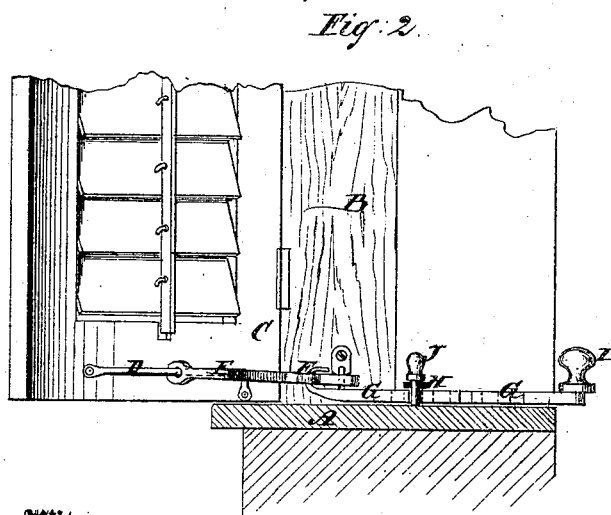
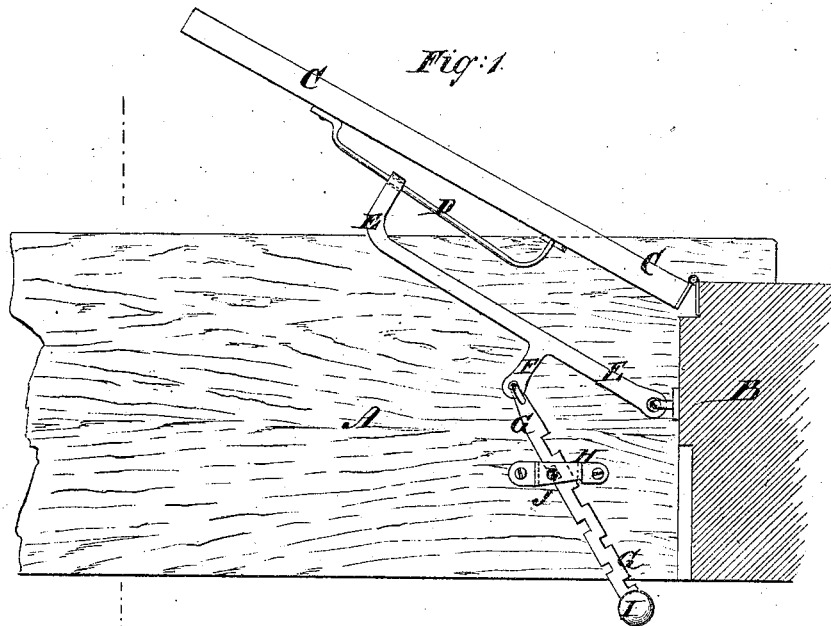


F. STRATTNER.

Improvement in Shutter-Workers.

No. 114,875.

Patented May 16, 1871.



Witnesses:

C. Raettig
Wm. H. C. Smith.

Inventor:
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Attorneys.

United States Patent Office.

FREDRICK STRATTNER, OF WILMINGTON, DELAWARE.

Letters Patent No. 114,875, dated May 16, 1871.

IMPROVEMENT IN SHUTTER-WORKERS.

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, FREDRICK STRATTNER, of Wilmington, in the county of New Castle and State of Delaware, have invented a new and useful Improvement in Device for Opening and Closing Window-Blinds; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others 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 top view of my improved device as attached to window-frame and blind.

Figure 2 is a side view of the same.

Similar letters of reference indicate corresponding parts.

This invention has for its object to furnish an improved device for opening and closing window-blinds and shutters, and which shall be so constructed that the blinds or shutters can be opened and closed from the inside of the sash; and

It consists in the construction and combination of the various parts of the device, as hereinafter more fully described and claimed.

A represents the sill;

B, the frame; and

C, the blind or shutter; about the construction of which parts there is nothing new.

D is an arm or bracket, the ends of which are attached to the lower part of the shutter or blind C, and which is bent near its ends, as shown in fig. 1, so as to stand out from the said blind or shutter to form a slide for the end of the bar E.

The bar E is bent near its outer end at or nearly at right angles, and has an eye formed in said outer end to receive and slide upon the bracket D.

The inner end of the bar E is pivoted or hinged to the casing B.

Upon the bar E, a little toward its inner end from

its middle point, is formed a short arm, F, to which is pivoted the outer end of the bar G.

The bar F passes in beneath the window-sash, and through the keeper H, and has a knob, I, formed upon its inner end, for convenience in operating it.

J is a pin which passes down through a hole in the keeper H, to fasten the bar G and lock the blind or shutter in place when adjusted.

Upon the opposite edges of the bar G are formed notches, which are arranged alternately with respect to each other.

By this construction of the bar G, when one of the notches in the right-hand edge of said bar is caught upon the end part of the keeper H, the pin J will pass down along the left-hand edge of said bar G, between the notches of said left-hand edge, and when the edge of the said bar between its notches is opposite the end part of the said keeper, the pin J will pass down through one of the notches in the left-hand edge of said bar.

By this construction the shutter or blind C will make a half revolution while the bar E makes a quarter revolution, which enables the said shutter or blind to be conveniently swung fully open or shut, by means of the device.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

An improved device for opening and closing blinds and shutters, consisting of the bracket or slide D, bent and pivoted or hinged bar E, arm F, notched bar G, keeper H, and locking-pin J, said parts being constructed and arranged substantially as herein shown and described.

FREDRICK STRATTNER.

Witnesses :

SAM. R. LAWSON,

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