

(No Model.)

E. ANDREWS.

BOARD RULE.

No. 392,091.

Patented Oct. 30, 1888.

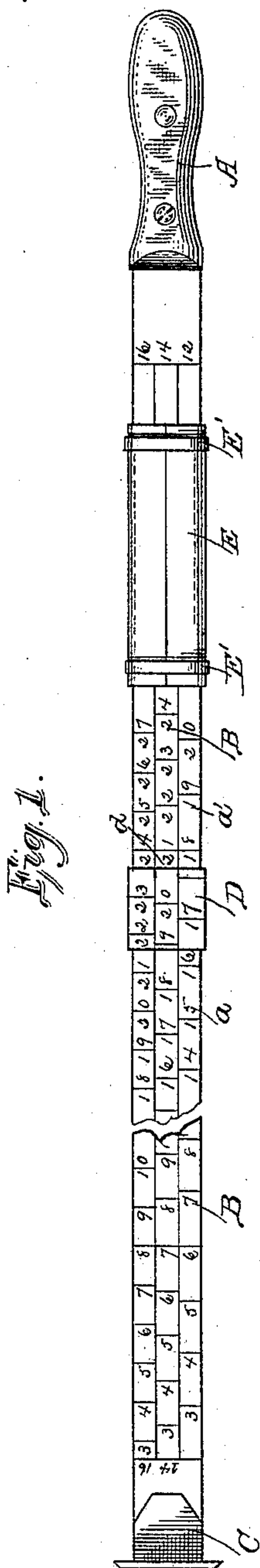


Fig. 3.

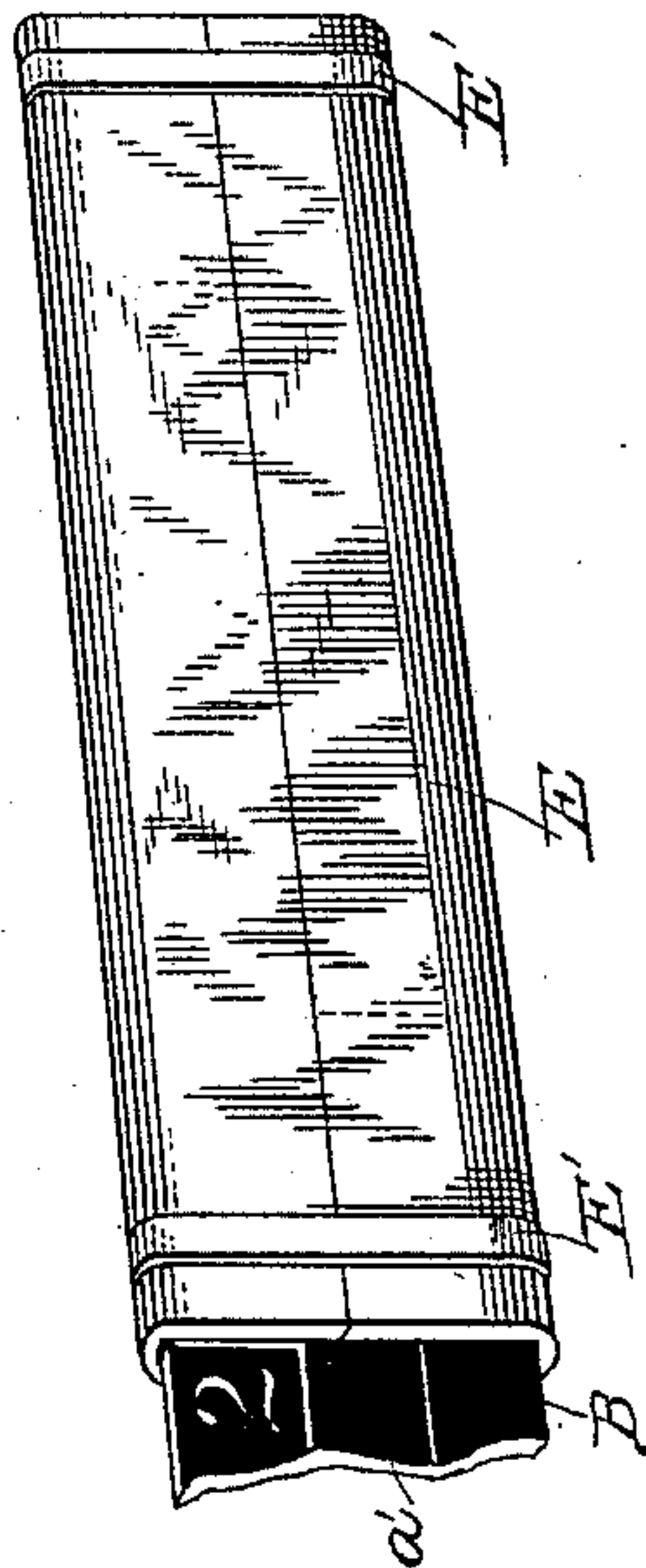
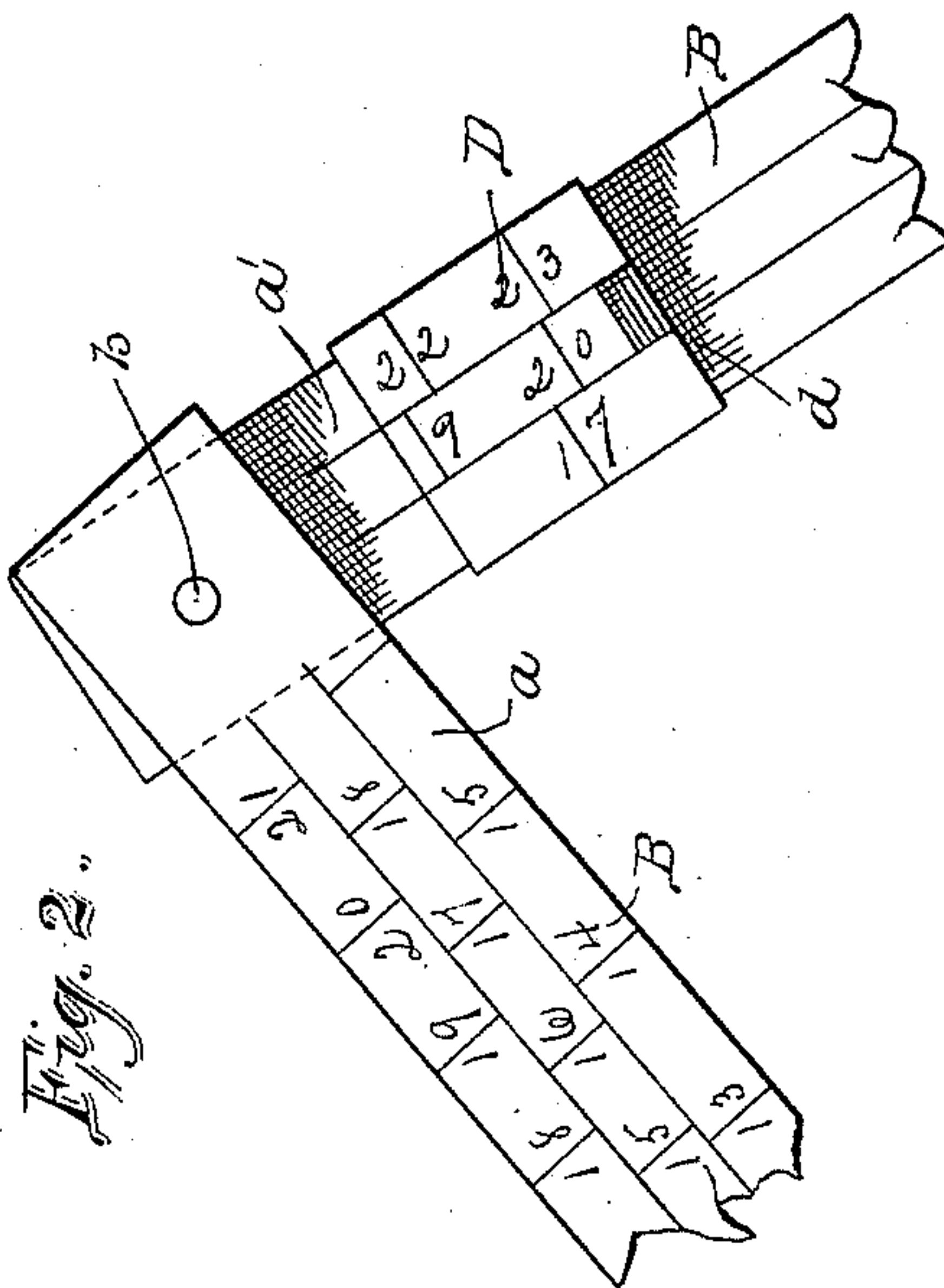
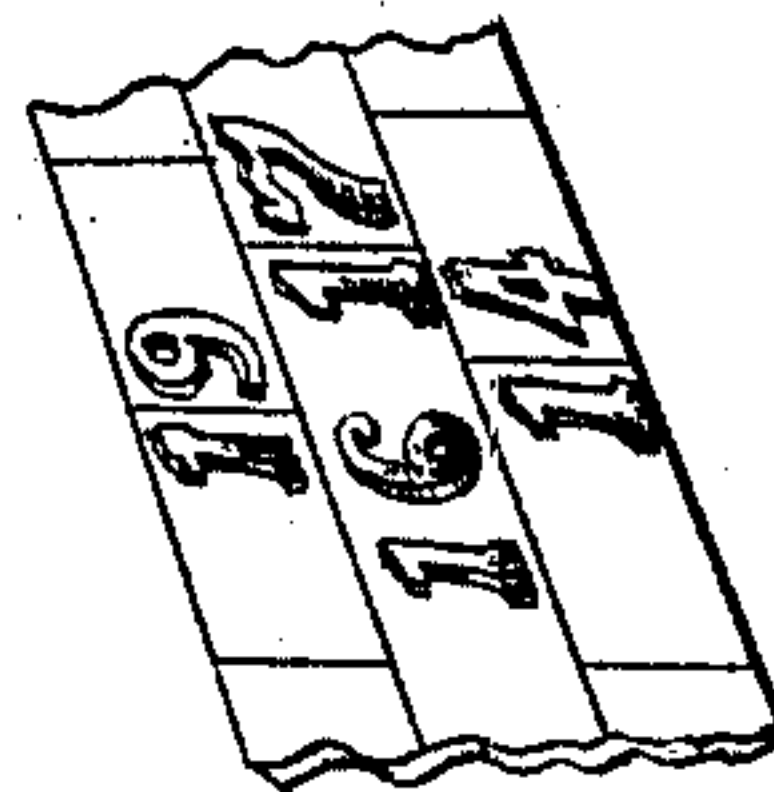


Fig. 4.



Witnesses.
Preston Phelps
Frank L. Hyer.

Inventor.
Emanuel Andrews.
by Geo. W. Dyer.
his Attorney.

UNITED STATES PATENT OFFICE.

EMANUEL ANDREWS, OF WILLIAMSPORT, PENNSYLVANIA.

BOARD-RULE.

SPECIFICATION forming part of Letters Patent No. 392,091, dated October 30, 1888.

Application filed June 20, 1887. Serial No. 241,865. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL ANDREWS, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Board-Rules; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement upon the invention described in Letters Patent No. 265,732, granted to me October 10, 1882, and has for its object the production of a board-measure which can be folded, and which shall be more convenient to handle, better adapted for outdoor use, and more efficient in general; and the novelty consists in the peculiar construction of the rule and in a hand-hold attached to the same, all as will be more fully hereinafter described and claimed, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a plan view of my improved board-rule and its attachments, broken out at the center; Fig. 2, a detail showing how the two sections of the rule are jointed and the sleeve for locking them together at the joint; Fig. 3, a detail, in perspective, of the hand-hold; and Fig. 4, a perspective view of a portion of the blade.

My improved rule is composed of a handle, A, of some non-conducting material, preferably of wood, and a spring-metal body, B, preferably of uniform width throughout, from the end which enters the handle to the end which is secured to the head C, and is substantially like my other rule, with the exception of certain changes in the body B, hereinafter explained. This rule is divided, as usual, into three longitudinal spaces for different lengths of boards, (in this instance twelve, fourteen, and sixteen feet,) and with cross-lines and figures denoting the number of feet in the board with a certain width. Heretofore these figures and cross-lines were in black, and were sunk below a nickel-plated surface having a dull finish; but when the rule was used in sunlight it was found to be too glaring and injurious to the eye. So to overcome this objection I make the rule

with raised nickel-plated figures and cross-lines upon a dark or black surface of lacquer or any other water-proof material, which not only prevents rust, but dulls the surface of the rule, so as to prevent any more glare than is caused by a varnished wooden rule.

The body B of the rule, instead of being made in one piece, is made in two sections, *a* and *a'*, lapped at the meeting ends and loosely jointed and held together by a pin or rivet, *b*, at the center, so that the rule can be folded and packed in a satchel or in a smaller space than heretofore. It is very necessary that a rule made in this way should be locked at the joint as securely and firmly as possible to throw off the strain at that point when the rule is used in a bent position, and for this purpose I employ a sliding sleeve, D, that can be easily moved over the joint and back again when desired. This sleeve is made from metal to nicely fit the body B, and is divided into longitudinal spaces, and has figures and cross-lines to form a continuous scale of measurement, together with the spaces, figures, and lines on the surface of the rule.

To insure perfect continuity of the scale of measurement and to prevent the sleeve from being slipped beyond the joint, I provide the transverse edge of this sleeve next to the handle A with a tongue, *d*, which, when the sleeve is moved up to cover the joint, comes into contact with the overlapping end of the section *a* of the rule, and thus locks the sleeve at a proper point against further forward movement. This tongue *d* is made, preferably, by slitting the edge of the sleeve at two points and bending down the intermediate piece of metal; but it may be a separate piece of metal secured thereto, or it may be a detent of some other form.

E is a hand-hold or additional handle, made, preferably, from leather, and adapted to be moved along the rule between the handle A and the sleeve D. This movable handle enables the user to take hold of the rule without coming in contact with the metal, and is of much service in preventing the arm from becoming tired when sorting lumber and in measuring lumber when standing below the pile. The two meeting edges of this leather handle may

be removably secured together in any suitable way; but for better convenience of removal and for better security I prefer to leave these edges open and to secure the handle on the rule by means of rubber bands E' E', so as to be easily put on and taken off.

This rule can be used both as a board-rule and a log-rule by marking one side with the log-scale and the other side with the board-scale.

The raised figures and the cross-lines of the scale on a dark or lacquered surface and the removable leather handle are not to be confined to a rule made with a joint; neither is the joint to be confined to a metal rule; and it must also be understood that the removable and adjustable handle could be made of some other flexible material besides leather.

It must be further understood that the rule itself may be made of wood, whether jointed or not jointed, provided that either the raised figures or the removable leather handle are used, without departing from the spirit of this invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A jointed board-rule made in two parts, overlapping each other at the meeting-point and there pivoted together, and provided with a sliding sleeve having a dependent flange at

one of its ends adapted to strike against the end of one of the parts of the rule, whereby the sleeve covers the joint and locks the rule when both parts are in the same line of direction.

2. In a board-rule, the combination of the handle A, jointed metallic blade B, and end C, substantially as set forth.

3. In a board-rule, the combination of the handle A, jointed blade B, metallic end C, sliding locking-sleeve D, and removable leather hand-hold E, substantially as set forth.

4. In a board-rule, the combination, with the blade provided with nickel-plated or light figures on a dark background, of a sliding sleeve, also provided with figures, substantially as shown and described.

5. As a new and improved article of manufacture, a jointed board-rule provided with a handle, a jointed blade and an end, said blade being provided with raised nickel-plated or light figures and cross-lines on a dark non-reflecting water-proof background, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EMANUEL ANDREWS.

Witnesses:

CHAS. MELHORN,
G. D. SLOATMAN.