

the objects at which he aims his lances, and our author must not expect to fare better at it than did his prototype who mistook the windmills for something other than they were.

L. WAYLAND DOWLING.

*Junior High School Mathematics*, Books 1 and 2. By E. H. TAYLOR and FISKE ALLEN. New York, Henry Holt and Company, 1919.

To one who has followed the trend of mathematical education during the last ten or fifteen years, it is apparent that the voluminous discussion on coordination of elementary mathematics is beginning to bear fruit. Recent elementary texts like the one under discussion show very clearly that teachers and authors now have a definite aim in view. The two most notable features of these modern texts are, first, the early introduction of geometric ideas and constructions without formal demonstrations, and second, the socializing of elementary mathematics by interesting the pupil in everyday activities which require computations and geometric constructions.

The text under review is a modern coordinated treatment of arithmetic, algebra and geometry for use in the seventh and eighth grades. Book 1 contains first a review of the fundamental operations of arithmetic with numerous problems in keeping accounts and simple business transactions. This is followed by a study of the formula as an introduction to literal arithmetic and algebra; percentage and its simpler practical applications; measurement of lines and angles; triangles and other constructions with ruler and compasses; parallel lines, quadrilaterals and polygons; and the mensuration of areas. The arrangement of subject matter is excellent, and the problem material covers a very extensive range of useful applications.

Book 2 continues the three lines of work begun in the first volume, viz., arithmetic, algebra and geometry. Algebra is approached through the formula and the use of letters to shorten statements in words; the square root of numbers is found arithmetically and also graphically by using the Pythagorean theorem; ratio and proportion are also treated both arithmetically and geometrically; this is followed by the mensuration of simple solids with numerous concrete problems; explanation of the negative; problems involving simple

equations; graphs and their application to statistical data; and the technical applications of percentage, such as banking and investment.

The book closes with a few extended problems which follow some special activity involving mathematical calculations through all its branches. A typical problem is the farm project, which includes financing the purchase and equipment of the farm; the construction of farm buildings; the purchase of live stock and implements; various agricultural problems; and finally the calculation of expenses and returns on the investment. Such problem material provides the most effective form of coordination and also instills valuable lessons in thrift and industry, so much needed at the present time.

Such books as these mark a distinct advance in the teaching of elementary mathematics, and cannot fail to make teaching more efficient and lead to a better appreciation of what mathematics is, and of its importance as a factor in common school education.

S. E. SLOCUM.

*Tables from the Mathematical Theory of Investment.* By E. B. SKINNER. Boston, Ginn and Company, 1917. 26 pages. Price 36 cents.

*Problems in the Mathematical Theory of Investment.* By G. R. CLEMENTS. Boston, Ginn and Company, 1917. 24 pages. Price 32 cents.

THESE tables are reprinted without change or introductory explanation from Professor Skinner's *Mathematical Theory of Investment*. In most cases, however, the descriptive titles of the tables are sufficient to make the use of them clear to persons who have not read the book from which they are reprinted.

Professor Skinner's textbook, first published in 1913, has been widely adopted and is generally recognized as the best American textbook on the subject. In class exercises and in final examinations it is frequently convenient to have the students use the tables without using the text. The printing of the tables separately was therefore highly desirable.

The collection of problems by G. R. Clements contains one hundred examples of the same general nature as those in Professor Skinner's text. The problems are not, however,