

M. C. AMES.

Improvement in Bell-Cranks.

No. 126,369.

Patented May 7, 1872.

Fig. 1.

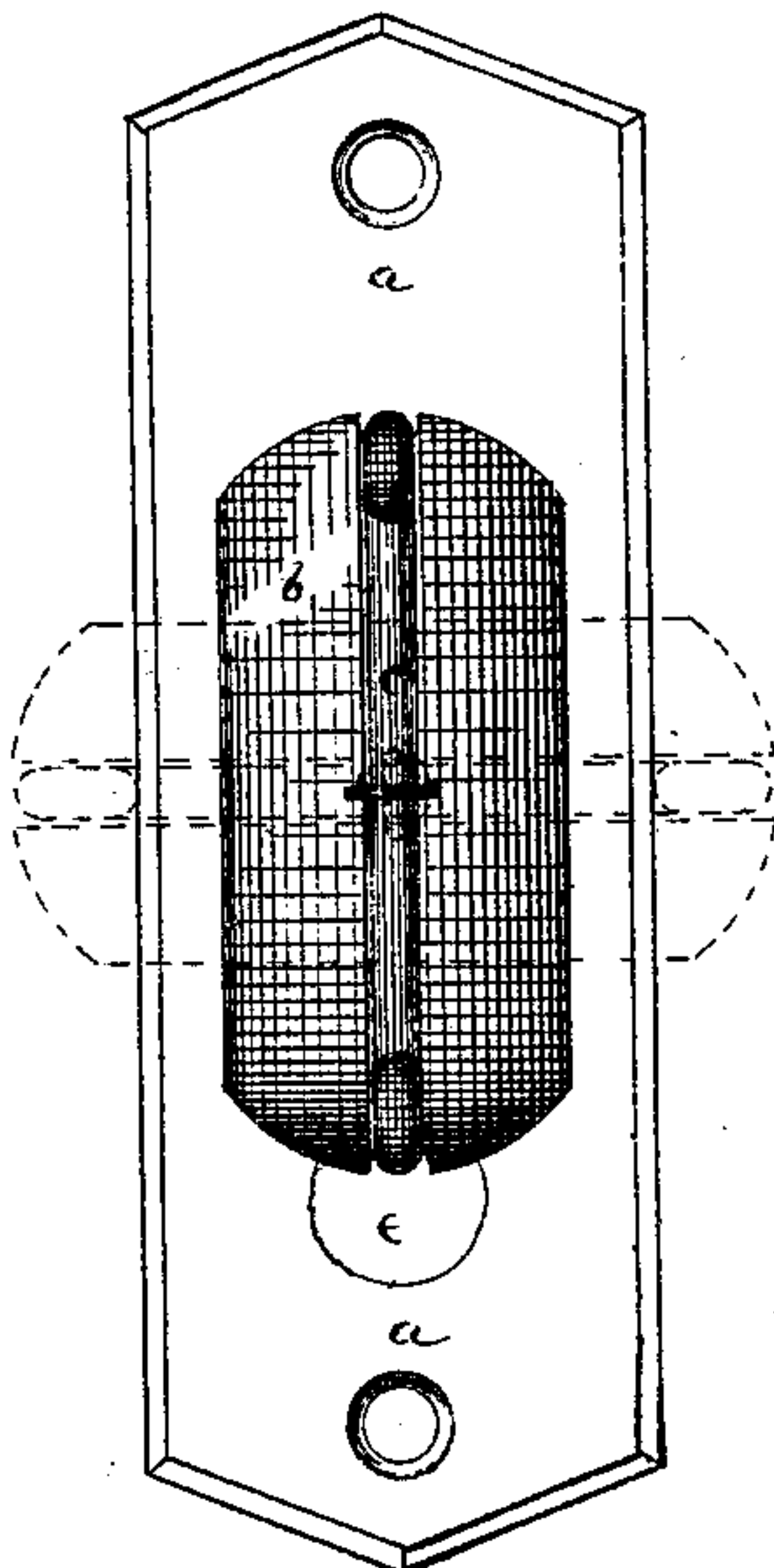


Fig. 2.

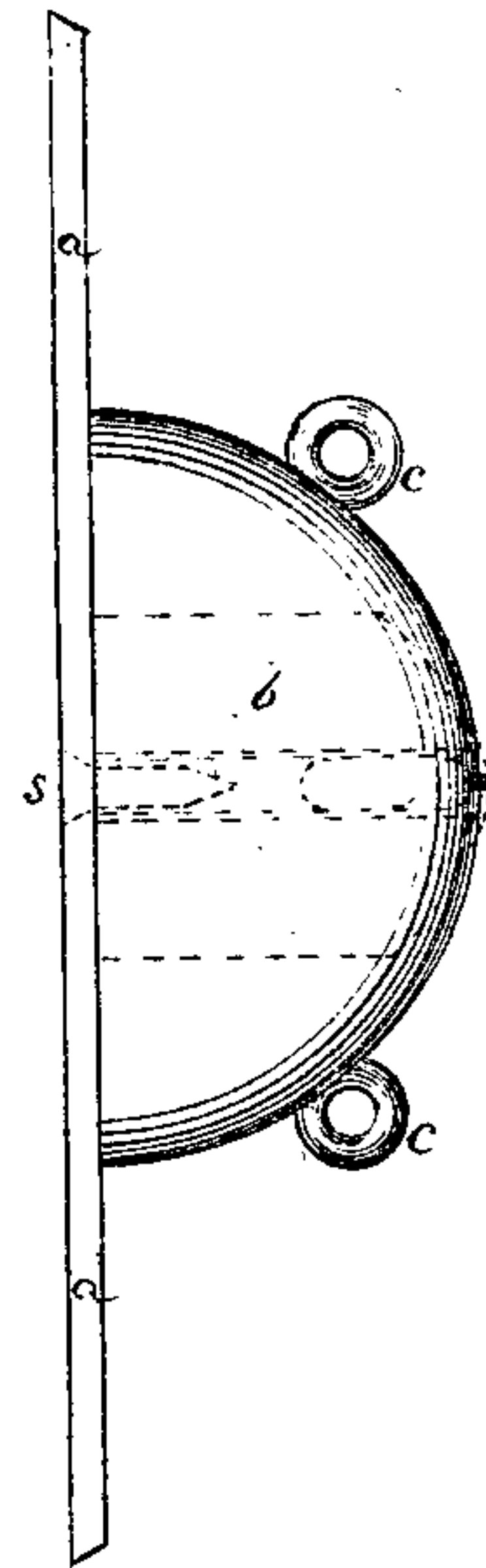


Fig. 3.

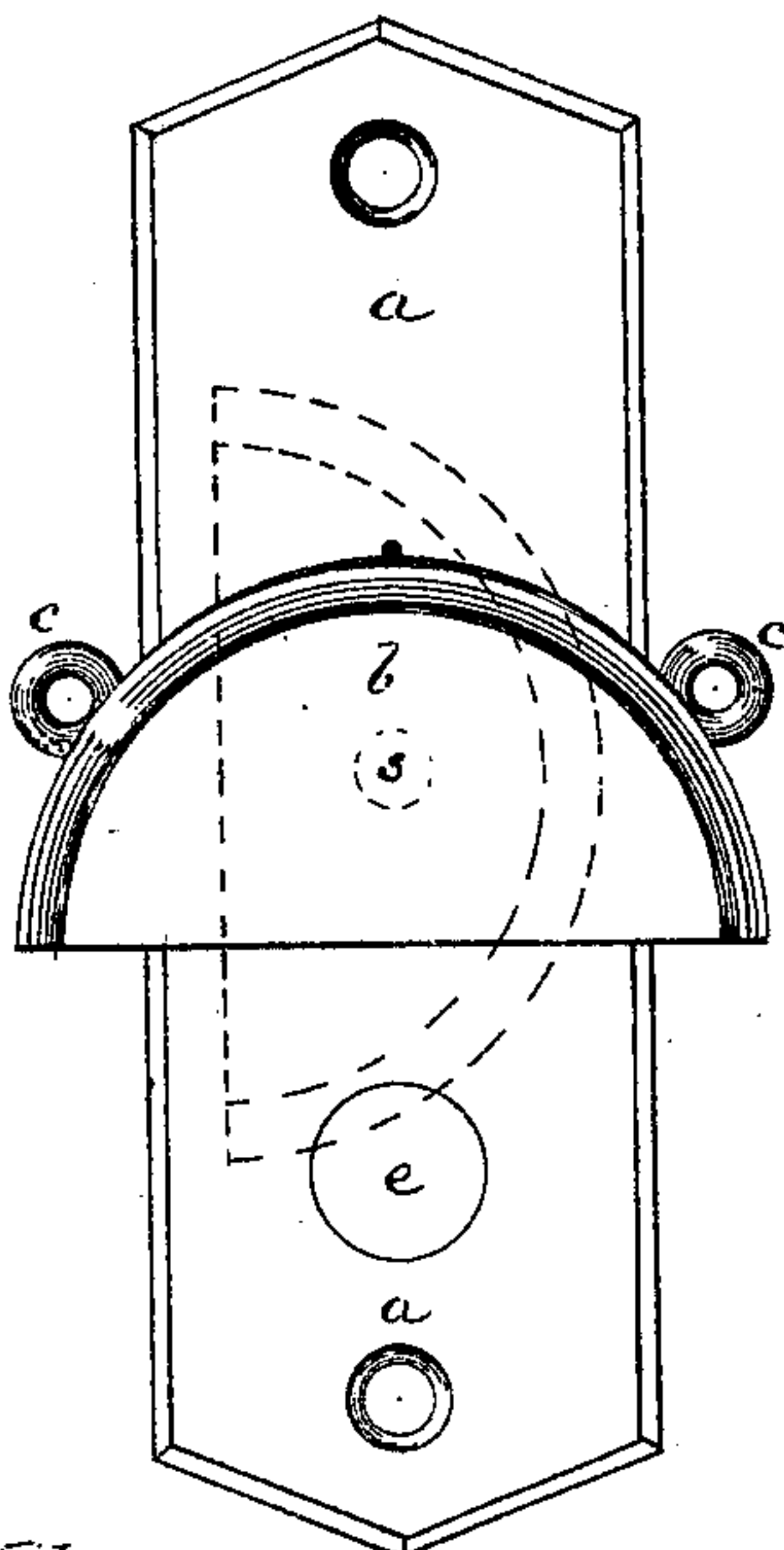
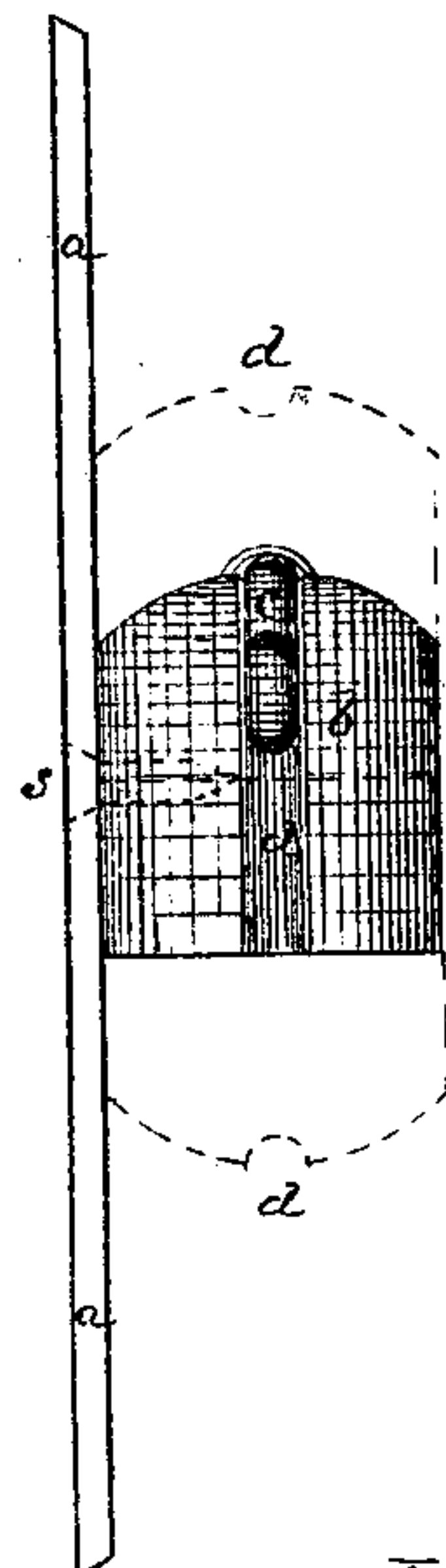
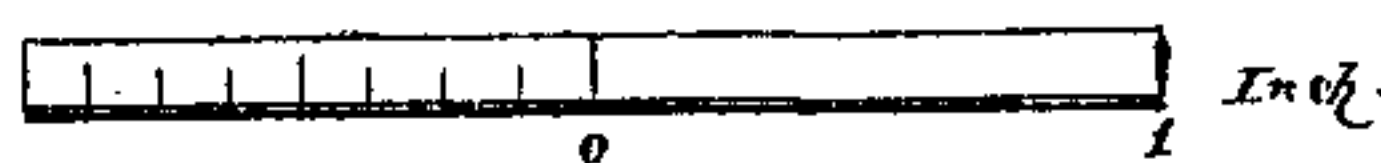


Fig. 4.



Scale.



Witnesses.

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UNITED STATES PATENT OFFICE.

MASON C. AMES, OF HARTFORD, CONNECTICUT, ASSIGNOR TO HIMSELF, HORACE R. MORLEY, AND STANLEY D. BOSWORTH, OF SAME PLACE.

IMPROVEMENT IN BELL-CRANKS.

Specification forming part of Letters Patent No. 126,369, dated May 7, 1872; antedated April 23, 1872.

To all whom it may concern:

Be it known that I, MASON C. AMES, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Bell-Cranks; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

Nature and Objects of the Invention.

My invention consists in a bell-crank or device for changing the direction of a bell-wire, formed of a curved-wire yoke sliding in a groove forming part of a circle, in place of having a crank attached to a center on which it turns, as is commonly employed. It also consists in the manner of attaching the grooved block to the plate so that it can be used as a "side," "end," or "mortise" crank, as may be desired, simply by altering the position of the block on the plate. It also consists in the new article of a universal bell-crank formed by the plate, grooved block, and wire yoke united, and capable of being used in all positions.

Description of the Drawing.

Figures 1 and 2 show a front and side view of my device arranged as a mortise-crank, or as would supply the place of a mortise-crank as commonly used. The dotted lines show the block turned round at right angles so as to form an "end" crank. Figs. 3 and 4 show a front and side view of my device in the position to form a "side" crank, and the dotted lines show the block turned round so as to form a side crank with a plate at right angles to its former position.

General Description.

a is the plate, which is attached, by screws or otherwise, to the wall or support. *b* is the grooved block, which is attached to the plate *a* by a single screw passing through the plate and entering the back of the block, as shown in Figs. 1 and 2, or the side, as shown in Figs. 3 and 4. *c* is a bent-wire yoke or similarly-

formed piece of metal forming a part of a circle, moving in the groove *d*, and having loops or rings at its ends for the purpose of attaching the bell-wires. The plate *a* is made of any suitable metal. It has a hole, *e*, for the bell-wire to pass through when it is used in place of a mortise-crank, as is the case of a front-door bell-pull. The wire passes from the knob through the door-post and is attached to one loop of the wire yoke *c*. The bell-wire is attached to its other loop, and usually passes downward through the floor. If turned upward the fixture would be reversed end for end, and be placed as shown in Fig. 1.

The block *b* may be made of any suitable hard wood. Wood is perhaps the best material, as it is light and may be made ornamental.

By means of the attachment to the plate by a single screw, as shown in the drawing, the block *b* may be attached to the plate *a* on its face or side, as may be desired, and can be turned at any angle to the plate while the screw is loosened, and then clamped firmly in its position by turning up the screw. The plate can therefore be placed at any angle to the block in two planes at right angles to each other, which admits of the application of my improved crank to any change of direction that may be needed in conducting the wires through a house. It thus takes the place of any of the common forms of bell-cranks now in use.

Claims.

What I claim as my invention is—

1. The grooved block *b* and yoke *c*, working together as a bell-crank, substantially in the manner herein described.

2. The arrangement of the block *b* and plate *a*, whereby they may be fastened together at any angle by a single screw, substantially as described.

3. The improved universal bell-crank, consisting of the plate *a*, the block *b*, the yoke *c*, and the screw *s*, or their equivalents, substantially as herein described.

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Witnesses:

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