

The Slide Rule – A Practical Manual, Pickworth, 24th Edition 1950

This book was originally published in 1900 or 1903, depending on your reference source. At any rate, by 1950 it had acquired 24 editions and numerous printings. My copy includes only Prefaces to the 21st (1938) and 23rd (1942) editions. Neither they nor the book's Introduction provide any specific guidance as to the author's original purpose and his intended audience. Based on content, the text seems intended as a self-study guide for technically-inclined readers whose mathematical background might correspond to our current high school algebra and trigonometry courses.

The basics of logarithms and their use in slide rule construction and operation are provided in an early chapter. Examples or exercises within chapters are generally purely numerical in nature but a 19 page section entitled, "Examples in Technical Calculations" is devoted specifically to practical problems in mensuration, mechanics, dynamics, statics, steam engines and boilers, mechanical and electrical engineering, chemical composition, and finance. Another section deals with "Practical Trigonometrical Applications".

The tutorial part of the book deals with the elementary Mannheim-type rule with its A,B,C,D/S,L,T scale configuration. A later section addresses "Slide Rules With Log Log Scales" and discusses the Davis, Faber, Perry, and K&E's Duplex log-log rules. Other sections of the book cover other forms of rules and include discussions of Fuller's Calculating Rule, Otis King calculators, Thacher's Calculating Instrument, Nestler Cylindrical Calculator, sectional length or gridiron calculators, the Cooper slide rule, Boucher Calculator, the Halden Calculex, Sperry's Pocket Calculator, and the Picolet and Fowler circular slide rules. In the section entitled, "Special Types of Slide Rules" are discussed the Nestler, Reitz, Engineer's New Pattern by Thornton, Precision (a "long" slide rule), Universal, Fix, Polyphase, Polyphase Duplex, Multiplex, and the Beghin rules. Under the section entitled, "Slide Rules for Specific Calculations" are included the Engine Power Computer, and the Electrical, Davis Martin Wireless, "Elektro", and Roylance Electrical slide rules.

The book has no index. While there are no specific addenda or appendices, the design of the book's contents is such that the last one third to one half of its contents are essentially appendices on various topics (see the Table of Contents on this website for details).

In summary, although the book offers a well thought-out discussion of the basis of the slide rule and an easy-to-understand set of instructions for its elementary use, its principle value is to provide a good historical view of slide rules and their use in the first third of the 20th century.