B. M. VAN DER VEER.

BOARD OR LOG RULE.

No. 7,331. Patented Apr. 30, 1850.

Fig. 1.

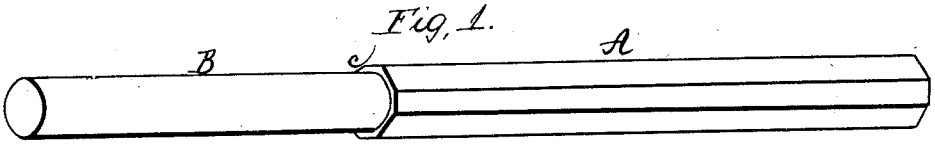


Fig. 2.

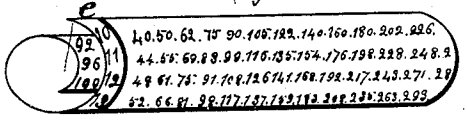


Fig. 3.

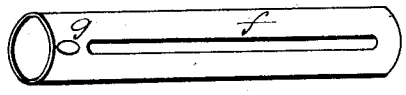
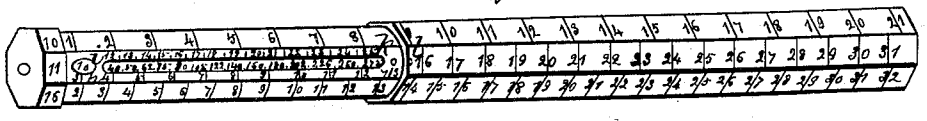


Fig. 4.

Fig. 5.



UNITED STATES PATENT OFFICE.

B. M. VAN DER VEER, OF CLYDE, NEW YORK.

BOARD AND LOG RULE.

Specification of Letters Patent No. 7,331, dated April 30, 1850.

To all whom it may concern:

Be it known that I, BENJAMIN M. VAN DER VEER, of Clyde, in the county of Wayne and State of New York, have invented a new method of applying log-tables to a board rule or measure in such a manner as to be of great practical use to lumbermen and others; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in a novel, compact, and convenient combination of the ordinary log tables now in use (in a book form) for ascertaining the number of feet of square edged inch thick boards a log of given length and diameter will make, with the common board rule or measure—so as to give at a glance the contents of these tables with perfect accuracy, and without further recourse.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

I adopt, in part, the common octangular board rule or measure in use with lumbermen, as shown by section A, Figure 1, in the accompanying drawing; turning it in a lathe round, and smaller, as at section B, with a shoulder at letter *c*—so as to admit of slipping on, in the first place, a cylindrical log table, made upon sheet brass, zinc, copper or other convenient metal, by the use of dies—or upon parchment or paper, with type, as shown by Fig. 2, around the end or head of which table, is a row or column of given lengths of logs, as seen at letter *e*. When this table is made and slipped on to section B, Fig. 1, and fastened so as not to turn, I make 2 thin brass or other metal rings or washers, about ½ an inch wide, and slip one (over the table) up to shoulder *c*, so as not to cover or hide any figures on the table, (a margin being left on the table for this purpose at each end) and make it fast. In like manner the other is slipped on to the end, up to the row of figures *e*, Fig. 2, and fastened—the object of these washers being to prevent the friction of a revolving outer cylinder or case (Fig. 3) from defacing the figures on the table.

When the table is made upon parchment or paper, it is wet on the back with glue and wrapped around section B, Fig. 1, and afterward nicely varnished.

The outer revolving cylinder, Fig. 3, may be cast of any of the soluble metals, or made of sheet metal of suitable thickness, by forming it around a mandrel and brazing or soldering the edges together—first cutting out an aperture, longitudinally, as at *f*, Fig. 3—and a round or oval hole, as at *g*. This done, and the case is slipped on over the table and washers up to the shoulder *c*, Fig. 1, being of the same diameter, when on, of section A of said Fig. 1, less the octangular angles. You now make the cap, Fig. 4, of brass or other metal, of octangular form, to correspond with section A, Fig. 1—and slip it on up to the revolving case or cylinder, fastening it by a thumb or common screw through the end or head—being careful not to make it so tight as to prevent the case or cylinder from turning. Next, you complete the instrument, by lining and figuring it by suitable dies or an engraver (or it is preferable to do this before the parts are put together), for a board rule, precisely in the way and manner such rules are lined and figured, with the exception—that in my rule, one of the planes within the longitudinal lines upon the revolving case or cylinder, is occupied in the center by the apertures *f* and *g*, Fig. 3, requiring the figures that would otherwise be placed there, to be set or stamped on the lower margin of said aperture (in rather smaller figures) in the same order, and within the same plane—see letter *h*, Fig. 5. Also there is stamped on said cylinder upon the upper edge or margin of said aperture within the lines of said plain, a series of diameters of logs, in inches, as shown at letter *i*, Fig. 5. Now the whole instrument is completed; containing in its combination the log table above described, the board rule, and the two foot measure.

In order that others may understand the uses of this instrument, I will describe its operation.

The first thing to be observed is, that the dot, or mark *k*, Fig. 5, on the cylinder, is brought in line with a corresponding dot, *l*, on the octangular section of the rule. The rule being thus set, it is ready for measuring the length, breadth and thickness of lumber and timber—and the length and diameter of logs, in precisely the same way and manner as the same are measured by the ordinary board rule in use. Then, wishing to know how many feet of square edged inch boards a log will make that has measured, say 10

feet long and 12 inches diameter, you look for the said number of feet in length, through the hole in the revolving cylinder at the head of the longitudinal aperture; when found, you glance your eye along the line of given diameters on the cylinder above the longitudinal aperture, until you find that which the log measures, 12 inches—seeing directly below it, through the long aperture, the number of feet in square edged inch boards the log will make, viz—40 feet.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the log table and board rule, in the way and manner, and in the form described and illustrated herein.

I do not claim the log table or the board rule, *per se*, as my invention.

BENJM. M. VAN DER VEER.

Witnesses:

HIRAM P. JONES,

WM. H. VAN DER VEER.