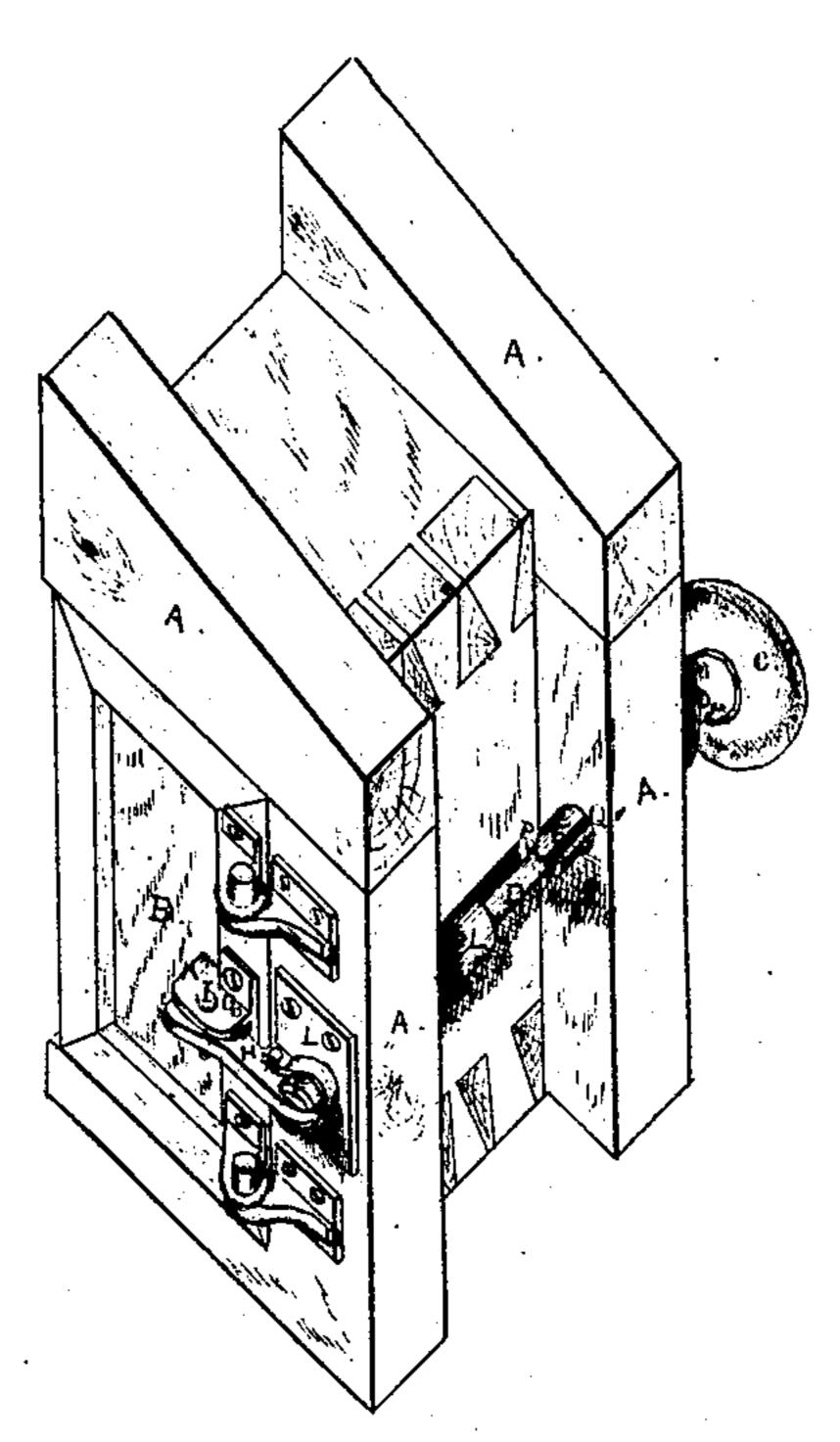
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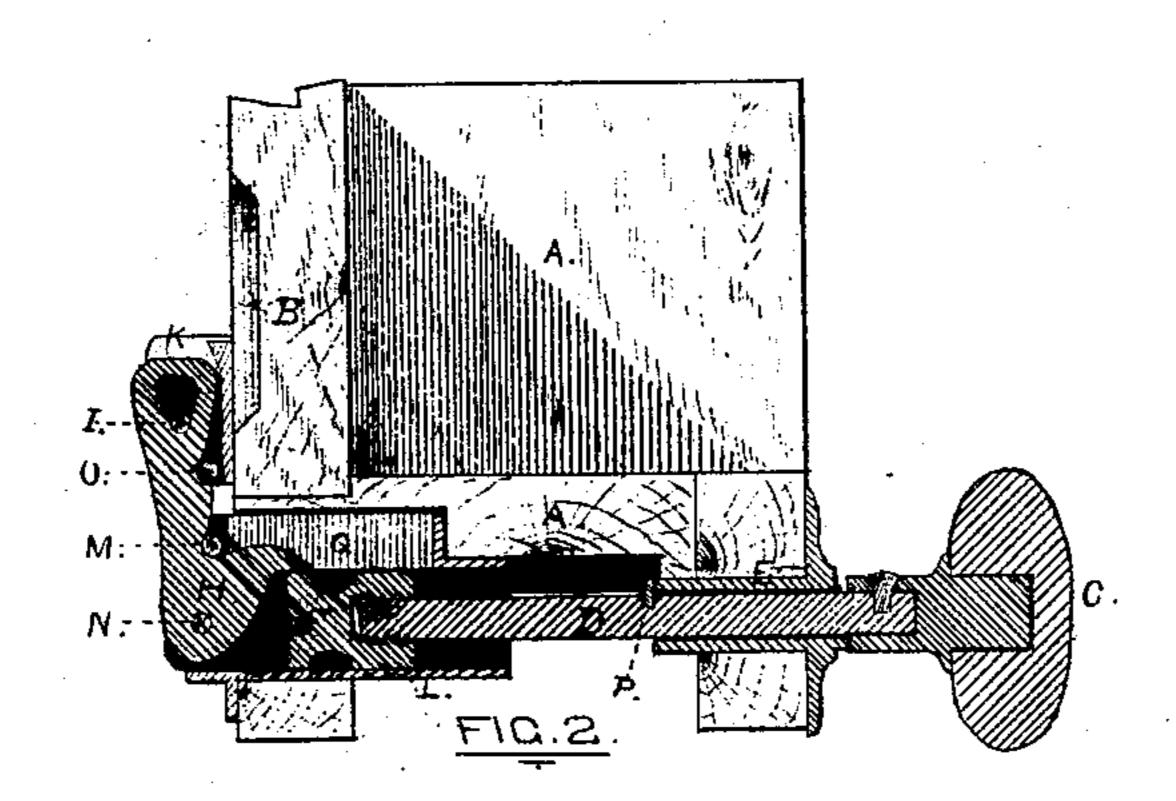
# Stutter Morker.

10. 102/92.

Palented Apr. 19. 1870



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WITNESSES.

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BS Smith Well Hornor INVENTOR

Herman Hoff

# Anited States Patent Office.

## HERMANN WOLFF, OF MILWAUKEE, WISCONSIN.

Letters Patent No. 102,192, dated April 19, 1870.

#### IMPROVED SHUTTER-WORKER.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, HERMANN WOLFF, of the city and county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Blind-Worker and Fastener; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a perspective view of my invention, and

Figure 2 a sectional view.

Similar letters of reference in each of the figures

indicate corresponding parts.

The object of my invention is to provide a blind-worker which will open and close a window-blind, and fasten the same open or closed, and one that can be put onto any blind now in use, without changing the hinges.

A is the window-frame.

B, the blind.

C, the knob.
D, the shank.

E, a metallic case, through which shank D passes,

with a slot in one side of it, in which pin P passes.

F, a round sliding rod, into one end of which bolt

D screws, and to the other is pinned tumbler H.

G, slot in hollow cylinder L, in which slides the point of tumbler H. H, tumbler, which operates the blind.

I, pin passing through ears on piece K and the hole in the end of tumbler H. This hole in tumbler H is made larger than the pin, and wider at its outer end. K, a piece with ears, fastened to the blind. L, a round hollow cylinder passing through the blind-casing, and with a flange fastened to the outside of the casing.

M, a pin through a projection in the flange of cyl-

inder L, over which tumbler H plays when hauled out or shoved in to open or close the blind.

N, pin which fastens rod F to tumbler H.

O, pin through the ears on piece K, for the tumbler H to rest on when the blind is closed. This pin, and pin M do not pass through tumbler H.

P, a pin in shank D, which, when the shank is turned so that it shall come opposite the slot in case E, will let the shank be pulled out, which will open the blind; and when the blind is open, turn the shank D, and the pin will strike against the end of case E

and hold the blind open; and when closed, the same operation will take place at the other end.

Q, a slot in case E, for pin P to work in.

### Operation.

Take hold of the knob and turn it till the pin P comes opposite the slot Q, then pull out on the knob, and the blind will be opened; and then turn the knob till the pin P shall press hard against the outside of the case E, which is made raised on one side, gradually rising in the form of a screw, and the blind will be held open fast; and reverse the motion to close the blind, and turn the knob, and pin P will hold the blind closed, the same as it is held open.

### Claims.

I claim as my invention—

1. Shank D, case E, beveled or screw-shaped at its ends, with slot Q and pin P, substantially as described.

2. Tumbler H, playing on its fulcrum-pin M, by means of which the sliding rod F fits tightly and works easily in the cylinder L, substantially as described.

HERMANN WOLFF.

Witnesses:

J. B. SMITH,

W. M. Hornor.