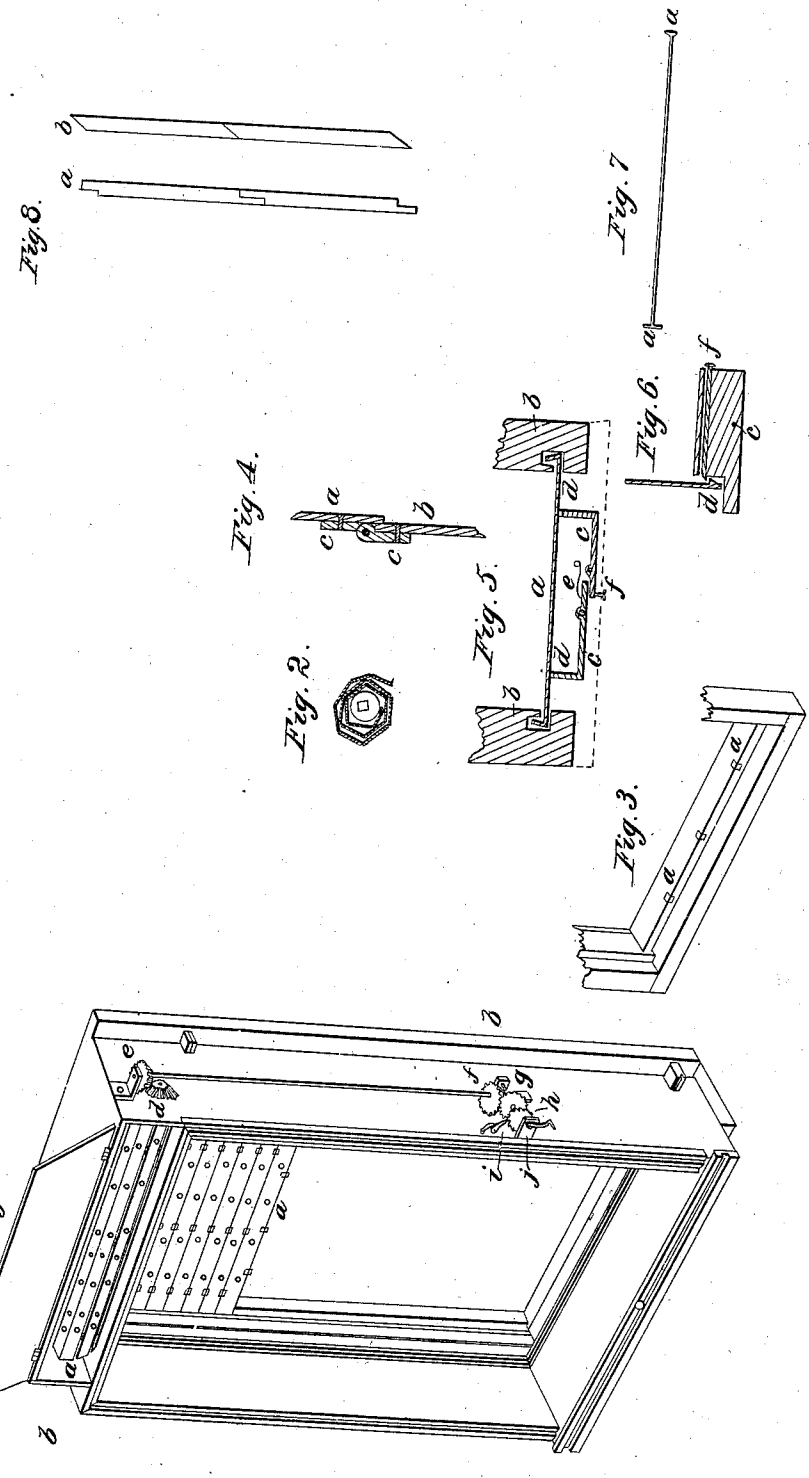
A. L. JOHNSON.

WINDOW GUARD.

No. 2,554. Patented Apr. 11, 1842.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ARTHUR L. JOHNSON, OF BALTIMORE, MARYLAND.

WINDOW SHUTTER OR GUARD.

Specification of Letters Patent No. 2,554, dated April 11, 1842.

To all whom it may concern:

Be it known that I, ARTHUR L. JOHNSON, of the city of Baltimore and State of Maryland, have invented a new and useful Improvement on Window-Shutters, which I denominate the "Window-Guard;" and I do hereby declare that the following is a full and exact description, reference being had to the accompanying drawing, which make a part of the same.

In the drawing *a*, *a*, Figure 1, represents the inside part of the guard in the frame *b*, *b*, which frame may be of either metal or wood, the slats (being iron) may be 2 inches wide, more or less, and $\frac{3}{16}$ inch thick. If the slats are made of wood for private dwellings, they may be made of a width and thickness to please the fancy of the builder. There are small openings or holes in the slats, so that they will show light through them; these openings may be made in any required form.

C is a small door thrown up exhibiting the guard rolled partly up on a drum, an end view of the drum, and the guard rolled on is seen at Fig. 2. This drum is fitted in a case at the top of the frame *b*, *b*, Fig. 1. *d* Fig. 1 is a bevel cogwheel on the end of the axle of the drum of the guard and gears into another bevel wheel *e* then by a shaft leads to bevel wheel *f*, this wheel *f* plays into a vertical bevel wheel *g*. On the same axle is a ratchet wheel, *h*, with a fall or hand, *i*. On the end of shaft of wheels *g*, and *h*, may be placed a winch or handle, *j*, by which the guard is raised and lowered, or rolled on or off the drum. The pinion or wheel *g*, may be as much smaller than *f*, as will afford sufficient power to raise the guard. Fig. 3 shows a section of the lower part of the frame of the window as seen from outside, *a*, *a*, the plates for the fastenings to be described hereafter. In Fig. 4 *a* and *b* show a vertical section of 2 slats, *c*, *c*, the form of the hinge connecting them, there being rivets passing through. When the slats are suspended it will be seen that the upper one as, *a*, laps over the one below it as *b*, making a close joint. In Fig. 5, *a*, represents a horizontal section of the windows showing the slat with bent ends as at the grooves *b*, *b*, in the window frame, these grooves are metal, and may be formed of an L, T, or any other shape adapted to the form of slat used. The ends of the slats are crooked so that they can not be forced out of the grooves, and the slats so nearly fills the grooves, that if even the hinges were broken off, one slat could not slide up or down over another slat, and the ends are bent inwards rather more than a right angle so as to ride on each other and not rub off the paint when rolling on and off the drum. Other forms may be given to the ends of the slats for the same purposes as at *a*, *a*, Fig. 7.

The guard is fastened down by means of the apparatus represented at Fig. 6 which is an end view of the window sill in which is embedded the bolts or catches *c*, *c*, Fig. 5 and *c* Fig. 6. On the bottom of the lower slat as at *d*, Fig. 6, and *d*, *d*, Fig. 5, is a projection over which the bolt or bolts *c*, *c*, passes which secures the slat down.

e, is a spring to keep the bolts up in place as the slat descends the bolt flies back or yields so as to suffer the catch *d* to pass under the bolt. When the guard is to be raised the operator simply presses his thumb on the point at *f*, Fig. 6, and Fig. 5, and the bolts are freed from the projection on the slat. There may be additional side bolts, pins or catches up along the sides of the grooves if thought proper. Various forms may be given to the slats, they may be put together as at Fig. 4, with the square edge, or as at *a*, and *b*, Fig. 8.

I do not claim to have invented a "window guard" or shutter consisting of slats jointed together as this has long since been done; but what I do claim as my invention, and desire to secure by Letters Patent is—

The making the ends of the slats in the various forms herein described to fit into grooves in the frame substantially as herein described, whereby to prevent the slats from being drawn out should they be separated from each other by violence, and also for the purpose of preventing the paint from being chafed off of the guard in the operation of rolling up as herein described.

AR. L. JOHNSON.

Witnesses:
HY NAYLOR,
JOHN THAW.