he founded in 1858 the *Annali di matematica pura ed applicata* (the immediate successor of the eight volumes of *Annali di scienze matematiche e fisiche*), and carried on independently the enterprise, so significant for the revival of mathematics in Italy, in a second series of twenty-six volumes, 1868–1897. Of his pupils at Pavia the most notable are Cremona, Beltrami, and Casorati. For an account of his labors for the Italian government and a careful analysis of his writings, one should read the excellent biography by Noether in the *Mathematische Annalen*, volume 50 (1898).

The present publication is a part (and the principal part we should esteem it) of the plan to provide a worthy memorial for this great scholar and educator. Scattered in five or more journals, the memoirs embodying Brioschi's extraordinary activity as commentator, critic and creator of modern mathematics had produced their first effect, that on his contemporaries. Now, collected, they become part of the accessible treasure of the scientist and historian. The plan is apparently to collect not his well-known books on determinants and mechanics of rigid systems, but only the shorter papers, from journals and the proceedings of learned societies.

So far there are republished 144 titles. Of these a rough enumeration shows 57 on algebraic invariants, 14 on modern geometry, 14 on differential geometry and the calculus of variations, 19 on differential equations, 21 on the theory of functions and higher analysis, 7 on history, bibliography and biography, 10 on physics or mechanics, and 2 miscellaneous. A more extended résumé is not our purpose here, in view of Noether's paper cited above. This collection reminds one of Cayley's works in