

a set of 165 concrete problems of a grade which insures the arrival at definite results. The selection of the problems is based on the correct pedagogic principles that doing things promotes and sustains the students' interest, and that all work in mathematics should be consecutive.

That the text is written from the view-point of the instructor whose students are preparing for technical courses may readily be seen from the selection of the topics discussed. The following form a list representative of the contents of the ten chapters: Measurements, both direct and indirect, of lengths and areas; with special reference to the degree of accuracy possible in the computations based on the given data. Areas of rectilinear plane figures by the method of coordinates, with applications to problems in surveying. The prismoidal formula, with special reference to the computation of earthwork. Vectors, with applications to resultant forces and latitudes and departures in surveying. A chapter on the nature and applications of logarithms, which might have been strengthened by a more complete discussion of the slide rule and by the introduction of problems based on the system of natural logarithms. Approximations to the lengths of curved lines as problems in limits. Graphic algebra, including work in the solution of simultaneous equations and inequalities. Approximate areas, leading to the trapezoidal, Simpson's, and Weddle's formulas. Approximate volumes, with applications to the contents of vessels. A discussion of the results obtained by the use of the prismoidal formula when the volumes are those of revolution.

Throughout it is apparent that the author believes in the pedagogic value of accuracy, the proper arrangement of computations, and the intelligent interpretation of processes and results. It seems to the reviewer that, since the nature of the subjects considered holds the student continually responsible for concrete results, the answers to the problems should have been included in the text.

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*Anfangsgründe der darstellenden Geometrie für Gymnasien.*

Von FRITZ SCHÜTTE, Oberlehrer am Gymnasium zu Düren. Leipzig, Teubner, 1905. 42 pp.

SINCE instruction in descriptive and constructive geometry was introduced into the German gymnasia in 1901, a number