

F. A. TROUT.
Combined Plumb and Level.

No. 38,252.

Patented April 21, 1863.

Fig. 2.

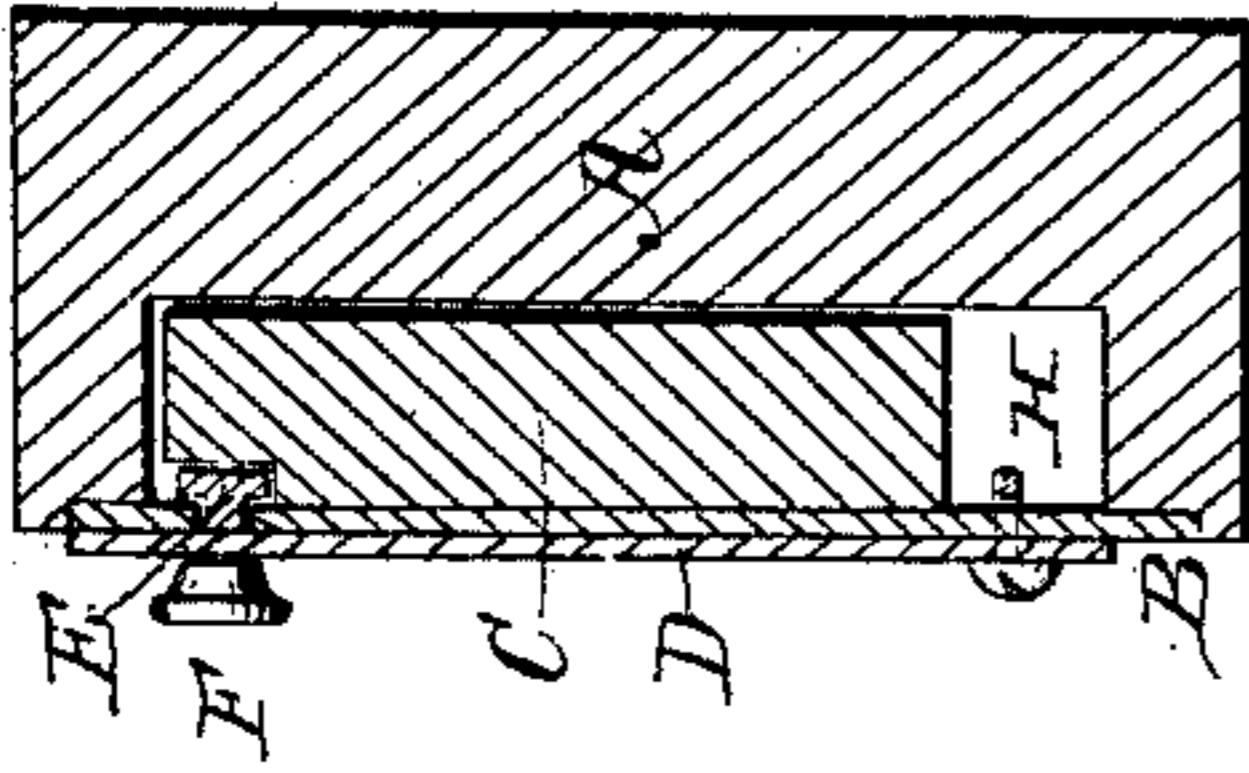
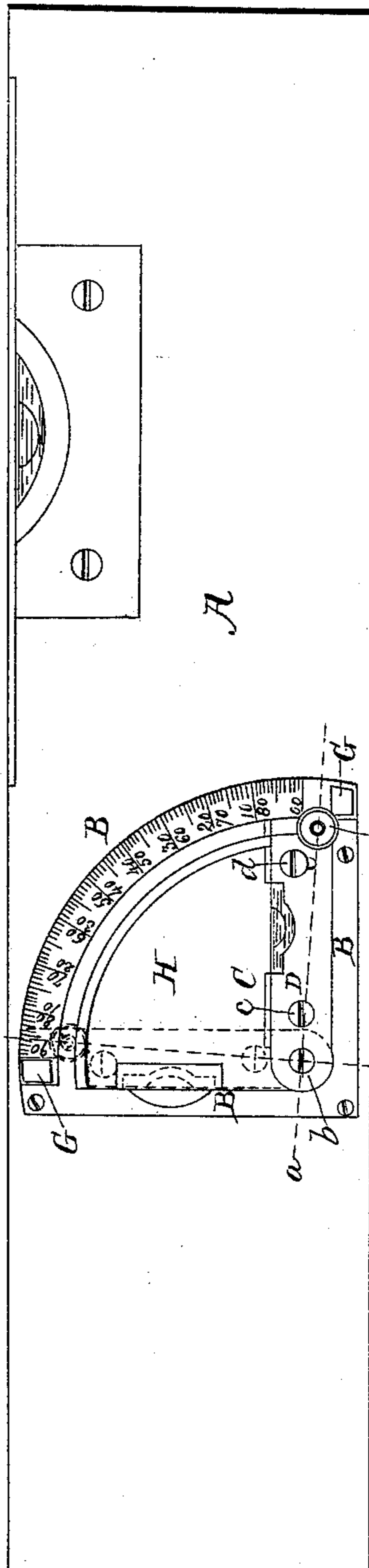


Fig. 1.



Witnesses.
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FREDERICK A. TRAUT, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN COMBINED PLUMB AND LEVELS.

Specification forming part of Letters Patent No. 38,252, dated April 21, 1863.

To all whom it may concern:

Be it known that I, FREDERICK A. TRAUT, of New Britain, county of Hartford, and State of Connecticut, have invented a certain new and useful Improvement in Combined Plumb and Level; and I do hereby declare that the same is described and represented in the following specification and drawings.

So as to enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

The object of this improvement in the combined plumb and level is to simplify the mechanism, cheapen the manufacture thereof, and to produce to the public a cheaper, and at the same time a more reliable, instrument for common mechanical purposes.

In the accompanying drawings, Figure 1 shows a side view of my improvement. Fig. 2 is a sectional view cut through the line *a*.

A is the stock, made of wood or any other suitable material, in the upper edge of which is secured a spirit-vial in the ordinary way in making the common level. B is a metallic plate made in the form of a right angle, intersected at each end thereof by a circle-plate, B', said circle-plate being struck from the point *b*, near the angle of the plate B, the face of which is divided into fractional parts or degrees up to a quarter of a circle or a right angle. C is a tube, in which is secured a spirit-vial. D is a traverse-bar, made in any proper or desired shape and secured upon and moves on the pin or screw at a point, *b*. Upon the inside of this bar D is secured the spirit vial or tube C, by means of a fixed pin or screw, *c*, at one end, and by an adjustable set-screw, *d*, at the other end. E is a bolt, the head of which is fitted into the slit in the circular plate B', so as to move freely therein, the screw of which

passes through the traverse-bar D, and receives a thumb-nut, F, the object of which thumb-nut and bolt is to hold the outer end of the traverse-bar D, through which it passes, firmly at any fixed point on the circular plate B'. G are hubs fixed nearly at the ends of the circular plate B' so as to allow it (the plate B') to move or traverse a quarter of a circle as nearly as may be. A depression, H, is cut in the stock A, of the desired shape to allow of the traverse of the tube C, and depressions are also cut for the thickness of the plates B B' to secure more perfectly against any movement of the device, and the said plates are secured therein by screws.

Now, when this instrument is made, first place the traverse-bar down firmly against the hub G, in a parallel line with the stock, and then adjust the spirit-vial or bubble in a level position and secure it by the set-screw *d*. Then the instrument is ready to be used for either a plumb or a level, or to be used at any other angle desired within ninety degrees of a circle, by simply loosening the thumb-nut F and moving the traverse-bar to the desired point and again securing it in that position by the said nut.

I believe I have shown the nature, construction, and operation of my improvement so as to enable others skilled to make and use the same.

What I claim, therefore, and desire to secure by Letters Patent, is—

The employment of the right-angle and circular plates B B', traverse-bar D, and tube C, in combination with a spirit-level stock, substantially in the manner as and for the purpose described.

FREDERICK A. TRAUT.

Witnesses:

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