the Treatise of Watson (1922); they are due to Watson, van der Corput, Langer, and others. The same is true for the section on the zeros. The second part contains a huge system of formulas.

Chapter VIII (T), Functions of the parabolic cylinder and of the paraboloid of revolution.

Chapter IX (M, T), The incomplete gamma functions and related functions.

Chapter X (T), Orthogonal polynomials. Various parts of this chapter go considerably beyond the material dealt with in the reviewer's book on the same topic: for instance, the work of Tricomi on the asymptotic behavior and the zeros of Laguerre polynomials and the properties of the important polynomials of Pollaczek.

Chapter XI (M), Spherical and hyperspherical harmonic polynomials, a very elegant and important chapter much of which was taken from unpublished notes of a course given by G. Herglotz.

Chapter XII, Orthogonal polynomials in several variables.

Chapter XIII (T), Elliptic functions and integrals.

Both volumes have a subject index and index of notations which will greatly increase the usefulness of the work.

The mathematical public will be indebted to the collaborators and to the editor of this project for their accomplishment.

G. Szegö

The algebraic theory of spinors. By C. Chevalley. New York, Columbia University Press, 1954. 8+131 pp.

Most of the results of the theory of spinors are due to its founder E. Cartan; and, until this year, the only place where they could be found in book form was E. Cartan's own *Leçons sur la théorie des spineurs*, published in 1938. Strangely enough, the deep and unerring geometric insight which guided Cartan's researches, and places him among the greatest mathematicians of all time, is too often smothered in his books under complicated and seemingly gratuitous computations: witness, for instance, his fantastic definition of spinors (at the beginning of the second volume of the work quoted above) by means of the coefficients of a system of (non-independent) linear equations defining a maximal isotropic subspace! The reason for this is most probably to be found in the fact that E. Cartan's generation did not have at its disposal the geometric language which modern linear algebra has given us, and which now makes it possible to express in a clear and concise way concepts and results which otherwise would remain hopelessly buried under forbidding swarms of matrices.

The remarkably skillful way in which this language is used is cer-