the hypergeometric equation. We are thus led directly to the theory of automorphic functions. Space is found for a short discussion of the dreieck functions, *i. e.*, functions which map the half plane on a triangle whose sides are circles.

We hardly need to add in closing that we recommend Herr Maurer's book most heartily to the student. Even the instructor will, we doubt not, find fresh inspiration in perusing its pages, and find here and there a mode of treatment which he will be tempted to incorporate into his own lectures.

JAMES PIERPONT.

Elliptische Funktionen. Von HEINRICH BURKHARDT. Zweite, durchgesehene und verbesserte Auflage mit zahlreichen Figuren im Text. Leipzig, Veit and Company, 1906. 373 + xvi pp.

THE present edition is essentially a reproduction of the first, except that here and there a proof has been improved or a typographical error has been corrected. Numerous friends of the book have sent the author lists of errata. Thanks to their cooperation, the author hopes the formulas are now entirely reliable. This is certainly a most important feature in a subject which almost suffers from its inexhaustible wealth of formulas.

For a detailed account of the contents and tendencies of this superior work, the reader may consult an extended review in this BULLETIN for July, 1900, pages 452–463.

JAMES PIERPONT.

Quadratic Forms and their Classification by Means of Invariant Factors. By T. J. I'A. BROMWICH. Cambridge University Press, 1906. viii + 100 pp.

THE theory of elementary divisors, with which this book deals, is one of the most useful and perfect of algebraic theories. Although it is now nearly forty years since Weierstrass's fundamental paper was published, no treatment of the subject appeared in English until the year 1904, when a brief discussion was included in Mathews's revision of Scott's Determinants. This treatment is far from being suited to the needs of one wishing to penetrate for the first time into the theory, and the same is true of the only treatise on the subject which exists in any language, that of Muth. The appearance of Mr. Bromwich's book is therefore to be hailed with satisfaction as affording the