

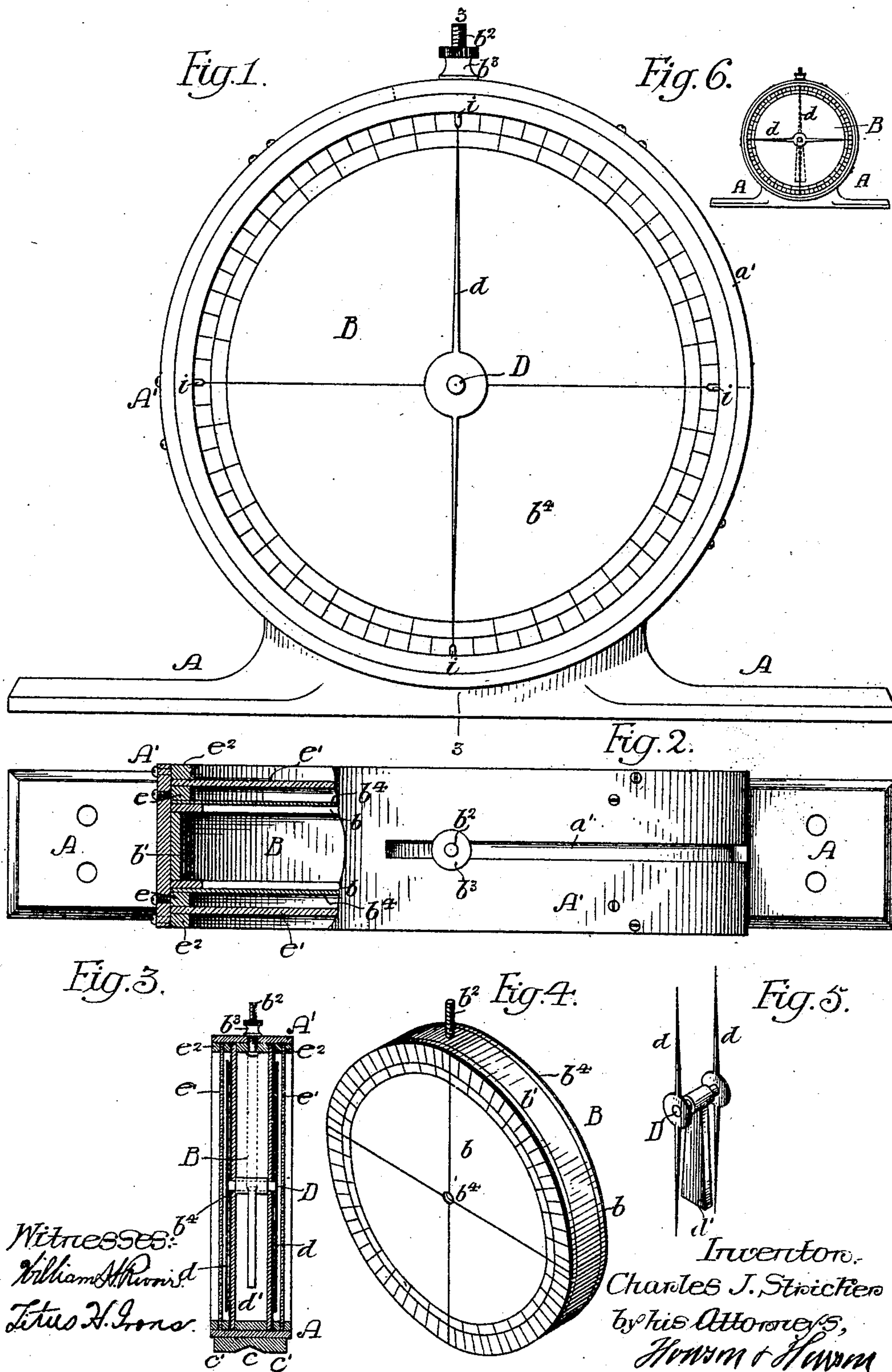
No. 841,598.

PATENTED JAN. 15, 1907.

C. J. STRICKER.

LEVEL.

APPLICATION FILED MAY 19, 1906.



Witnesses:
William A. Brown
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UNITED STATES PATENT OFFICE.

CHARLES J. STRICKER, OF BRIDGEPORT, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO GEHRET BROTHERS, OF BRIDGEPORT, PENNSYLVANIA,
A FIRM.

LEVEL.

No. 841,598.

Specification of Letters Patent.

Patented Jan. 15, 1907.

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To all whom it may concern:

Be it known that I, CHARLES J. STRICKER, a citizen of the United States, residing at Bridgeport, Pennsylvania, have invented certain Improvements in Levels, of which the following is a specification.

The object of my invention is to so construct a level that it can be used not only in the usual manner, but can be set to any degree desired, so that it can be used for building walls, chimneys, running diagonal work, and for other purposes where intricate leveling is required.

In the accompanying drawings, Figure 1 is a face view of my improved level. Fig. 2 is a plan view, partly in section. Fig. 3 is a section on the line 3 3, Fig. 1, drawn to a reduced scale. Fig. 4 is a detached perspective view of the dial. Fig. 5 is a detached perspective view illustrating the weighted hands, and Fig. 6 is a view showing a modification.

A is the base of the dial. A' is a circular casing inclosing the dial B. This dial is so mounted in the casing that it can be turned to any position required and locked.

The casing is slotted at a' , and extending through the slot from the dial B is a pin b^2 , screw-threaded to receive a locking-nut b^3 . The pin is used to turn the dial, and the nut will lock it in any position.

The dial is double-faced, having a face on each side, and is made of metal, in the present instance having a central ring-section b' , to which are attached the two disks b , either made solid or in the form of spiders, and attached to or forming part of each disk are the dial-faces b^4 , of paper, porcelain, aluminium, or other material.

Mounted in center bearings in the plates b of the dial B is a shaft D, having hands d at each end and a weight d' at the center. The hands in the present instance are double-pointed, as shown in Fig. 5, and the weight is of sufficient size so as to bring the hands always in the proper position. The weight is mounted within the dial B between the two face-plates b , as indicated in Fig. 3, the hands being arranged to travel over each face of the dial.

I preferably extend the hands on each side of the center, as shown, so that either end of the hand will indicate the degrees, as it often

occurs that one portion of the level is visible while the other portion is obscured.

In assembling the dial and hands one of the plates may be removed from the dial, the shaft and its weight placed in position. The plate is then secured and the two hands applied, as indicated. On each side of the dial in the present instance are rings e , which are of such width as to give clearance-space for the free movement of the hands and against which rest the glass plates e' , and these glass plates are confined to the casing by outrings e^2 . The rings are secured to the casing in the present instance by screws, as clearly shown in the drawings, but other means of fastening may be resorted to without departing from my invention.

I preferably form pin-points i on the inner ring e in the four positions indicated in Fig. 1, so that whether the level is in horizontal or vertical position the hands will assume a position in line with two of these points, and they also act as a guide in setting the dial, as the dial is set so many degrees from the right or left from these fixed points.

The base of the dial has a V-shaped groove on its under side, so that it can be mounted on a shaft, rod, or other circular object, and the flat surface c' on each side is sufficient to allow it to act as a level on a flat straight-edge.

In Fig. 6 I have shown a modification in which the hand on one face is arranged at right angles to the hand on the other face, so that one hand will show plumb and the other will show level.

It will be seen by the above description that I am enabled to make a very accurate and easily-constructed level which can be secured to a straight-edge or mounted on a shaft or round bar and which can be used by masons or engineers in all structural work and which is especially adapted for use in building chimneys or walls where there is a certain batter to be given to the chimney or wall.

I claim—

1. The combination in a level, of a casing, a weighted hand, a circular dial fitting into the casing and free to be turned, said dial having its markings on a portion lying parallel to the plane of movement of the hand,

with means for holding the dial in any adjusted position, said means including a threaded pin on the dial extending through a slot in the casing, substantially as described. 5

2. The combination in a level, of a casing, a dial mounted in the casing and free to be adjusted therein, means for locking the dial in any adjusted position, including a pin extending from the dial through a slot in the casing, a shaft mounted in the dial and having a hand arranged to travel over the face of the dial, and a weight suspended from the shaft within the dial, substantially as described. 15

3. The combination in a level, of a casing, a circular dial free to be adjusted within the casing and having a face at each side with the degree-marks indicated thereon, a shaft mounted on the dial and having a hand at each end, one hand traveling over one face of the dial and the other hand traveling over the other face of the dial, and having a cen- 20

tral weight suspended from the shaft between the two faces of the dial, there being a slot in the casing substantially concentric with said shaft, a threaded pin projecting from the dial through said slot, and a nut for said pin whereby said dial may be clamped in any adjusted position, substantially as described. 25 30

4. The combination in a level, of a circular casing, a circular dial mounted in the casing, the said casing having a slot, a pin on the dial projecting through the slot, a nut on the pin for confining the dial to the casing, a shaft mounted on the dial, a hand on the shaft, and a weight also on the shaft, substantially as described. 35

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 40

CHARLES J. STRICKER.

Witnesses:

WILL. A. BARR,
JOS. H. KLEIN.