No. 761,430. PATENTED MAY 31, 1904.

A. VREELAND.

DOUBLE PLUMB RULE.

APPLICATION FILED SEPT. 29, 1903.

NO MODEL.

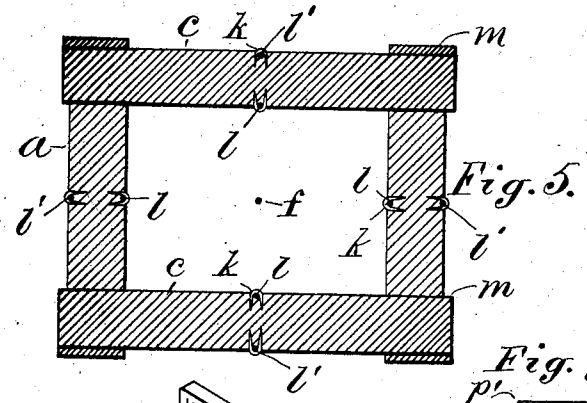


Fig. 1.



Fig. 3.

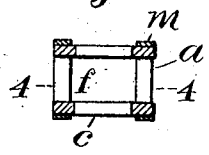


Fig. 2.

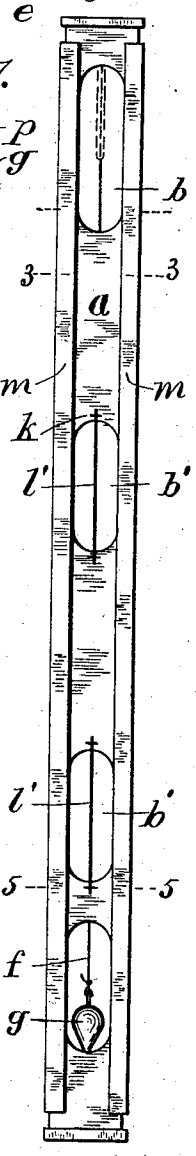


Fig. 4.

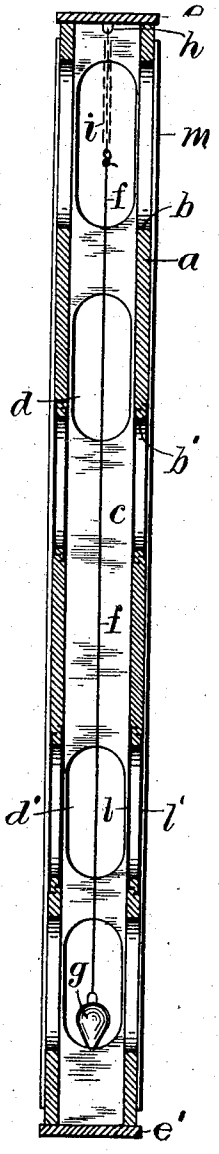
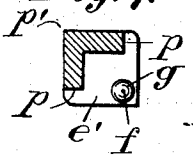
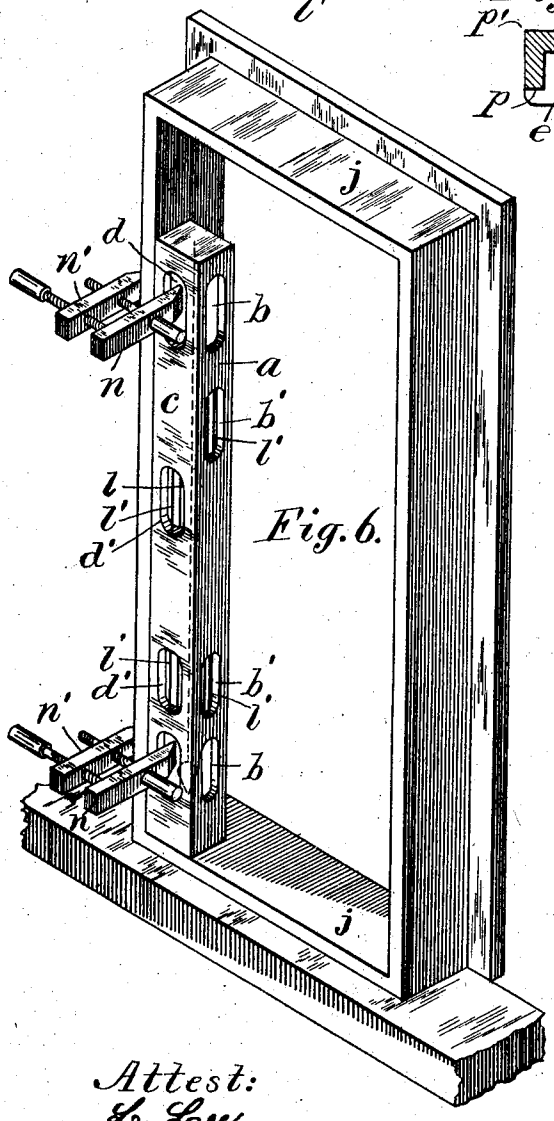


Fig. 7.





Attest:

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No. 761,430. Patented May 31, 1904.

UNITED STATES PATENT OFFICE.

AARON VREELAND, OF SINGAC, NEW JERSEY.

DOUBLE PLUMB-RULE.

SPECIFICATION forming part of Letters Patent No. 761,430, dated May 31, 1904.

Application filed September 29, 1903. Serial No. 175,053. (No model.)

To all whom it may concern:

Be it known that I, AARON VREELAND, a citizen of the United States, residing at Singac, county of Passaic, State of New Jersey, have invented certain new and useful Improvements in Double Plumb-Rules, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The object of this invention is to furnish a plumb-rule for carpenters' and masons' use whereby a corner can be plumbed as well as a flat surface—that is, the plumb-rule has a corner for application to the object and sighting-guides in different planes by which the cord of the plumb-bob can be sighted in two directions, preferably at right angles to one another.

The body of this double plumb-rule can be made of any convenient shape, either L-shaped or square, provided it has the cord suspended clear from the body, so that it may be swung in two different relations to the body in planes at right angles to one another. By the use of such a double plumb-bob a corner in mason-work can be carried up accurately, and an object, like a door-frame or a window-frame, can be plumbed in both directions at once and great loss of time saved on the part of the operator. The exterior of the body is preferably provided with projecting strips or seats, which may be dressed off to true up the body when worn or warped.

In the annexed drawings, Figure 1 is a plan of the plumb-rule with body of rectangular shape and of greater width than thickness. Fig. 2 is an elevation of the narrow side of the plumb-rule. Fig. 3 is a cross-section on line 3 3 in Fig. 2. Fig. 4 is a section on line 4 4 in Fig. 3. Fig. 5 is a section on line 5 5 in Fig. 2. Fig. 6 is a perspective view of a door-frame with the plumb-rule clamped thereto by hand-screws near its opposite ends, and Fig. 7 is a cross-section of an alternative form for the body.

In Figs. 1 to 5, *a* designates the narrower sides of the body, provided with openings *b* *b'*, and *c* designates the wider sides, provided with openings *d* and *d'*. End plates or covers *e* and *e'* are shown upon the top and bottom ends of the body, the interior of which is rectangular and has the cord *f* for the plumb-bob *g* suspended in the center. A staple *h* is shown within the top cover *e* and chain *i*, fastened thereto, which may be readily drawn out of one of the openings *b* or *d* for attaching or renewing the cord *f*. Sighting guide-wires *l* and *l'* are shown attached, respectively, to the inner and outer surfaces of the sides *a* and *b* and stretched vertically across the centers of the openings *b'* and *d'*, and the whole is so proportioned that all the sides of the bob-shaped body are truly plumb or vertical when all of the guides are in alinement with the plumb-cord *f*. The guide-wires upon opposite sides of the box lie in a plane parallel with the two intermediate sides of the box and in planes in each of which the cord *f* is located when vertical. The sighting-guides are so disposed that the intersection of the two planes formed by the guide-wires *l* and *l'* is parallel with all the edges of the box, so that any of them may be set vertically by alining the several guides with the cord. The ends of the guide-wires are secured by bending at right angles and driving them into the wood and driving a staple *k* over the wire near by. The box is preferably made with longitudinal strips *m* along the sides at the corners, which may be planed or dressed off when required to true up the plumb-rule.

Fig. 6 shows how the openings *b* and *d* in the body of the plumb-rule may be employed for inserting one jaw, *n*, of a hand-screw, the other jaw, *n'*, being placed behind any object—as, for instance, the door-frame *j*—and the corner of the plumb-rule set even with one edge of the door-frame, so that the alinement of the guides with the plumb-cord sets the door-frame simultaneously plumb both edgewise and sidewise. The plumb-rule may be held or secured at the corner of brickwork and other objects and the eyes directed to adjacent sides of the body of the rule in succession to aline the several guides with the cord inside.

Fig. 7 shows an L-shaped body for the rule, the plumb-cord *f* being hung from a suitable top piece, so as to line with the edges *p* of the two side members, the corner *p'* of the body being set in coincidence with the object to be

plumbed. The edges p are made parallel with the corner p', and the cord is hung at the intersection of planes drawn from such edges parallel with the two side members. In this construction the edges p of the body can be sighted directly into alinement with the cord f, and no wire-guides are required. The hollow rectangular box is, however, greatly preferable, as the cord and plumb-bob are wholly inclosed, and thus protected from derangement.

It is obviously immaterial whether the hollow rectangular body (shown in Figs. 1 to 5) be provided with wire-guides or whether one edge of each opening d' be formed upon the center line of the body, where the wires l' are represented in the drawings.

Having thus set forth the nature of the invention, what is claimed herein is—

1. A double plumb-rule having an external edge to set in coincidence with the upright edge of an object, and having sighting-guides parallel with such edge and arranged in two planes, and a cord with plumb-bob suspended from one end of said plumb-rule at the intersection of the two planes, whereby the said edge may be set in a vertical line, substantially as herein set forth.

2. A double plumb-rule comprising a long rectangular box having openings in all of its sides, a support at one end of the box with cord and plumb-bob suspended therefrom, and coöperative sighting-guides fixed in opposite openings to sight the cord in planes at right angles to one another, whereby the edges of the box may be set truly vertical.

3. A double plumb-rule comprising a long rectangular box having openings in all of its sides, a support at one end of the box with cord and plumb-bob suspended therefrom, sighting-guides fixed in openings upon all of the sides to sight the cord in planes at right angles to one another, and additional openings for the application of hand-screws to clamp the plumb-rule in place for use.

4. A double plumb-rule comprising a rectangular wooden box having openings in the various sides with sighting guide-wires secured therein for sighting a plumb-cord in planes at right angles to one another, a support in one end of the box with plumb-bob suspended therefrom by cord at the intersection of said planes and extended past the guides for alinement therewith, and the exterior edges of the box being furnished with longitudinal projecting wooden seats which may be dressed off to coincide with the guides when required.

5. A double plumb-rule comprising a rectangular box having openings in the sides with guides applied to certain of the openings, a cover at the top of the box, and opening in the side below such cover, and a chain attached to the cover within the box to draw outwardly through the opening, for attaching the cord of the plumb-bob.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

AARON VREELAND.

Witnesses:
L. LEE,
THOMAS S. CRANE.