We must rejoice, however, in proof of the wide circulation of Hilbert's ideas, that both a French and an English translation have actually been published. A widely diffused knowledge of the principles involved will do much for the logical treatment of all science and for clear thinking and clear writing in general. E. R. HEDRICK.

YALE UNIVERSITY, September, 1902.

DICKSON'S LINEAR GROUPS.

Linear Groups with an Exposition of the Galois Field Theory. By L. E. DICKSON, Assistant Professor of Mathematics in the University of Chicago. Teubner's Sammlung von Lehrbüchern auf dem Gebiete der mathematischen Wissenschaften mit Einschluss ihrer Anwendungen, Volume VI. Leipzig, B. G. Teubner, 1901. 8vo, x + 312 pp.

SHORTLY after the appearance of the first few numbers of the Encyclopädie der Mathematischen Wissenschaften the publishers announced a series of text-books on advanced mathematics to be issued in connection with the Encyclopädie. While the authors of articles in the Encyclopädie were especially requested to take advantage of this series to develop their subjects more fully and thus make them more accessible to the student, other writers were asked to assist to make the series as complete as possible. More than fifty different volumes of this series have already been announced, by almost as many different writers of various countries.

Never before has there been such extensive collaboration to bring the developments in the various parts of our subject within the reach of the student. It is hoped that this series will do much towards increasing the number of well-equipped investigators and thus exert a strong influence towards more substantial progress in various directions. The fact that the authors belong to so many different countries emphasizes the cosmopolitan element in mathematical work and the absence of national prejudices among its devotees.

The present work is the sixth volume of the series and is devoted to a subject which has been developed principally on French and American soil. The fundamental ideas are due to Galois and were published by him at the early age of eighteen