
15. Review of IJzebrand Schuitema's book:

The Slide Rule, Technical Cultural Heritage

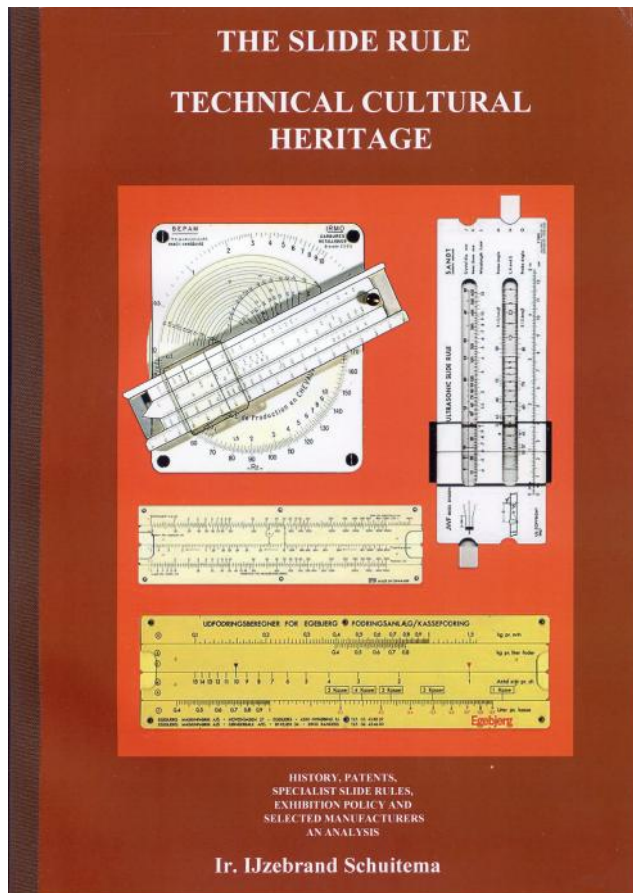
by Otto E. van Poelje

During the last International Slide Rule Meeting IM2003, IJzebrand Schuitema has presented his new book, "The Slide Rule, Technical Cultural Heritage". The book is only available in the English language, hence this review in English.

Where his first book ("2 * 3..... about 6", published in 2000) focused largely on specific Dutch slide rule designers and makers by "oral history", this new book has a different scope, and carefully avoids overlap with the other book.

The title suffix "Technical Cultural Heritage" is chosen to highlight the importance of technical artefacts and tools, including slide rules, in the cultural history of science and industry.

The book starts by skimming in just 12 pages over almost 400 years of slide rule inventions, production and usage. This broad overview gives the main direction of slide rule development, spiced with many tiny grains of information suggesting a far greater depth of knowledge beneath the surface.



The main part of the book is about patents and descriptions of selected slide rules and their design innovations. The chapter on patents gives more than 130 (mostly European) patents, selected by IJzebrand for their interest in the areas of slide rule cross-sections, cursors, circular designs and scales. For every patent the original and often intriguing drawings are reproduced while the stuffy legal texts have been replaced by more appetizing descriptions on the essentials of the invention. Any reader will find here some of his familiar names and principles, but surely also new names and fascinating innovations.

The largest and most important chapter, almost 100 pages, deals in more detail with some 30 specialised slide rules, from exotic areas like:

- forestry (Lyth tree rule)
- spirits (the famous Farmar, for example)
- rheology (Aristo 990124)
- radio-activity (RADIAC)
- cattle breeding (Aristo 10101 and 10102)
- welding control (Blundell P2808)
- milling and cutting (the beautiful IRMO P2)
- piping and hydraulics (many types)
- truck performance (REO, ALRO)
- climate control (Meisner 1802)
- solar energy transmission through building walls (UTO SUNCAL)
- textile (Aristo 930 - Beck)
- music string design (IWA 15379)
- flower bulb forcing (ALRO “broeischijf”)
- diving (NAUI SAC-Rate)
- sea echo sounding (TACAID 6-10)
- drainage (design Wageningen University)
- aviation (IWA flight performance, designed by Bargl)
- compression strength design of steel I-beams (IWA 09247-09248)

These are mainly slide rules from IJzebrand's own extensive collection, which he has studied in more detail. Some of these descriptions have been published earlier, in separate articles. The level of detail is generally understandable, but can also be challenging for the reader outside a particular profession.

IJzebrand, like always, has inserted many amusing anecdotes and personal notes, for example on how he acquired some particular slide rule or its operational knowledge, sometimes by pure chance meetings or events.

There is a section on how a collection like his own (the largest collection in the Netherlands) might be exhibited permanently for the general public.

In actual discussions with Dutch museums, the outcome has been most often that a large and homogenous collection like IJzebrand's is considered to have insufficient appeal to the general public.

Nevertheless, the book puts forward a solid proposal for a fixed exhibition, by many structured themes; even a suitable building, with a "slide-rulean" facade, has been sketched and modeled recently (and could be viewed by the participants of IM2003)!

The last part of the book narrates the history of three companies which are still producing slide rules today (or at least recently), with special attention for the people driving these companies.

The companies involved are UTO in Denmark (also a theme in the recent IM2003 meeting) and IWA in Germany; for the third company, Blundell-Harling in England, an earlier paper (1999) by Peter Soole has been inserted.

This book is a "must-have" for the serious slide rule collector or enthusiast: not because it gives the final treatise of "The Slide Rule" (it does not, neither could any book accomplish that), but because it succeeds so well in sharing with the reader the vast knowledge and experience of IJzebrand from his 20-year quest for slide rules.

For 260 pages of advanced slide rule knowledge, over 500 illustrations, including many in color, and a CD-ROM by Herman van Herwijnen with all discussed slide rules in digital picture and database format, the price of 40.- EURO is certainly reasonable.

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