

No. 835,172.

PATENTED NOV. 6, 1906.

Z. H. WILLIAMS.
LEVEL DEVICE.
APPLICATION FILED APR. 16, 1906.

Fig. 1.

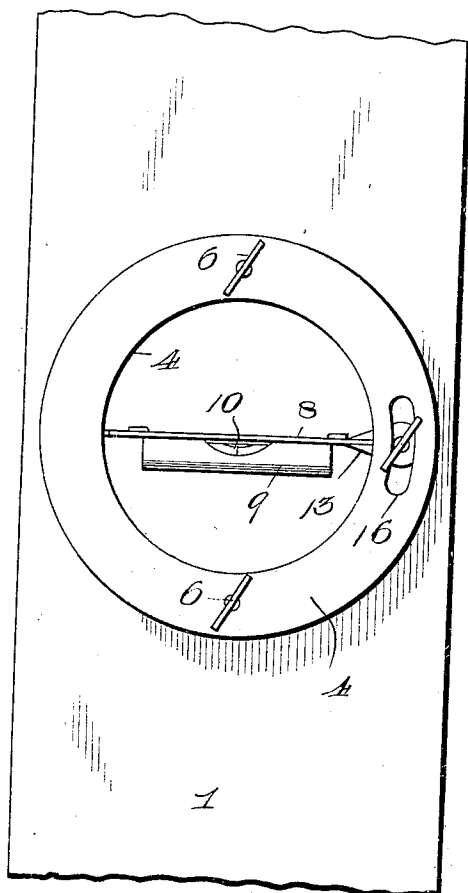


Fig. 2.

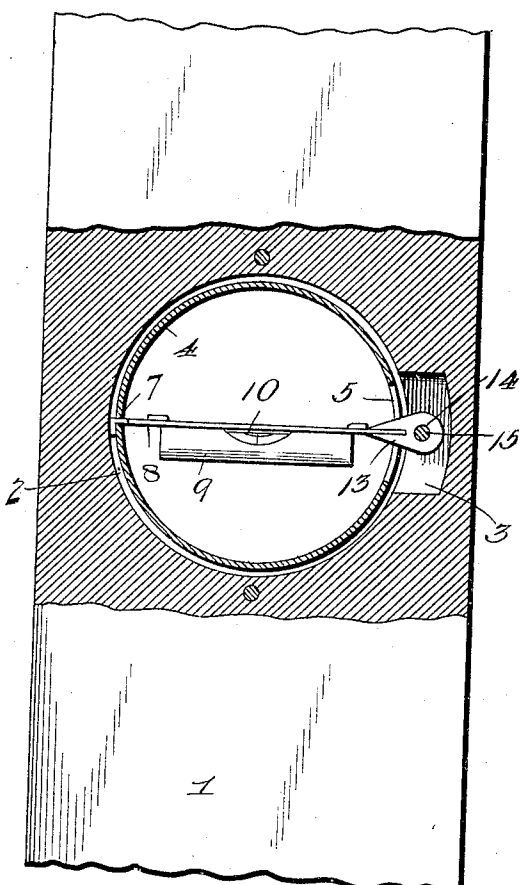
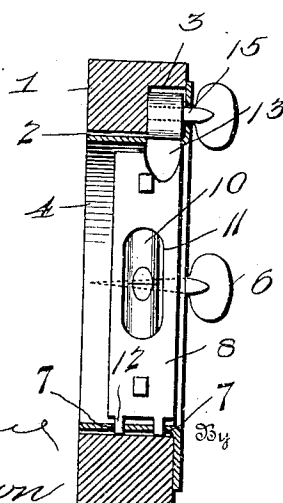


Fig. 3.



Witnesses
D. L. McFarlane
James F. Brown

Inventor
Z. H. Williams
Geo. S. Vashon
Attorney

UNITED STATES PATENT OFFICE.

ZENAS H. WILLIAMS, OF GRANTWORKS, ILLINOIS.

LEVEL DEVICE.

No. 835,172.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed April 16, 1906. Serial No. 311,948.

To all whom it may concern:

Be it known that I, ZENAS H. WILLIAMS, a citizen of the United States, residing at Grantworks, in the county of Cook and State of Illinois, have invented new and useful Improvements in Level Devices, of which the following is a specification.

This invention relates to a level device adapted mainly for application to perpendicular structures, such as plumbing door-jambs; but it may be used for other purposes and in other positions.

The primary object of the invention is to provide a truing or plumb instrument with a frame carrying a level-box and glass and capable of removable application to a straight-edge or plumb-rule and also adapted to be adjusted to compensate for inequalities in the original assemblage of the straight-edge and frame.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter set forth.

In the drawings, Figure 1 is a face view of a straight-edge or stock embodying the features of the invention. Fig. 2 is a view similar to Fig. 1, shown broken away and illustrating the frame of the level in section. Fig. 3 is a transverse horizontal central section through the straight-edge or stock and the level attachment.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a straight-edge or stock which may be of any form, but, as shown, is particularly arranged for application to perpendicular devices to plumb the same. It is obvious, however, that the attachment may be disposed in the straight-edge or stock or plumb-rule in such manner as to adapt it for horizontal leveling operations. The straight-edge or stock 1 has a circular opening 2 formed therein, with which a slot 3, also formed in the stock, has communication. The level attachment comprises a circular frame 4, of suitable sheet-metal, provided with an attaching-flange 4 and a slot 5 to coincide with the recess or slot 3. At opposite points the flange 4 is suitably apertured to receive thumb-screws

6, which penetrate the stock, straight-edge, or plumb-rule at diametrically opposite points, as shown, and serve as a securing means for the level attachment. These thumb-screws may be released and the entire attachment withdrawn from the stock or thumb-rule when desired, and by reason of the freedom of removability of the attachment the latter may be adjusted or shifted to operate either in perpendicular directions or in horizontal planes. Opposite the slot 5 the frame 4 has a pair of smaller slots 7 formed therein, and extending across from the slot 5 to the slot 7 is a cross-bar 8, holding a level-box 9 and glass 10, the cross-bar having an elongated opening 11 therein to expose the glass 10. The one extremity of the cross-bar 8 is formed with prongs 12, inserted through the slot 7 and upset against the outer side of the frame, as clearly shown by Fig. 2. The opposite extremity of the bar 8 has an adjusting-head 13, secured thereto, with an opening 14 therein, the said head projecting into the slot or recess 3 and engaged by a thumb-screw 15, which projects through a slot 16 in the flange of the frame 4 and concentric with respect to said frame. The slot 16 is long enough to compensate for adjustment of the bar 8, and after the adjustment has been made the thumb or set screw 15 will be tightened to hold the said bar and level-box positively in the position desired.

The advantage of the improved level attachment is its simplicity of structure and the capability of readily assembling the parts, removing the attachment as an entirety and replacing it in a different position, and the adjustment of the bar 8.

Having thus described the invention, what is claimed as new is—

The combination with a support having an opening therein and a slot communicating with said opening, of a level attachment comprising a metal frame mounted in said opening and having a slot in the wall thereof to establish communication between the interior of said frame and the slot in the support, a cross-beam secured at one end in the frame and having the opposite extremity projected through the slot of the latter into the slot of

the support and carrying a level-box and glass, the end of the cross-bar projecting into the slot of the support being adjustable, the frame also having a flange which fits over the support and has a slot communicating with the slot in said support, an adjusting-screw extending through the slot in the flange and engaging the projecting end of the cross-bar,

and removable screws applied to other parts of the flange and engaging the support. 10

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

ZENAS H. WILLIAMS.

Witnesses:

CHARLES LITTLE,
JOHN LORTIE.