ever, to whom the analytic theory is chiefly due (in volume 5 of the *Mémoires de St. Pétersbourg*).

An examination of the Produzioni shows that it is as an algebraist that Fagnano deserves chief recognition.   To be sure he devotes a large amount of space to his Teoria generale delle proporzioni geometriche, so much space that few readers will be found who care to master it, but it is in his Applicazione dell' algoritmo nuovo that one finds displayed an interest in the field of mathematics in which Italy stood preeminent from the time of Ferro and Florido.   Fagnano's treatment of equations, his ability to handle skilfully the complex number, and his contributions of a *nuova maniera* of handling cubic and quartic equations, are quite as noteworthy as his discoveries in the theory of the lemniscate.

Of the three volumes edited and published with such care by Professors Volterra, Loria, and Gambioli, the first contains Volume I of the Produzioni matematiche, devoted chiefly to geometric proportion and the " new algorism " applied to the treatment of equations.   The second contains Volume II of the Produzioni, chiefly concerned with the theory of the triangle, special problems in the calculus, and the lemniscate.   The third volume contains Fagnano's other scientific and polemic writings, a large number of his letters, and his biography.

Whether or not one feels that the standing of Fagnano justifies the republication of his memoirs and his *opus magnus* before those of other scientists whose works are out of print, he cannot deny the value of the labor undertaken by the Società Italiana per il Progresso delle Scienze, nor withhold the praise that is so justly due to Professors Volterra, Loria, and Gambioli.

DAVID EUGENE SMITH.

The Method of Archimedes Recently Discovered by Heiberg.
A Supplement to the Works of Archimedes, 1897.   Edited by Sir THOMAS L. HEATH, K.C.B., Sc.D., F.R.S., Sometime Fellow of Trinity College, Cambridge.   Cambridge University Press, 1912.   51 pp.   Two shillings and sixpence net.

IT is nearly four years since there appeared in *The Monist* Miss Robinson's translation from the German of the treatise on mechanics by Archimedes discovered by Heiberg in 1906. It was this reviewer's privilege to write a brief introduction to that translation, and all this material appeared in pamphlet