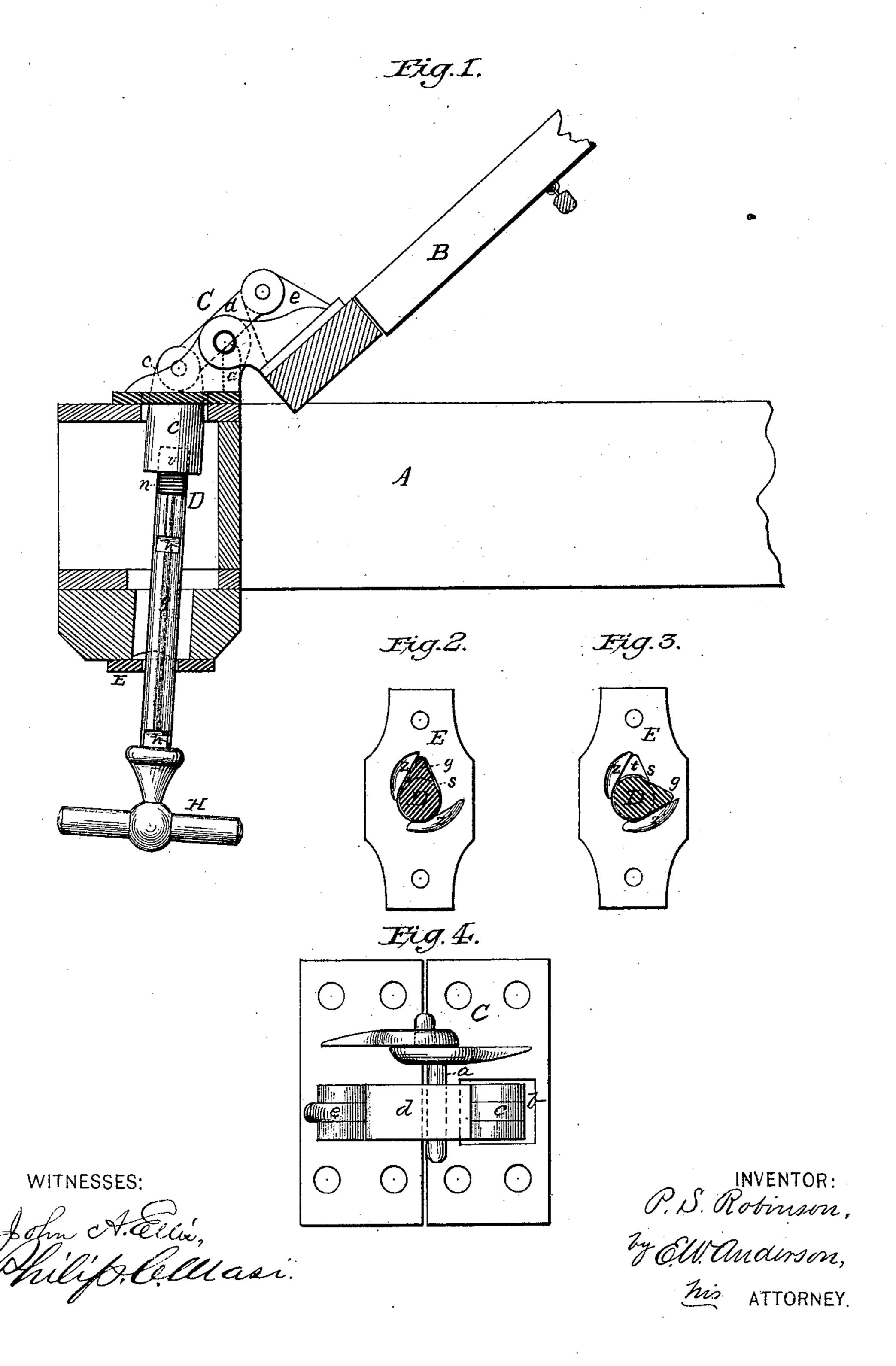
## P. S. ROBINSON. Shutter Worker.

No. 238,716.

Patented March 8, 1881.



## United States Patent Office.

PETER S. ROBINSON, OF CEDAR FALLS, IOWA, ASSIGNOR OF TWO-THIRDS TO W. A. ROBINSON AND J. E. ROBINSON, OF SAME PLACE; SAID J. E. ROBINSON ASSIGNOR TO SAID PETER S. AND W. A. ROBINSON.

## SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 238,716, dated March 8, 1881.

Application filed September 18, 1880. (Model.)

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 valu-5 able 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 10 of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a horizontal sectional view of this invention. Fig. 2 is a detail view of the back of the 15 rosette-plate, showing the draw-rod in free position. Fig. 3 is a similar view, showing the draw-rod in engagement. Fig. 4 is a face view of the bridge-hinge and the link-connection.

This invention has relation to means for op-20 erating shutters or blinds from the interior of | the house; and it consists in the construction and novel arrangement of the removable drawrod, having a notched rib and threaded end, the rosette formed with stops on the inside ob-25 liquely above and below a perforation for the draw-rod, having an angular offset for the rib and the tapped connection to the link, forming an improvement upon my shutter-worker for which Letters Patent No. 221,613 were granted 30 to me November 11, 1879, all as hereinafter fully shown and described.

In the accompanying drawings, the letter A designates the window-casing, and B the shutter.

C represents the hinge, whereof one branch or leaf is provided with a bridge or stud, a, and an opening, b, for the passage of the connecting end c of the draw-rod D. This end  $c \mid$  hereunto subscribed my name in the presence is pivoted to the link d, which works over the 40 bridge a, and is connected to the projecting lug e of that branch of the hinge which is attached to the shutter. The draw-rod D is made cylindrical in form, except that it has a longitudinal rib, g, which is notched at h and |

h', the notches forming journals upon which 45 the draw-rod may be turned, and at the same time forming holding-catches, when engaged with the rosette-plate E, to hold the draw-rod in or out, and thereby to fix the shutter in an open or closed position. One end of the draw- 50 rod is provided with a handle, H, and its other end is threaded at n, to engage a tapped hole in the end of the connection c, as indicated at v. In this manner the rod is made removable, it being readily screwed into the connection 55 from the inside of the casing before the rosette is secured in position. It also facilitates the passage of the draw-rod through the aperture s in the rosette, which is of circular form below, but has an offset, t, above, corresponding 60 in shape to the rib g of the draw-rod.

On the interior of the rosette-plate are cast the stop-lugs z and z', the former being obliquely above and on one side of the aperture s, and the latter being obliquely below and on 65 the opposite side of same, and having an angular relation to the former, as shown in Fig. 2 of the drawings. These stop-lugs limit the rotary movement of the draw-rod when turned in the rosette-plate, and thus prevent it from 70 becoming unscrewed from the connection c.

Having described this invention, what I claim, and desire to secure by Letters Patent,

The improved shutter-worker consisting of 75 the rosette-place E, having the offset apertures s t and stop-lugs z z', the removable draw-rod D, having the rib g, notches hh', and threaded end n, and the tapped connection c, substantially as specified.

In testimony that I claim the above I have of two witnesses.

PETER SUMERCELL ROBINSON.

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Witnesses:

F. L. Morgan, W. PIERCE.