

W. M. LANPHERE.
Shutter-Worker.

No. 164,463.

Patented June 15, 1875.

Fig. 1.

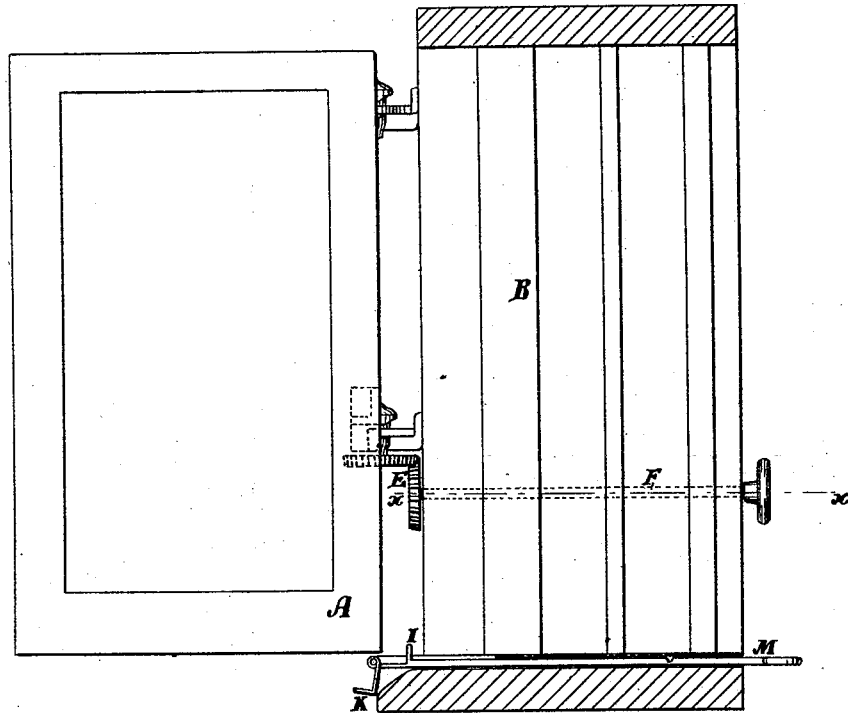


Fig. 2.

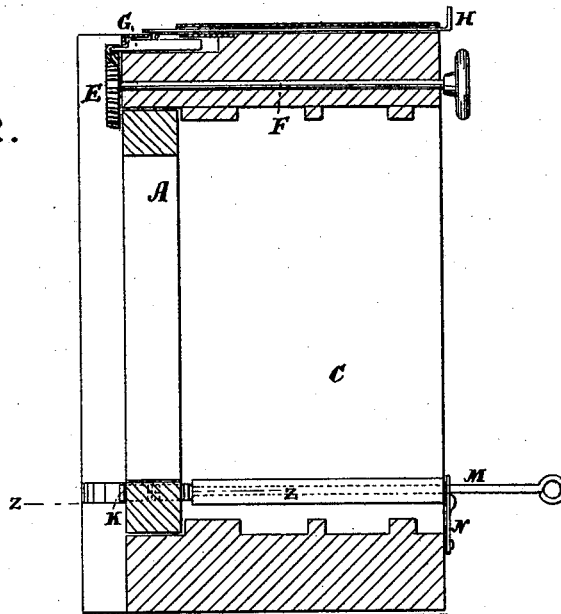
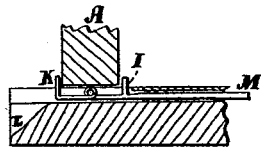


Fig. 3.



WITNESSES:

A. Benz...
A. J. Terry

INVENTOR:

W. M. Lanphere
BY *Mum...*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM M. LANPHERE, OF WATERLOO, IOWA.

IMPROVEMENT IN SHUTTER-WORKERS.

Specification forming part of Letters Patent No. **164,463**, dated June 15, 1875; application filed April 3, 1875.

CASE B.

To all whom it may concern:

Be it known that I, WILLIAM M. LANPHERE, of Waterloo, in the county of Black Hawk and State of Iowa, have invented a new and Improved Blind Opener and Fastener, of which the following is a specification:

The invention consists in the provision of a hinged angle-plate, which is carried by a push-rod, employed for starting or dislodging the shutter when bound by frost or any slight obstruction, said plate serving to fasten the shutter, when closed, by engaging with its lower edge.

Figure 1 is a sectional elevation of a window-frame and side elevation of a blind, showing the operating-gears and the starter and fastening-plate. Fig. 2 is a horizontal section taken on the line *y y* of Fig. 1, and Fig. 3 is a detail section taken on the line *z z* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the window-blind; B the side, and C the bottom, portions of the window-frame; E, the gear-wheels for opening and closing the blinds; F, the shaft for turning the wheels; G, the locking-slide for fastening the blind

open or shut by one of the wheels; H, the rod working it; M, the starter for opening the blind; J, the bar for working the starter, and K the hinged fastening-plate, combined with the starter-slide for being worked by it to fasten the blind shut from the inside, so that it cannot be opened from the outside. This fastening-plate consists of a little angle-plate hinged to the end of the starter-slide, in combination with the incline L, to let it fall when the blind opens for the blind to pass over it, and to swing it up behind the blind when it closes. The rod M of the starter will be fastened inside of the room by a catch, N, or any approved means.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the hinged angle-plate K and rod N with the shutter A and casing B, as and for the purpose set forth.

WILLIAM M. LANPHERE.

Witnesses:

F. KISTNER,
ROBT. C. APLIN.