

A Manual of the Slide Rule - Its History, Principle, & Operation, Thompson, 1930, reprinted 1942

According to the Preface, the book is designed for "high school and college students, practical industrial workers and clerical workers." The general nature of the book's vocabulary and approach, and its exercises and problems, suggests that readers need to be comfortable in their background in high school algebra and trigonometry. The text is most likely best used for self-instruction.

A reasonable amount of background and theory for slide rule construction and operation is presented, beginning with the properties of exponents and progressing to logarithms. The style of presentation however, is that of a 1930's or 1940's mathematics text and would likely not be regarded as terribly accessible by today's audiences. In Chapter IV, there are provided 53 pages of settings and instructions to solve a very good mix of purely numerical and applied problems in the areas of mensuration, commerce, finance, mechanics, and engineering.

The author confines his teaching approach to Mannheim and Duplex linear rules, with specific references to those produced by K&E. That company's rules are used as examples and in illustrations throughout the text, specifically, the Polyphase Mannheim, the Polyphase Duplex, and the Log Log Duplex. The scale set used is typical of early Log Log rules. There is no mention of vector rules. Chapter V is entitled "Special Forms of the Slide Rule". It presents discussion and illustration of K&E's Roylance Electrical, Stadia, Surveyor's Duplex, Chemist's Duplex, and Power Computing linear rules. Circular and other non-linear rules such as the Charpentier, Sperry Pocket Calculator, Thacher, and Fuller are also illustrated and briefly described.

There are no appendices or addenda. Nor is there even the simplest form of an index, which damages substantially the usefulness of the text as a reference work.