

## SHORTER NOTICES

*An Introductory Account of certain Modern Ideas and Methods in Plane Analytical Geometry.* By Charlotte Angas Scott. Second edition with notes and corrections. New York, G. E. Stechert & Co., 1924. xx+288 pp.

Perhaps the most noteworthy fact about this second edition of Miss Scott's book is that no change has been made in the text. It differs from the first edition (1894) only in the insertion of a short "Author's Note" and five pages of "Notes and Corrections,"—in which "a few misprints and misleading statements have been corrected; a few proofs and discussions have been simplified: one new section has been added."

A review of the first edition was written for this BULLETIN by F. N. Cole (vol. 2, pp. 265-271). This long and careful analysis will serve to-day, as it served thirty years ago, as an adequate and discriminating appreciation of Miss Scott's valuable book.

E. B. COWLEY

*Design of Diagrams for Engineering Formulas and the Theory of Nomography.* By L. I. Hewes and H. L. Seward. New York, McGraw-Hill Book Company, 1923. xiii+111 pp. (82 figs.)

A number of books on graphical calculation and on nomography have appeared in recent years. They naturally have a good deal in common but still have a good deal that is not in common. The book of Hewes and Seward appears to be noteworthy for its very elaborate and careful drawings which should appeal to the engineer but may not appeal to the ordinary professor of mathematics who undertakes to teach nomography. One of the failures in education is that studies do not adequately interlock. For example, there appears to be very little, if anything, in the courses on mathematics in our engineering schools which interlocks with the courses in drawing and design. It is fortunate that the book by Hewes and Seward does so interlock. Its use will give students an opportunity to do careful drawing in connection with formulas of importance in engineering practice but yet with a sound logical mathematical background. A nomogram is not much use unless it is accurately drawn. A really useful nomogram can scarcely be constructed without so much of the mathematical theory as is given by these authors. A feature which to an observing student and in the hands of a good teacher should be exceedingly useful is the comparison of the diagrams obtained for the same formula by different constructions. For example, Francis' wiewer formula is treated on page 11, on page 22, on page 48, and on page 58, and the diagrams are decidedly different. Until one understands the possibilities of varied representations and the advantages of the various representations he has not learned nomography. It is to be hoped that on the basis of this book a good many of our engineering schools will work out a cooperative course between mathematics and engineering drawing.

E. B. WILSON