No. 896,483. PATENTED AUG. 18, 1908.

C. F. THIES.

PLUMB.

APPLICATION FILED DEC. 5, 1907.

Fig. 1.

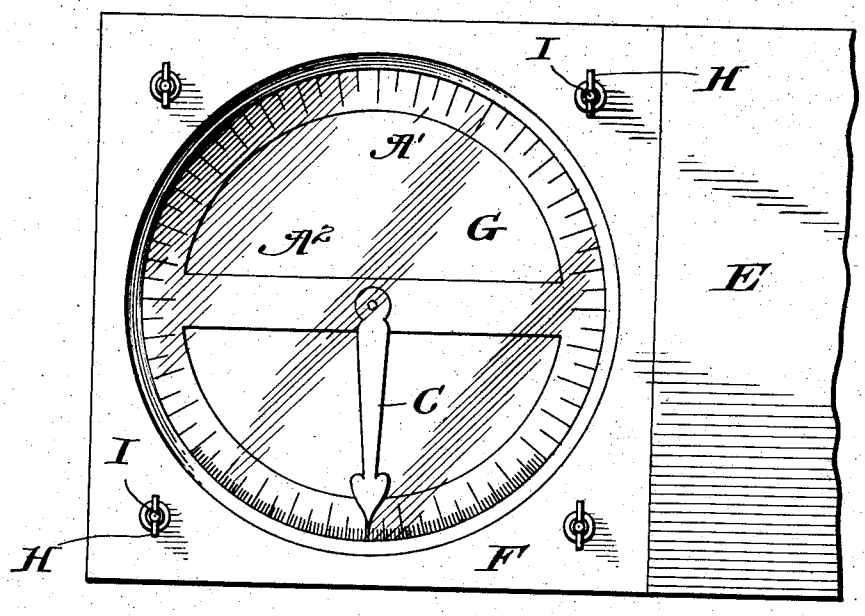


Fig. 2.

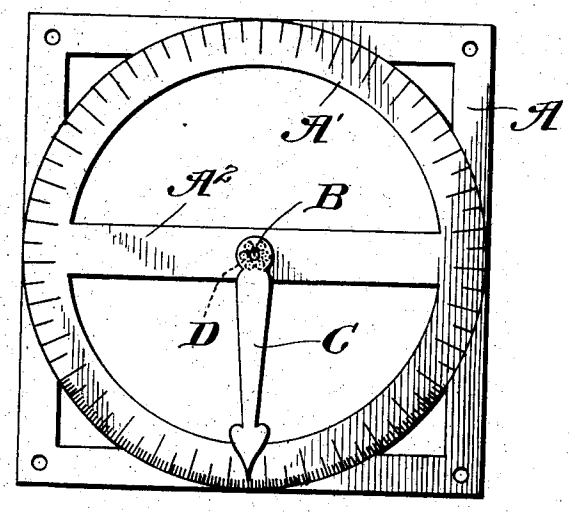
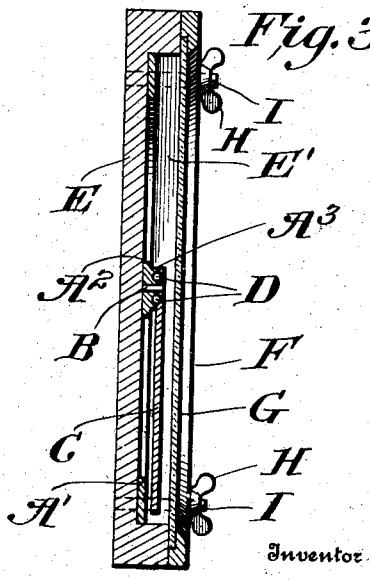


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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PLUMB.

No. 896,483. Specification of Letters Patent. Patented Aug. 18, 1908.

Application filed December 5, 1907. Serial No. 405,149.

To all whom it may concern:

Be it known that I, CHARLES FRANCIS THIES, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Plumbs, of which the following is a specification.

This invention relates to plumb levels, the object being, to provide a level which is exceedingly simple and cheap in construction, and one which is especially adapted to be used on a straight edge or stock of any desirable length, whereby the rise or fall of an uneven surface can be very readily obtained.

Another object of my invention is, to provide a plumb level which can be easily and quickly attached to a straight edge or stock, and one which is composed of a very few parts, so that it is almost impossible for it to get out of order, the parts being so arranged that they are not liable to become broken when in use.

A further object of my invention being, to form the body and dial of one piece, whereby it can be readily punched out of a sheet of metal, the dial being graduated into inches and fractions thereof, so as to enable the user to tell at a glance the inclination of the surface.

A further object of my invention is, to provide a cover for the plumb when it is arranged in a recess formed in the stock or straight edge, so as to prevent the dust and dirt from reaching the same.

These objects are obtained by the novel arrangement and construction of parts hereinafter fully described and shown in the accompanying drawings, in which:

Figure 1, is a top plan view of my improved plumb level showing it arranged in the stock or straight edge, the stock or straight edge being broken away. Fig. 2, is a top plan view of the body of the plumb level removed, and, Fig. 3, is a transverse section of Fig. 1 through the pointer.

Referring to the drawing A, indicates the body of my improved plumb level which is formed of a thin metal plate having portions punched out as shown, to form a circular ring, which is graduated to form a dial, so as to show the rise in inches and fractions per foot. The ring is provided with an integral central cross bar A^2, having a central apertured boss A^3, provided with an annular groove in its face, forming a ball race-way.

A pin B is secured in the boss and extends outwardly therefrom, on which is pivotally mounted a pointer C, which is provided with an annular groove on its inner face, registering with the grooves of the boss, in which are arranged balls D forming ball bearings for the pointer, whereby it will swing easily on the same. The pointer being of such a length that the point of the same will work over the graduated dial.

Apertures are formed in the corner of the plate of the body, which is adapted to be arranged in a recess E′ of a stock or straight edge E, it of course being understood, that it can be secured on the face of the stock or straight edge if desired. Arranged over the recess is a cover F which is provided with a circular opening, the wall of which is beveled, and the underface of the cover being annularly rabbeted, in which a circular plate of glass G is adapted to be arranged, the cover fitting in a reduced portion formed in the stock or straight edge, so that it will be flushed with the face of the stock or straight edge, and is secured therein by thumb nuts H which work on bolts I, extending up through the stock or straight edge, and through openings formed in the body and cover, and it will be readily seen that the cover can be removed if desired, and when the nuts are screwed down on the cover, it will be securely held in position. It will also be seen that this plumb level can be used as an ordinary plumb when detached, or that it can be readily secured on the face of the stock or straight edge by ordinary screws and used without the cover.

From the foregoing description it will be seen that any desirable pitch can be readily obtained by the use of this device, and with this device a carpenter will be able to accomplish more work without stopping to calculate to find the different pitch of a floor or roof.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

The combination with a stock provided with a recess, of a plumb level comprising a body formed of a square piece of metal, adapted to be seated in said recess, said body having a circular graduated dial provided

with an integral cross bar having a central boss, a pin secured in said boss, a pointer mounted on said pin, and a cover provided with a circular opening carrying a glass plate arranged in the stock over said recess, said cover being secured thereon by bolts extending through said stock, body and cover.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES FRANCIS THIES.

Witnesses:

GEORGE REIDINGER,

H. THOS. DURELAP.