pounds a theory of subjective probability based on betting behavior (cf. p. 60 of the book under review), is not referred to at all.

The author writes extremely well and obviously enjoys writing. To the very conservative his florid personal style may be at times disconcerting, but seeing that many mathematicians are such careless writers I think his literariness is to be commended. The adult reader may ignore his advice on doing all the exercises etc., he may even gloss over the nuances of personalisticism, but if he can overcome the initial barrage of a new terminology[3] he will enjoy most of what the author has to say and the way he says it.

K. L. CHUNG

Tables of integral transforms. Vol. II. Prepared under the direction of A. Erdélyi, New York, McGraw-Hill, 1954. 16+451 pp. $8.00.

This volume is divided into two parts of somewhat different character. The first, Chapters VIII through XV, follows the same organization plan as Volume I. [For a review thereof see this Bulletin vol. 60 (1954) pp. 491–493.] That is, the integrals are classified as transforms under the following types:

Hankel	$\int_0^\infty f(x)J_\nu(xy)(xy)^{1/2}dx$
Y-transform	$\int_0^\infty f(x)Y_\nu(xy)(xy)^{1/2}dx$
K-transform	$\int_0^\infty f(x)K_\nu(xy)(xy)^{1/2}dx$
H-transform	$\int_0^\infty f(x)H_\nu(xy)(xy)^{1/2}dx$
Kontorovich-Lebedev	$\int_0^\infty f(x)K_{ix}(y)dx$
Fractional integrals	$\int_0^y f(x)(y-x)^{r-1}dx$
Stieltjes	$\int_0^\infty \frac{f(x)}{(x+y)^r}dx$
Hilbert	$\int_{-\infty}^\infty \frac{f(x)}{x-y}dx.$

[3] It is hoped that the brief recapitulation given in the first paragraph of this review may be of some help there.

Here J_ν and Y_ν are Bessel functions of first and second kinds, respectively; $K_\nu(x)$ is the modified Bessel function of the third kind, and $H_\nu(x)$ is Struve's function. The second part of the volume contains integrals of higher transcendental functions, most of which could not properly have come into the foregoing tables of transforms. They are classified under the following titles: orthogonal polynomials, gamma and related functions, Legendre functions, Bessel functions, and hypergeometric functions. As in Volume I there is an appendix for notations and definitions and an index thereto.

It is the fate of all tables to be incomplete, and in spite of the ambitious scope of the present set most users will probably spot omissions. For example, the reviewer would have welcomed a chapter on the Weierstrass (or Gauss) transform. The omission is not serious since this transform can easily be related to the Mellin or Fourier transform. The appearance of this second volume confirms the reviewer's earlier opinion that these tables will ultimately be among the indispensable tools of many analysts and applied mathematicians.

D. V. WIDDER

Geometrie der Zahlen. By O. H. Keller. Enzyklopädie der mathematischen Wissenschaften mit Einschluss ihrer Anwendungen, Vol. I_2, No. 11, Part III. 2d ed. Leipzig, Teubner, 1954. 84 pp. 8.80 DM.

The title *Geometrie der Zahlen* was introduced by Minkowski over half a century ago. Its subject matter has naturally expanded greatly, particularly in the last twenty years, and the author commendably presents a more modern account of the subject. The aim of the *Enzyklopädie* is "to find a middle road between the . . . historical presentation and the . . . systematic presentation." The reviewer's impression is that the work tends to be more systematic than historical, but the few isolated remarks that follow can in no way detract from the debt owed to the author for his pioneering compilation.

One major pre-Minkowskian development is the study of the minima of quadratic forms in n variables, elegantly interpreted as the densest lattice packing of equal spheres in n dimensions. The discovery, essentially, that the symmetric tetrahedral packing (with $n+1$ mutually tangent spheres) is no longer densest when $n=4$ is one of the earliest indications that n-dimensional "Euclidean geometry" would depend on n with "number-theoretic" irregularity. Strangely enough, the footnote reference to this result (footnote 184a) does not refer to its discovery (by Korkine and Zolatareff in 1872) but