Einstein and Fermi). An appendix explains Legendre, Laplace, Hermite, and Laguerre functions.

Bloch's book seems to be eminently fit for a general introduction to the present state of things. It can be compared to Birtwistle's books (*The Quantum Theory of the Atom*, Cambridge, 1926, *The New Quantum Mechanics*, Cambridge, 1928), but is more recent and is, perhaps, more readable.

<div align="right">D. J. Struik</div>

The Adjustment of Errors in Practical Science. By R. W. M. Gibbs. The Oxford University Press, 1929. 112 pp.

The object of this little book is to simplify and condense into a readable form the gist of the theory of errors arising in practical work. Ideas, important formulas and curves of reference basic to this phase of mathematics are presented in a concise, clear and interesting manner. The main body of the treatise is devoted to the presentation of these with diagrams, examples and tables; while the appendix is devoted to the mathematical derivation of the formulas and useful integrals. Students not interested in the mathematical side of the theory of errors will be able to read the contents and use the results without having to read technical proofs of formulas, while those interested in their derivation can turn to the appendix and find this phase presented. The chapters are short and to the point.

The first two chapters present an introduction, two examples from experience showing how distributions similar to the normal curve arise, and a short discussion of probability.

Chapters 3 and 4 present the normal curve of error for linear, area, and volume distributions, together with formulas for h, the standard deviation, and mean error. The probable errors for these three distributions are defined, discussed briefly, and given in terms of the standard deviation and mean error. The percentage error curves are introduced for these distributions with examples showing their construction and uses.

Chapter 5 is devoted to a short treatment of determining the curve of best fit and the most probable point by using the method of least squares. Exponential equations for predicting are treated linearly by using logarithms.

The following three chapters present the correlation coefficient, partial correlation, quality correlation, and the correlation ratios, together with a table exhibiting the probability of the correlation coefficient. A contingency table is explained for determining this coefficient.

The last chapter treats of the error of the last figure, the error of the interval, and the errors of functions. A power series raised to an integer is used to advantage in the discussion of the error of the interval.

The appendix follows with mathematical derivations of all formulas, equations of curves of reference, and the evaluation of certain integrals. A summary of formulas follows.

Many well constructed diagrams appear in the book and should prove helpful to the reader. Several chapters close with exercises for the student. The book is small, well bound, and easy to carry. It should prove to be very useful to those doing research work in this field. I found the treatise interesting and worthwhile.

<div align="right">W. D. Baten</div>