

J. Rogers,
Shutter Worker.

N^o 21,368.

Patented Aug. 31, 1858.

Fig. 2.

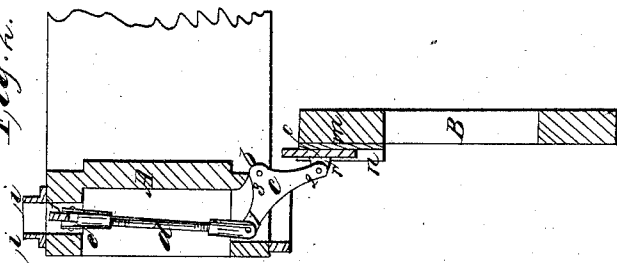
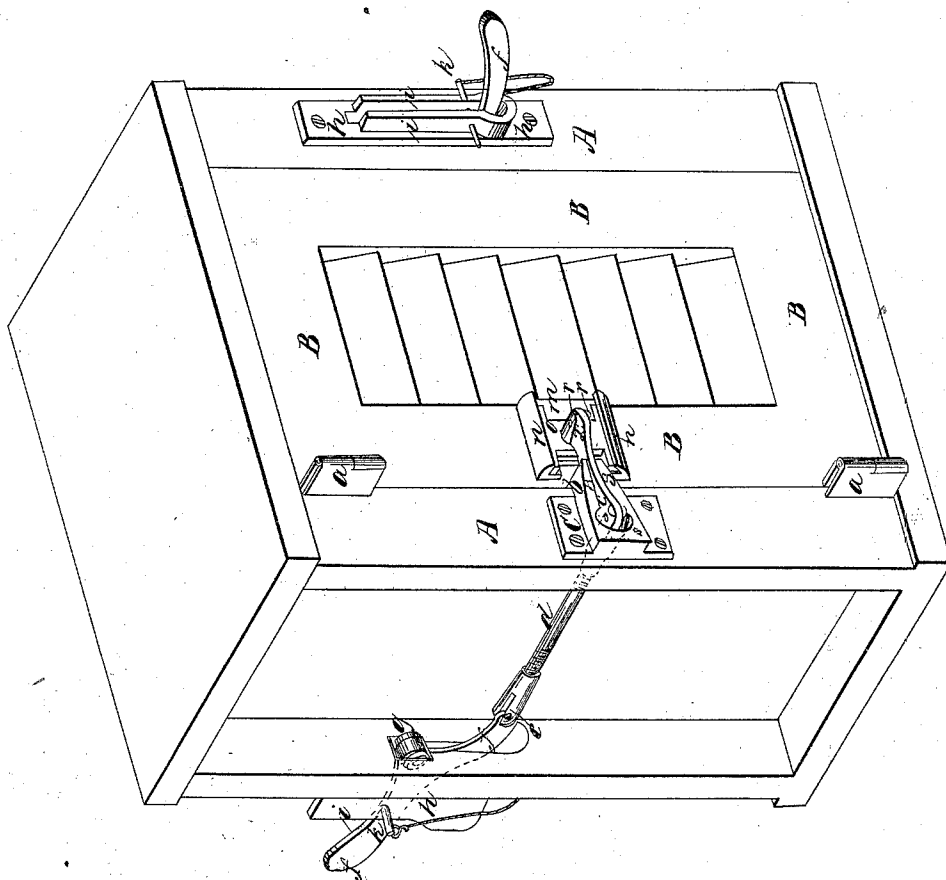


Fig. 1.



UNITED STATES PATENT OFFICE.

ISAAC ROGERS, OF OWEGO, NEW YORK.

SHUTTER-OPERATOR.

Specification of Letters Patent No. 21,368, dated August 31, 1858.

To all whom it may concern:

Be it known that I, ISAAC ROGERS, of Owego, in the county of Tioga and State of New York, have invented certain new and useful Improvements in Apparatus for Opening and Closing Window-Blinds from the Inside; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part thereof, in which—

Figure 1 represents in perspective the mode of connecting and operating the apparatus and Fig. 2 represents a section through the window frame and shutter, and the construction of the same apparatus as applied when the walls of the house are of brick or stone, or project beyond the line of the shutter or blind when closed.

Similar letters in both figures refer to like parts.

My invention relates to the peculiar contrivance for effecting the opening and closing of the blinds from the inside of the house.

A represents the window frame, and B, the shutter or blind hinged thereto, by any of the ordinary hinges *a*, *a* used for such purpose—the opening and closing apparatus in no wise depending upon any special construction of hinge, and thus being applicable to blinds or shutters already hung.

C, is a plate fastened to the outside of the window frame, in which is pivoted at or near the point *b* a bell crank, or three armed lever *c*. To the arm 1, of this lever, is attached one end of a connecting rod *d*, the other end thereof, being pivoted at *e*, to one end of a thumb lever *f*, that is also pivoted at *g*, to a plate *h*, let into the frame on the inside of the house. The plate *h*, has flanges *i* *i*, projecting slightly therefrom between which the lever *f*, works, and by which said lever is guided in its motions, and through these flanges *i*, and through the lever *f*, there may be a hole to insert a pin *k*, to lock the shutter when open. The same pin passing over the top of the lever when the blind is closed, serves to fasten it in that position.

On the shutter B, there is a plate *m*, hav-

ing two overhanging flanges *n* *n*, on it, to form guides or ways for a slide *o*, to move between. On this slide *o*, there are lugs *r*, to which the arm 2 of the bell crank *c*, is pivoted—the third arm 3 of said crank being pivoted as above mentioned to the plate C, at the point *b*.

A shield *s* projecting from the plate C, may entirely protect the end of the connecting rod *d*; and said rod *d*, may have a screw thread cut upon it, so as to be elongated or shortened between its connecting points, to adjust it to its work, or make the apparatus applicable to different frames.

The advantage of having the connecting rod to vibrate horizontally between its two connections is that, it requires less of an opening through the frame, and consequently less cold air is admitted. Its advantage over a rack and pinion, is that its operation is quicker, and more certain, as it is less liable to get out of repair. When the rod is passed through below the sash, as it often is, a long slot must be cut for it to vibrate through. I avoid the many defects, due to other contrivances for a similar purpose—and especially I avoid cramping in the operation of the parts, which often renders the contrivances useless. When the blind is opened or closed the slide *o*, moves in its ways, and thus avoids any cramping of the parts. If there be any back-lash, or looseness about the shutter, the rod *d*, is turned, until it is taken up or remedied, and all inconvenience avoided.

Having thus fully described the nature and object of my invention what I claim therein as new and desire to secure by Letters Patent is—

The within described apparatus for opening and closing window blinds, viz: the lever *f*, rod *d*, crank *c*, and slide *o*, the whole being arranged on the shutter and window frame as set forth, combined and operating substantially in the manner described.

ISAAC ROGERS.

Witnesses:

A. B. STOUGHTON,
THOS. H. UPPERMAN.