DICKSON'S HISTORY OF THE THEORY OF NUMBERS.

History of the Theory of Numbers. By LEONARD EUGENE
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IN these days when "pure" science is looked upon with
impatience, or at best with good-humored indulgence, the
appearance of such a book as this will be greeted with joy by
those of us who still believe in mathematics for mathematics'
sake, as we do in art for art's sake or for music for the sake of
music. For those who can see no use or importance in any
studies in mathematics which do not smack of the machine
shop or of the artillery field it may be worth while to glance
through the index of authors in this volume and note the
frequent appearance of names of men whose work in the
"practical applications" of mathematics would almost
qualify them for a place on the faculty of our most advanced
educational institutions. One of the most assiduous students
of the theory of numbers was Euler, whose work otherwise was
of sufficient importance to attract the notice of a king of
Prussia. The devotee of this peculiar branch of science can
reassure himself that he is in very good company when he
reads the list of authors cited in connection with the famous
theorems of Fermat and Wilson in Chapter III; Cauchy,
Cayley, d'Alembert, Dedekind, Euler, Gauss, Jacobi, Kron-
ecker, Lagrange, Laplace, Legendre, Leibniz, Steiner, Syl-
vester, Von Staudt and a host of others, great and small,
living and dead, to the number of over two hundred, who
have found these absolutely "useless" theorems worthy of
their most serious attention. The reviewer is firm in the
faith that no great headway will ever be made in any science,
least of all in mathematics, by those who are always looking
for the penny. He takes comfort also in the fact that great
teachers are not found among those who are scornful of
mathematics for mathematics' sake. Their race is not likely
to be perpetuated, and the chances are that the study of the
theory of numbers will become increasingly popular as the
years go by.