

Leopold Kronecker's Werke, Volume IV. Edited by K. Hensel. Leipzig, Teubner, 1929. 4+509 pp.

It is now more than 30 years since the first three volumes of Kronecker's collected mathematical papers appeared, and the present volume therefore comes as a pleasant surprise. Still more pleasing is the announcement of the editor that the two remaining volumes, Volume V and Volume III², will follow in a short time.

Volume IV contains Kronecker's purely algebraic papers, his investigations on solvable equations and the generation of Abelian fields. Furthermore it contains the first part of his memoirs on the theory of elliptic functions, particularly the real and complex multiplication and the connection with the theory of quadratic forms. At the end of the volume, Professor Hensel has added a set of valuable critical and historical notes.

OYSTEIN ORE

Éléments de Mathématiques Financières. By R. Thiry. Paris, Vuibert, 1930. 87 pp.

While acknowledging the need for the usual text to include details in regard to applications, schedules, etc.,—especially for the student who desires actually to master the various processes—the author seeks to reduce the treatment to a minimum by including only the essential processes. He is primarily interested in those individuals—possibly in administrative positions—who desire a general knowledge of those processes. The little book is in no wise a profound treatise and even departs, wittingly or unwittingly, from the standard—or at least widely accepted—forms of notation. The tables are mere extracts. It is doubtful whether most American texts would not remain just as clear and be just as brief if the material omitted in this text were omitted in them also. A small appendix affords a brief review of important but elementary parts of algebra.

C. H. FORSYTH

Leçons de Mécanique Rationnelle. By F. Bouny. Volume 2. Paris, Blanchard, 1929. 8+659 pp.

Professor Bouny's treatise on mechanics is based upon lectures which he has given to students of mining and metallurgy at Mons. The second volume treats the dynamics of a particle and of rigid bodies and presents a good detailed exposition of classical mechanics. The methods are, in general, also classical, although the author uses vector calculus where convenient and there is a brief mention of the use of integral equations in connection with the problem of a vibrating string and resonance.

Because of its present importance the book contains a very extensive study of vibratory motion and an attempt is made to put the results in forms convenient for applications.

A valuable feature is the collection of exercises at the end of each chapter. While a few are merely numerical applications, the great majority serve to amplify the theory. Answers to the exercises are given and in many cases there is also an indication of the method of solution.

W. R. LONGLEY