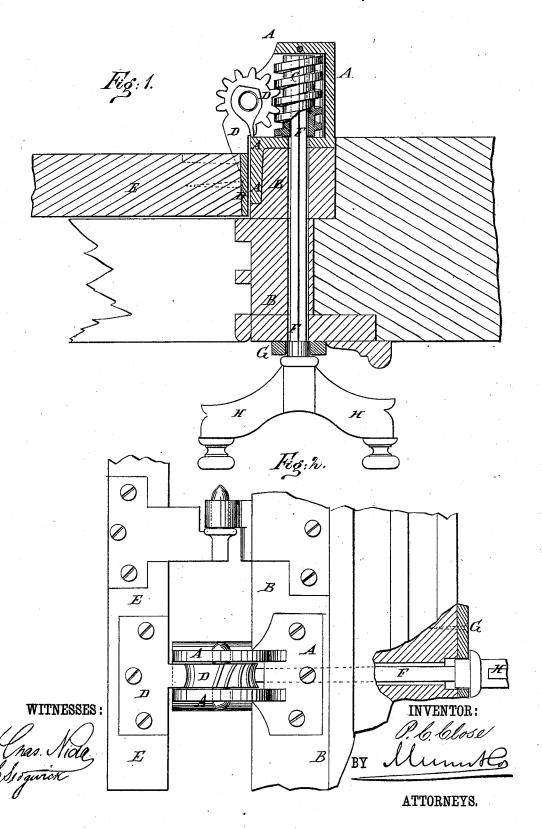
P. C. CLOSE. Shutter-Worker.

No. 202,151.

Patented April 9, 1878.



## UNITED STATES PATENT OFFICE.

PHILIP C. CLOSE, OF AUGUSTA, GEORGIA.

## IMPROVEMENT IN SHUTTER-WORKERS.

Specification forming part of Letters Patent No. 202,151, dated April 9, 1878; application filed January 11, 1878.

To all whom it may concern:

Beit known that I, PHILIP CHARLES CLOSE, of Augusta, in the county of Richmond and State of Georgia, have invented a new and useful Improvement in Positive Burglar-Proof Blind-Hinges, of which the following is a specification:

Figure 1 is a horizontal section of my improved blind or door hinge, shown as applied to a window or door frame and blind-frame, the blind being closed. Fig. 2 is a side view of the same, the blind being fully open.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish an improved hinge for blinds and doors which shall be so constructed that it can be turned only from the inside of the room, and will thus prevent the blind or door to which it is applied from being opened from the outside.

The invention relates to shutter-workers; and consists in the novel combination of a slotted and flanged box, a loose screw, a baseflanged wheel, and shaft with a window-frame and blind, all as hereinafter more fully described and claimed.

A is an iron box, which is made with a base-flange, by which it is secured to the lower part of the window-frame B, and within which is placed a loose screw, C.

The forward side of the box A has a slot formed in it to receive the screw-wheel D, the teeth of which mesh into the threads of the

Upon the forward side of the box A, above and below its slot, are formed flanges, which receive the screw-wheel D between them, and to which the said screw-wheel is pivoted and held in position by an ornamental loose pin. The screw-wheel D has a base-flange formed upon it, by which it is secured to the blind E.

The screw Chas a square hole formed through it longitudinally to receive the square outer end of the shaft F, which is passed into it through the window-frame B from the inside, and through a hole cast in the side of box A, and by which it is turned to open and close the blind E.

The shaft F passes through and works in a plate, G, attached to the inner side of the window-frame B, and is operated by a crank, H, attached to its inner end.

The crank H may be made double for the purpose of making it ornamental, and may also be otherwise ornamented, if desired.

The upper part of the blind E is connected with the frame B by an ordinary hinge.

I am aware that it is not broadly new to employ worm-wheels and operating-shafts in shutter-workers, my invention being confined to my particular mode of combining certain elements to produce an improved shutterworker.

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

The combination of the slotted and flanged box A, the loose screw C, the base-flanged wheel D, and the shaft F with a window-frame, B, and blind E, as shown and described.

PHILIP CHARLES CLOSE.

Witnesses:

ALFRED N. JUDKINS, WILLIAM PENDLETON.