

R. W. FITZELL.
SHADE-CORD RETAINER.

No. 179,008.

Patented June 20, 1876.

Fig 2.

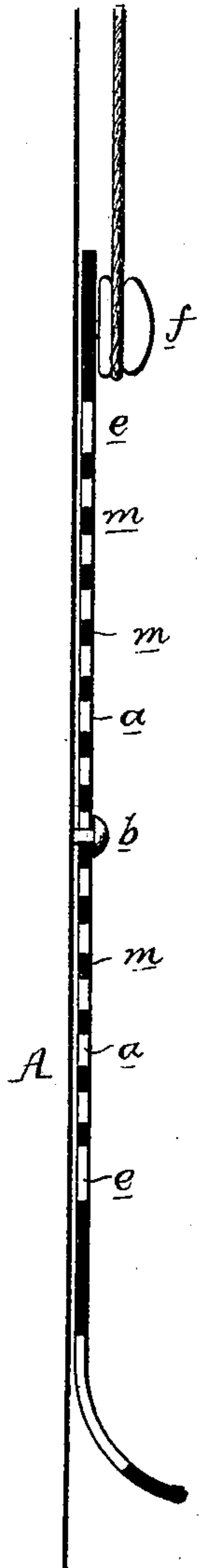
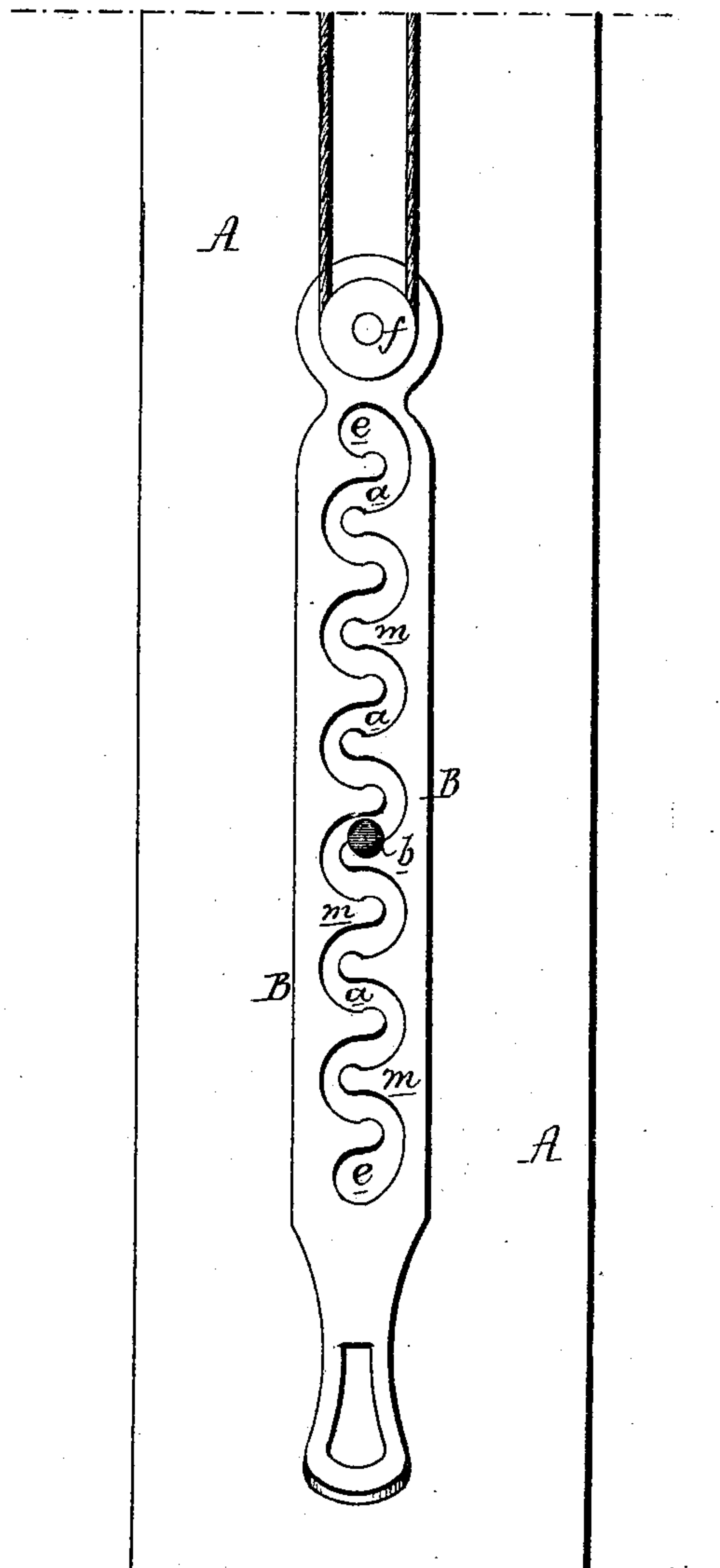


Fig 1



Witnesses
Harry Howson Jr.
Harry Smith

Robert W. Fitzell
by his Attorneys
Howson and son

UNITED STATES PATENT OFFICE.

ROBERT W. FITZELL, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SHADE-CORD RETAINERS.

Specification forming part of Letters Patent No. **179,008**, dated June 20, 1876; application filed April 19, 1876.

To all whom it may concern:

Be it known that I, ROBERT W. FITZELL, of Philadelphia, Pennsylvania, have invented an Improved Shade-Cord Retainer, of which the following is a specification:

The object of my invention is to so construct a retainer for the winding-cords of window-shades that the retaining-plate may be prevented from slipping; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a front view of my improved retaining device for shade-cords; Fig. 2, a vertical section of the same.

A represents part of a window-frame, and B the retainer, the latter consisting of a plate having a zigzag slot, *a*, formed by projecting fingers *m* on the plate. To this slot is adapted the shank of a pin, *b*, in the window-frame, this pin having a suitable head to prevent the outward withdrawal of the plate. The upper edge of one or other of the fingers *m* bears against this pin, and each finger is provided at the end with an enlargement, so that it cannot slip from the pin. The slot *a* terminates at each end in an opening, *e*, slightly larger in diameter than the head of the pin *b*, in order that the plate B may be slipped over the same in applying it to or removing it from the frame. The lower end of the plate B is bent outward, for facilitating its manipula-

tion, and the upper end of said plate has a knob or pulley, *f*, around which the window-cord passes. When the cord becomes slack, the plate B is depressed until an upper finger is brought beneath and retained by the pin.

There have heretofore been made window-shade retainers in which a pin or button is adapted to notches in a plate, but this plate has been so constructed that whenever the pin slips out of one of the notches the parts become disengaged and the shade falls.

By making each finger *m* project across into the recess formed between two adjoining fingers on the opposite side of the slot *a*, as shown, should the pin slip over one of the fingers it will inevitably be caught on the next and the retainer continue to sustain the shade.

I claim as my invention—

The combination of the pin *b*, attached to the window-frame; with the plate B, having a zigzag slot, *a*, formed by fingers *m*, each projecting into the recess between adjoining fingers on the opposite side of the slot, substantially as shown and described.

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

ROBERT W. FITZELL.

Witnesses:

HARRY HOWSON, Jr.,
HARRY SMITH.