

P. S. ROBINSON.
Shutter-Worker.

No. 221,613.

Patented Nov. 11, 1879.

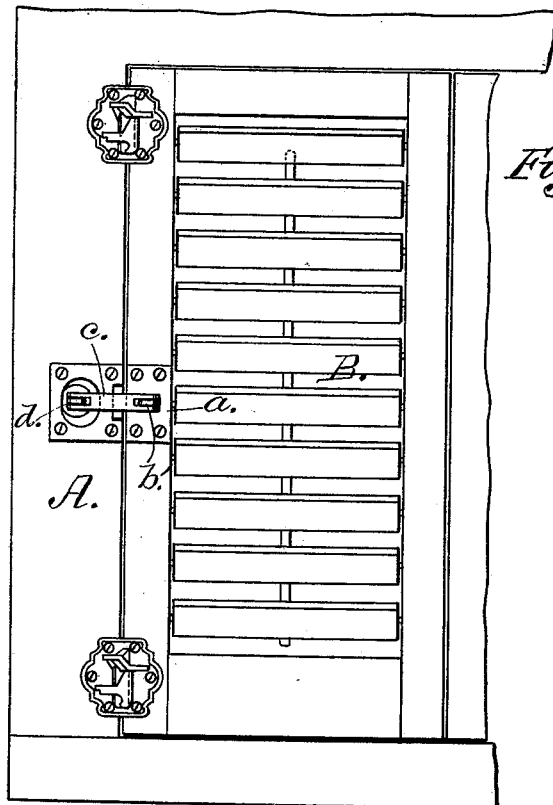


Fig. 1.

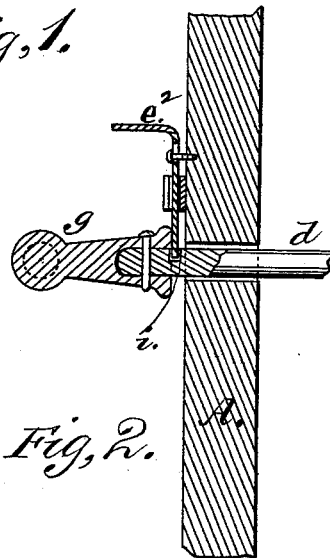


Fig. 2.

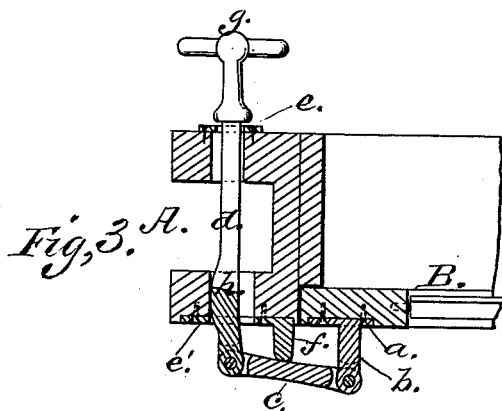


Fig. 3.

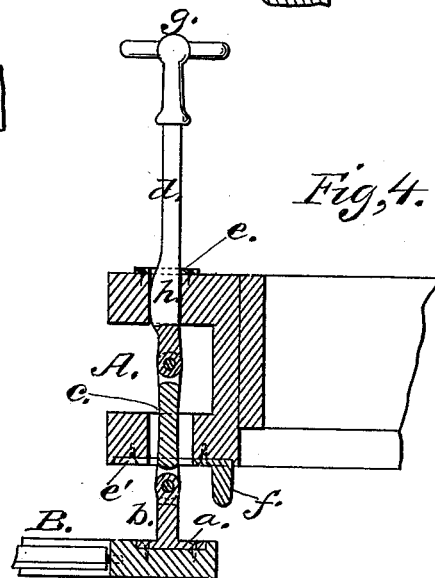


Fig. 4.

WITNESSES

Villette Anderson.
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INVENTOR

P. S. Robinson,
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UNITED STATES PATENT OFFICE.

PETER S. ROBINSON, OF CEDAR FALLS, IOWA.

IMPROVEMENT IN SHUTTER-WORKERS.

Specification forming part of Letters Patent No. **221,613**, dated November 11, 1879; application filed August 21, 1879.

To all whom it may concern:

Be it known that I, PETER S. ROBINSON, of Cedar Falls, in the county of Black Hawk and State of Iowa, have invented a new and valuable Improvement in Shutter-Workers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of my improved shutter-worker applied; and Figs. 2, 3, and 4 are sectional views thereof.

This invention has relation to that class of shutter-workers wherein the blind or shutter is opened or closed by a flexible rod extending through the casing and secured to the said blind or shutter.

The nature of the invention consists in the construction and novel arrangement of parts, as hereinafter shown and described.

In the annexed drawings, the letter A designates the window-casing, and B the shutter, hinged thereto in any suitable manner. Attached to the shutter, adjacent to and between the hinges, is a metallic plate, *a*, having a horizontal post, *b*, to which is pivoted one end of a metallic link, *c*, of which the other end is pivoted to a rigid rod, *d*, extending through the window-casing, and works in metallic bearings *e e'*, respectively, on the inside and outside of said casing.

The orifice in plate *e'* is considerably larger than the rod and link aforesaid, and the said plate is provided with a projecting stud, *f*, serving as a fulcrum for the link, which is thus converted into a lever of considerable power, and renders the opening of the shutter by drawing rod *d* inward of very easy attainment.

Rod *d* is provided with a cross or other suitable handle, *g*, and also with a swell or bulge, *h*, that is jammed or crowded in the orifice of the inner face-plate, *e*, when the shutter is fully opened, and thus holds it so.

The shutter is closed by thrusting the rod outward, and locked in the closed position by means of a slide, *e²*, upon plate *e*, that is thrust into engagement with a notch, *i*, cut in said rod.

If hinges of the description known to the trade as "locking" are employed—that is, wherein the leaves interlock when the blind is thrown open, requiring the said blind to be raised to disengage the leaves and close the said blind—the inner end of rod *d* must be thrust down over plate *e* as a fulcrum, when, acting as a lever, it will disengage the leaves and allow the shutter to be closed. This is feasible, because the orifice of plate *e'* is larger than the link, which, under these circumstances, extends through it.

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

In a shutter-worker, the combination, with a shutter, B, the plate *a*, having post *b* secured to said shutter, and the plate *e'*, having the stud *f* secured to the casing, of the draw-rod *d*, provided with bulge *h*, extending through said casing, the link *c*, pivoted at one end to post *b* and at the other to rod *d*, and working across stud *f* to close the shutter, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

PETER S. ROBINSON.

Witnesses:

W. A. ROBINSON,
JOHN P. HESKETT.