

KIEPERT'S DIFFERENTIAL AND INTEGRAL
CALCULUS.

Grundriss der Differential- und Integral-Rechnung. Von DR. LUDWIG KIEPERT, Professor der Mathematik an der technischen Hochschule zu Hannover.

Teil I: *Differential Rechnung.* Siebente vollständig umgearbeitete und vermehrte Auflage des gleichnamigen Leitfadens von weil. DR. MAX STEGEMANN. 1895. Pp. 638.
Teil II: *Integral-Rechnung.* Sechste vollständig umgearbeitete und vermehrte Auflage, u. s. w., 1896. Pp. 599.

In his Evanston colloquium Professor Klein called the attention of American teachers to this treatise upon the Differential and Integral Calculus as one of the best introductory text-books in the German language. The appearance of the present edition is confirmatory evidence of the high esteem in which it is held by German mathematical teachers. It was originally written by Dr. Max Stegemann, professor of mathematics in the *technischen Hochschule* at Hannover and first appeared in 1862. Since his death the revision of the fifth and subsequent editions has been in charge of his successor, Ludwig Kiepert. The modifications and extensions which have chiefly been made in the interest of students at the universities and technical schools, are so numerous that the original outlines can now scarcely be discerned. The present edition therefore very properly appears under Kiepert's own name.

To American mathematicians the chief interest of the treatise will be due to its German authorship. In reviewing, it will be my aim to bring out those points in which it differs from text-books on calculus in current use in this country, which, when not of English authorship, are generally constructed upon English or French models.

The general range of topics treated in the two volumes is about the same as in our more advanced text-books. The closest parallel is to be found perhaps in Williamson's Differential and Todhunter's Integral Calculus. The standpoint assumed in the discussion is, however, more elementary. The most noticeable variations in subject matter are, on the one hand, the insertion in the differential calculus of a final chapter upon the complex variable and in the integral calculus an introduction to the theory of differential equations; on the other hand, the exclusion of such topics as the gamma-functions, the theory of probabilities and the