The Double Use of a Graphical Card-Board Logarithm Table:

The Pressler „Ingenieur-Messknecht“ (Measurement Servant) from 1852

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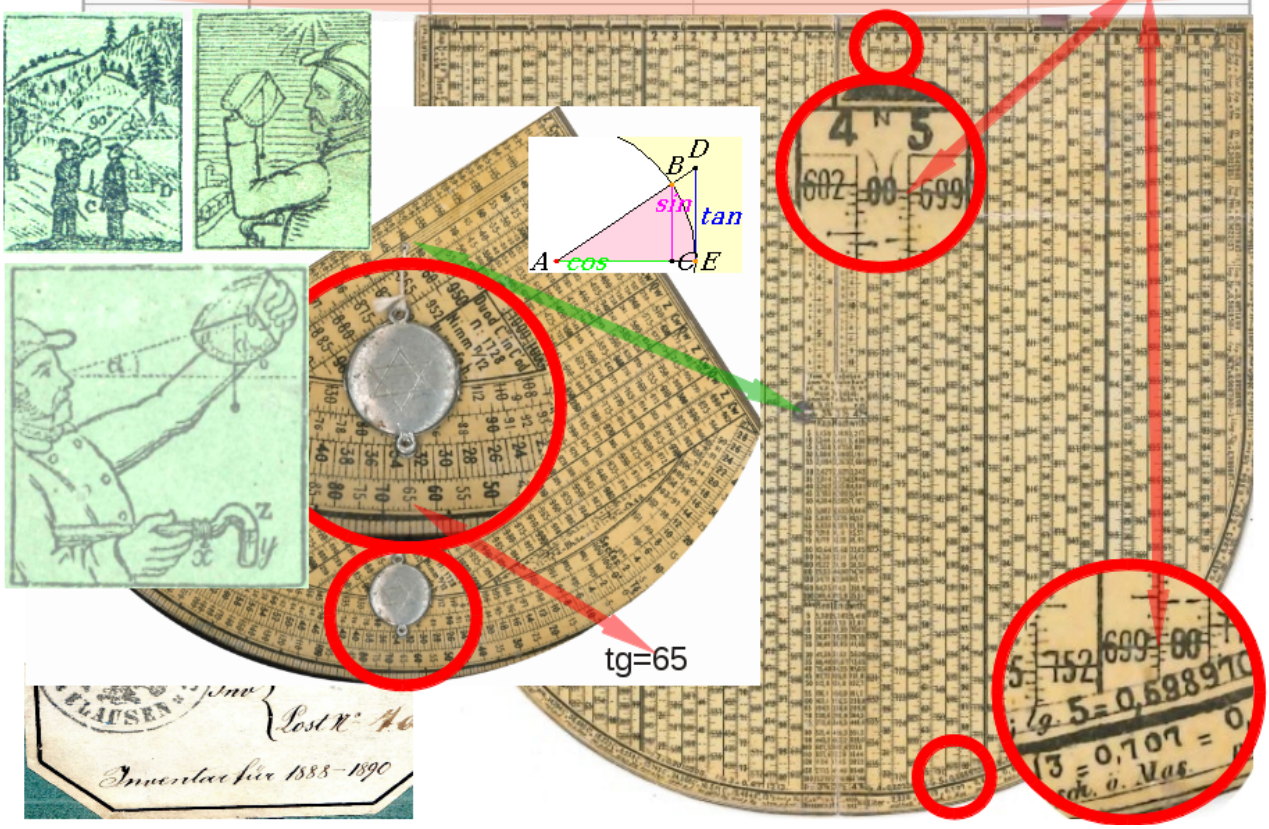
Intended for forestry officers, Pressler's foldable card board instrument first published in 1852 has multiple tables and listings, one of which a graphical logarithm table. It can be folded to become a measurement device, permitting – by means of a small plumb line and sighting needles– to determine angles and elevations, almost like a modern theodolyte. A didactical booklet (in German) describes how to sight a tree-top alongside the edge, read the trigonometric values, estimate a distance, multiply/divide them using its printed logarithms and obtain the height of the tree. Adequate formulae permit to calculate some then innovative forestry indicators like thickness and growth prediction of the observed forest.

Common logarithm, characteristic, and mantissa of powers of 10 times a number

number	logarithm	characteristic	mantissa	combined form
5	0.698 970...	0	0.698 970...	0.698 970...



The figure shows on the left some cutouts from the cardboard cover which explain the holding of the folded instrument and the sighting of the angle. To the right, magnified parts of the graphical logarithm table, with the mantissa for 5-00 slightly below 699 (characteristic zero presumed). Max Pressler (1815-1886) has founded a discussed theory for optimal forestry results. Its ultimate adoption were and are now big monocultures of pine trees in most parts of Germany. His books are still republished, but the strange „Messknecht“ became a rare but often muddy collector's item.

Pressler, Maximilliam Robert (1852, Print on Demand), Der Messknecht Und Sein Praktikum:..;ISBN: 9781248018347