

E. A. HOLBROOK & A. E. YORK.  
Shutter-Workers.

No. 149,222.

Patented March 31, 1874.

Fig. 1.

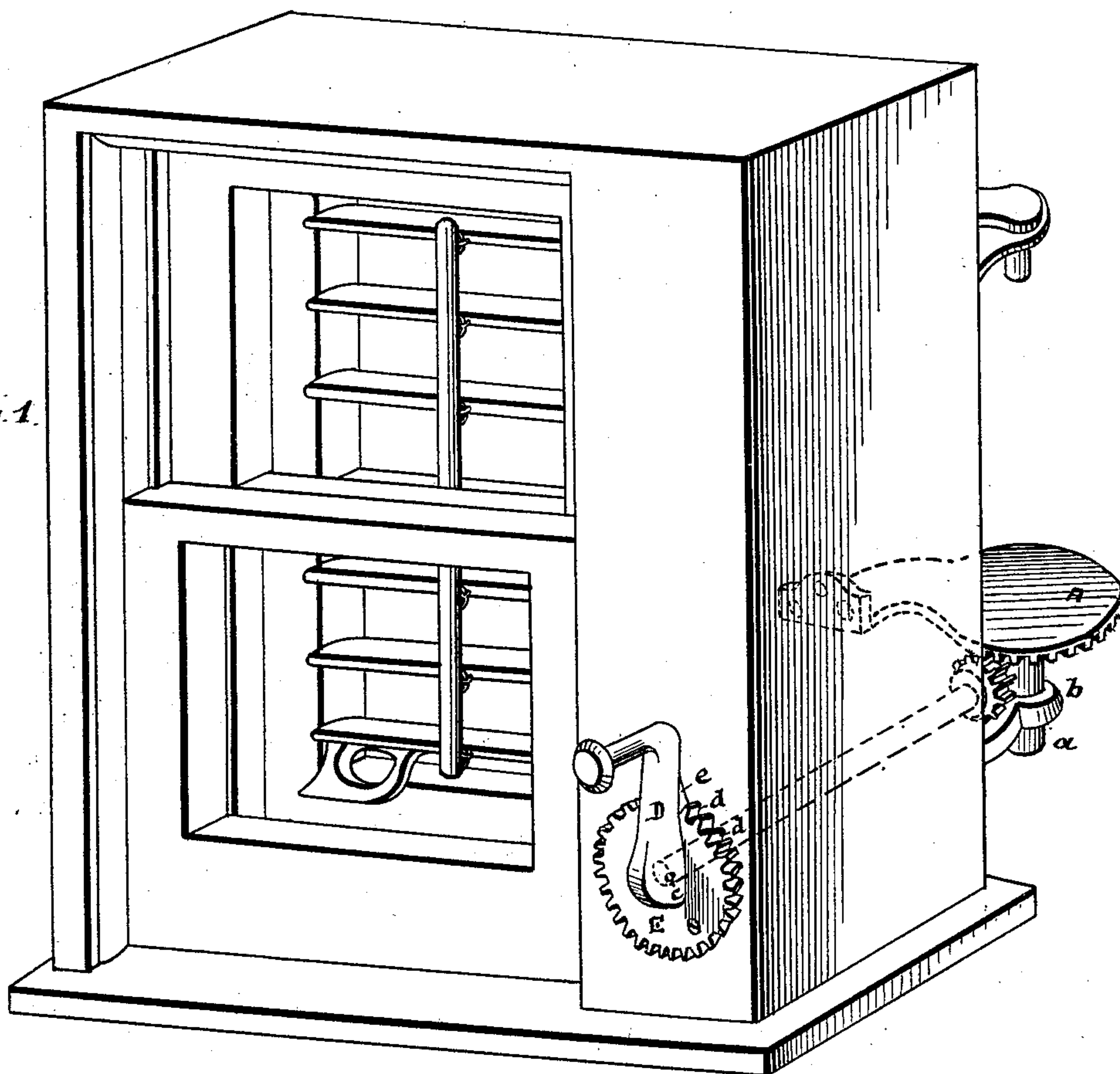
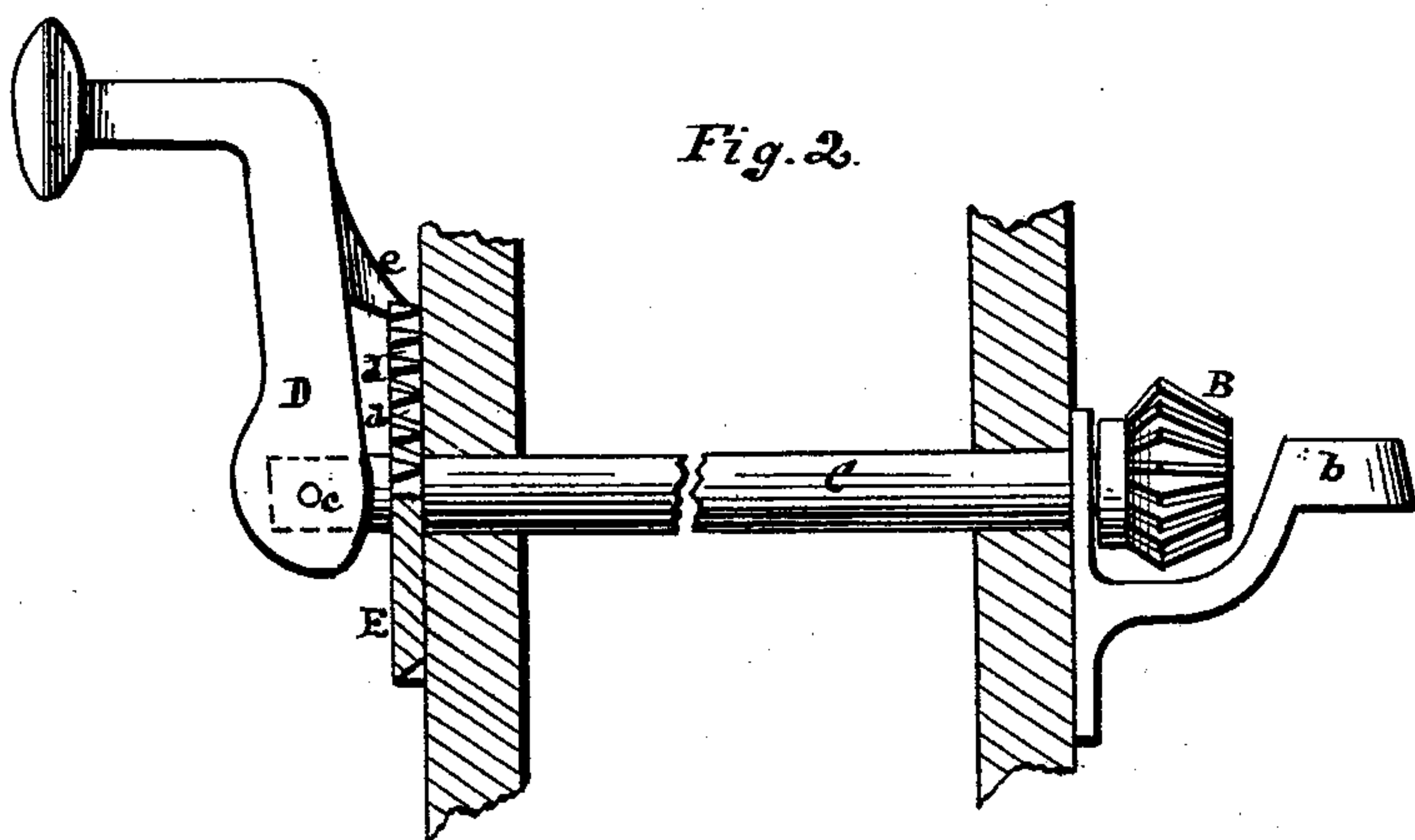


Fig. 2.



Witnesses:

E. A. Dick  
W. E. Chaffee

Inventors:

Edwin A. Holbrook &  
Aaron E. York,  
by atty. Shuck

# UNITED STATES PATENT OFFICE.

EDWIN A. HOLBROOK AND ANSON E. YORK, OF WATERTOWN, NEW YORK.

## IMPROVEMENT IN SHUTTER-WORKERS.

Specification forming part of Letters Patent No. **149,222**, dated March 31, 1874; application filed March 16, 1874.

### CASE B.

*To all whom it may concern:*

Be it known that we, EDWIN A. HOLBROOK and ANSON E. YORK, both of Watertown, Jefferson county, New York, have invented certain new and useful Improvements in Shutter or Blind Workers, of which the following is a specification:

This invention relates to means whereby window-blinds may be operated without opening the window; and it consists in the combination of certain novel devices, hereinafter described, designed to lock the blind in any position that may be desired.

The nature of our invention, and the manner in which the same is or may be carried into effect, will be readily understood by reference to the accompanying drawings, in which—

Figure 1 is a view, in perspective, of a window and window-blind and locking device. Fig. 2 is a view of the blind operating and locking device.

The blind-operating device is formed in this instance at the lower hinge of the blind, and consists of a crown-wheel, A, fast to the blind, provided with a vertical pin, *a*, supported in bracket, step, or bearing, *b*, on the outside of the window-frame. The wheel A meshes with a beveled gear, B, on the outer end of a horizontal shaft, C, which is supported in bearings in the window-frame, and extends through into the interior of the apartment in which the window is located.

The devices so far described have been heretofore in use, and are not our invention.

On the inner end of the shaft C is jointed an oscillating crank-handle, D, the joint being at *c*, so as to give the handle a slight movement on said pivot *c* toward or away from window-frame. Fast on the window-frame, and encompassing and concentric with the shaft, is a disk, E, the periphery of which is notched with V or wedge shaped notches *d*. The widest part of each notch adjoins the window-frame, and the taper or decrease in width is toward the outer face of the disk, at which point the notch is narrowest, as shown clearly in Fig. 2. Upon the side of the oscil-

lating crank D, contiguous to the disk, is a lug, *e*, having a wedge-shaped end, corresponding in shape to the notches *d*, and located at a point on the crank where it will just overhang or be opposite to the notches.

In operating the devices described, the crank, when it is desired to work the shutter or blind, is drawn outwardly, so that its lug will clear the notches. The crank can then be turned to open or close the blind more or less, as required. When the blind has reached the desired position, it can there be locked by pressing the oscillating crank inwardly, which will cause it to move on its pivot to an extent sufficient to force the wedge-shaped lug *e* into one of the corresponding-shaped notches on the locking-disk E.

The notch and lug, by reason of their peculiar shape, will resist any tendency there might otherwise be to cause their disengagement, and an attempt to move the shutter, which, by reason of the bevel of the gear B, would tend to move the shaft C longitudinally inward, would have the effect to wedge the lug the more tightly in the notch. In this way a very convenient locking mechanism is obtained.

Having now described our invention, what we claim, and desire to secure by Letters Patent, is—

In combination with the jointed oscillating crank-handle of the blind-operating shaft, provided with a wedge-shaped or tapering lug or projection, as described, the disk placed on the window-frame concentrically with said shaft, and formed on its periphery with wedge-shaped or tapering notches, widest on the side adjoining the window-frame, substantially as and for the purposes shown and set forth.

In testimony whereof we have hereunto signed our names this 13th day of March, A. D. 1874.

EDWIN A. HOLBROOK.  
ANSON E. YORK.

Witnesses:

WATSON M. ROGERS,  
J. G. BETHEL.