(Model.)

J. POOL.

SHUTTER WORKER.

No. 297,713. Patented Apr. 29, 1884.

Fig. 1.

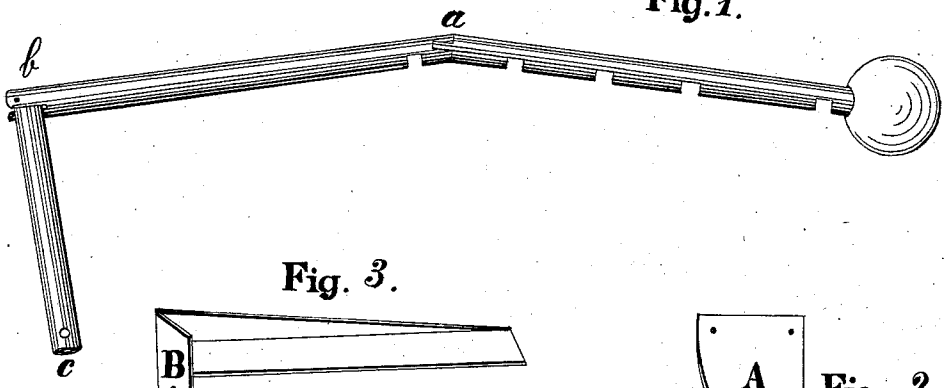


Fig. 3.

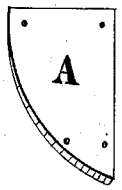
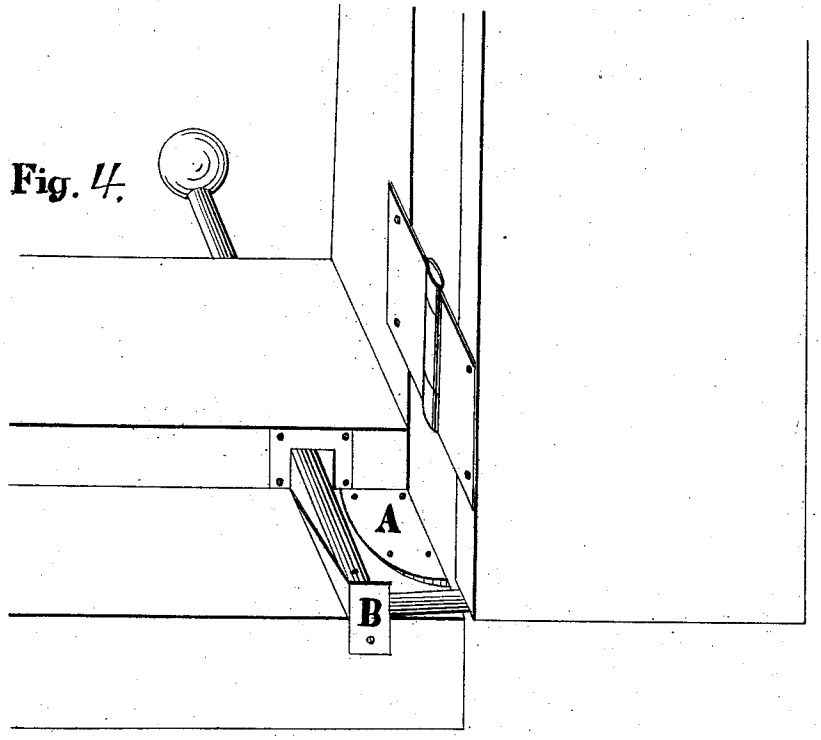


Fig. 2.

Fig. 4.



WITNESSES

John Pool Jr.

E. M. Turner

INVENTOR

John Pool

UNITED STATES PATENT OFFICE.

JOHN POOL, OF ELIZABETH CITY, NORTH CAROLINA.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 297,713, dated April 29, 1884.

Application filed July 3, 1880. Renewed October 5, 1883. (Model.)

To all whom it may concern:

Be it known that I, JOHN POOL, of Elizabeth City, in the county of Pasquotank and State of North Carolina, have invented a new and useful Improvement in Window-Shutter Workers, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a view of the jointed lever. Figs. 2 and 3 details, and Fig. 4 a perspective view of the frame and shutter with my improvement applied.

The object of my improvement is to furnish a continuous series of fulcrum-point bearings to a moving jointed lever in opening or closing a shutter, by the combination of the jointed lever *a b c* with the fixed fulcrum-plate A in the form of a section of an ellipse, and filling the angle between the window-frame and said jointed lever, thus affording a continuous fulcrum-surface bearing to the jointed lever during the opening or closing of the shutter.

My improvement, in combination with the other parts in a window-shutter worker, will be readily understood by reference to the drawings, in which—

a b c is a jointed lever; A, a fixed fulcrum-plate, being in the form of a section of an ellipse; B, a brace or support to jointed lever, while Fig. 4 is the section of a window frame and shutter, showing the relative positions of all the parts and the manner in which my improvement is applied. The jointed lever *a b c* works through the window-frame, its end *c* being fastened in a suitable manner to the lower end of the shutter, the ball end or handle being in the room. The notches in the under side are made to engage the edge of a plate which is placed on the lower side of the mortise through which the lever works, by means of which the shutter may be securely fastened when opened or closed, or when partially opened or closed. The handle-section of the lever falls down out of the way when the shutter is closed. The blind is opened by simply pushing out the lever, and closed by pulling it in.

I am fully aware of the improvements by Robinson, No. 221,613, November 11, 1879; Hart, No. 175,604, April 4, 1876, and others in shutter-workers.

What I claim as my improvement is—

In a shutter-worker, the combination of the jointed lever *a b c* with the fixed curved fulcrum-plate A in the form of a section of an ellipse, and filling the angle between the window-frame and said jointed lever, whereby said jointed lever is afforded a continuous fulcrum-surface during the opening or closing of the shutter, substantially as described.

JOHN POOL.

Witnesses:
W. G. FORD,
JOHN POOL, Jr.