(No Model.)

W. C. THAYER.

PENDULUM LEVEL.

No. 317,885. Patented May 12, 1885.

Fig. 1.

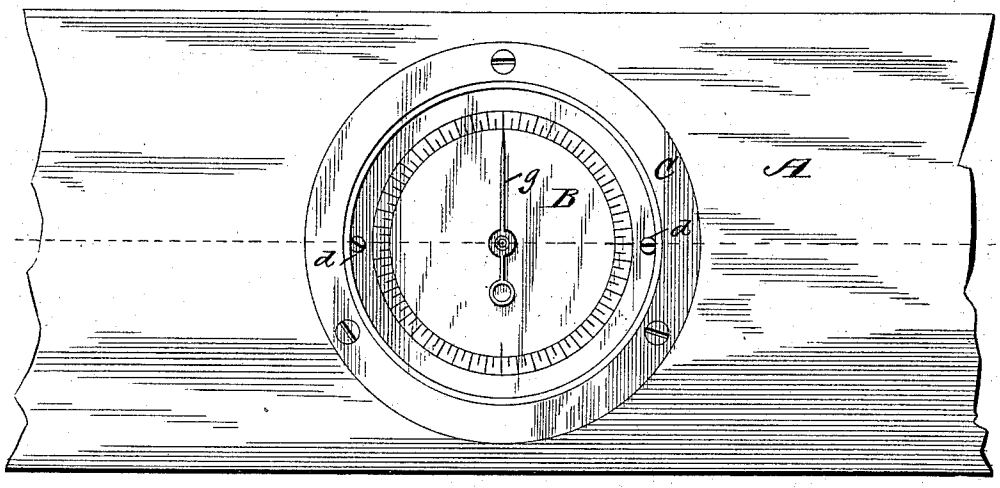


Fig. 2.

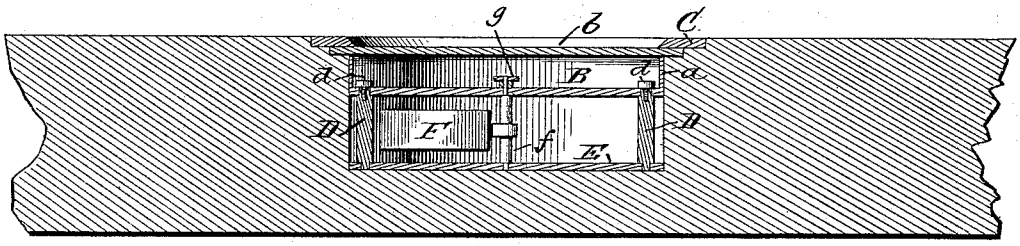


Fig. 3.

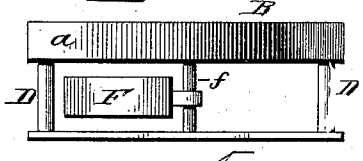
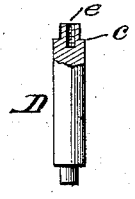


Fig. 4.



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UNITED STATES PATENT OFFICE.

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PENDULUM-LEVEL.

SPECIFICATION forming part of Letters Patent No. 317,885, dated May 12, 1885.

Application filed February 17, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. THAYER, a citizen of the United States, residing at Bainbridge, in the county of Chenango and State of New York, have invented certain new and useful Improvements in Levels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a top plan view of my invention; Fig. 2, a longitudinal section thereof; Fig. 3, a detail view of the dial-plate and its connections, and Fig. 4 a detail view of one of the posts for supporting the dial-plate.

The present invention has relation to that class of levels in which the hand or pointer of the dial-plate is operated by a horizontal moving weight, and the object thereof is to improve and simplify the means for supporting the dial-plate and the movable shaft carrying the weight; and it consists in the details of construction, substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents the usual rectangular frame or block of the level, having a mortise midway of its ends to receive the dial-plate B and its several connections. The dial-plate B has the usual degrees marked thereon, and is formed with the upwardly-projecting rim *a*, the plate and rim being of circular form, and of a size in its circumference to nicely fit within the annular mortise formed in the frame or block A of the level.

Over the dial-plate B is placed a glass, *b*, which is held or confined in position by a metal ring, C, fastened by suitable screws or other desirable means, said ring being flush with the face or upper surface of the frame or block of the level.

The dial-plate B is supported in a horizontal position by upright posts D, which rest on annular shoulders *c* upon the upper ends thereof, and are held on said posts by clamping-screws *d*, engaging with screw-threaded sockets *e* in the ends of the posts. The reduced ends of the posts D, formed by the shoulders *c*, enter correspondingly-formed holes in the dial-plate B, and extend nearly flush with the upper surface of the plate, and when the screws *d* enter the screw-threaded sockets *e* they are screwed down until the heads firmly clamp the plate between them and the shoulders *c* on the posts C.

To the lower ends of the posts C is connected, in any suitable manner, a longitudinal bar, E, which holds the posts a suitable distance apart, and forms a support therefor, said bar being of a length equal to the diameter of the dial-plate. The bar E also forms a support and bearing for the reduced end of an upright shaft, *f*, which carries the horizontal weight F, the upper reduced end of the shaft passing through a central perforation in the plate, and having connected thereto a suitable hand or pointer, *g*.

A very simple and effective means is thus provided for supporting the dial-plate and holding it in a true horizontal position, and enabling it to be readily removed independent of the posts, their connecting-bar, weight, and shaft.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a level, the rectangular frame A, having the usual mortise, glass *b*, and confining-ring C, in combination with the bar E, having shouldered posts D, the dial-plate B, formed with annular projecting rim *a*, and connected to the posts by screws *d*, the upright shaft *f*, carrying the pointer *g*, and horizontal weight F, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM C. THAYER.

Witnesses:

ROBERT SIVER,

WESLEY MULFORD.