

SHORTER NOTICES.

Karl Friedrich Gauss:—*General Investigations of Curved Surfaces* of 1827 and 1825. Translated with notes and a bibliography by JAMES C. MOREHEAD, A.M., M.S., and ADAM M. HILTEBEITEL, A.M., J. S. K. Fellows in Mathematics in Princeton University. Princeton, The Princeton University Library, 1902. 4to., viii + 127 pp.

THE handsome form of this the first translation into English of these classic memoirs of Gauss may make amends for its tardy appearance. Printed on old Stratford paper, gilt top, uncut edges, under press work that leaves little to be desired, the volume is one to delight both bibliophile and mathematician.

The translation proper is preceded by an introduction written by Professor H. D. Thompson which discusses the evolution of the method of Gauss as exhibited in the memoirs, and presents what is believed to be a complete account of all previous translations and editions.

The translation has been executed with great care from the original text of each memoir, free use having been made of other editions, especially that of Professor A. Wangerin* of the memoir of 1827. The translators have endeavored to retain as far as possible the notation, the form and punctuation of the formulæ, and the general style of the original papers. Certain changes necessary to conform to more modern notations are mentioned in the notes. These notes, which occupy thirty-two pages of the book, contain proofs of many of the formulæ and theorems which Gauss only indicated without demonstration.

The bibliography consists of three hundred and forty-three titles, and, with a few exceptions, is limited to books, memoirs, and papers which use the method of Gauss and which treat generally or in detail one or more of the following subjects: curvilinear coordinates, geodesic and isometric lines, curvature of surfaces, deformation of surfaces, orthogonal systems, and the general theory of surfaces.

∩ The publication of the translation was made possible by the liberality of the Princeton Library Publishing Association and the alumni of the university who founded the mathematical seminary.

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* Ostwald's *Klassiker der exakten Wissenschaften*, No. 5.