

H. Wolff,

Shutter Worker.

No. 105,400.

Patented July 12, 1870.

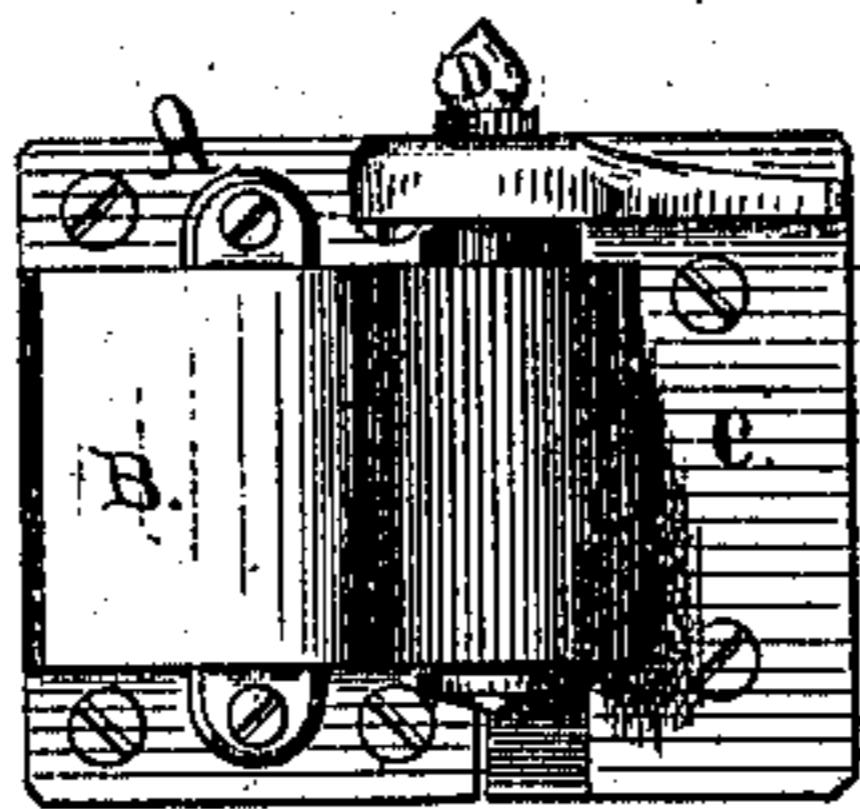


Fig.I.

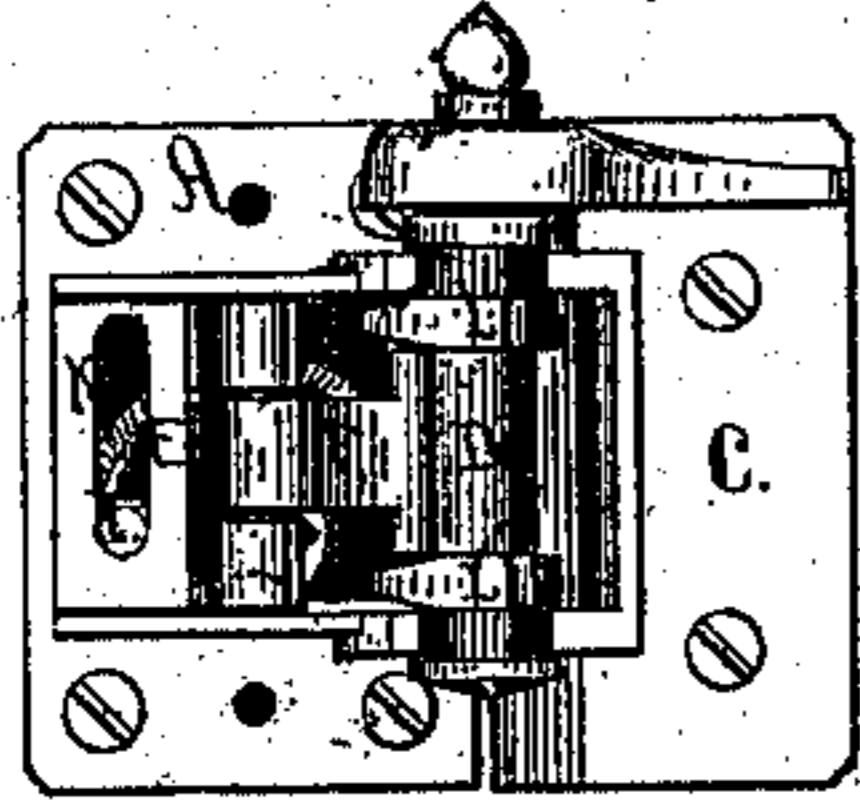


Fig.II.

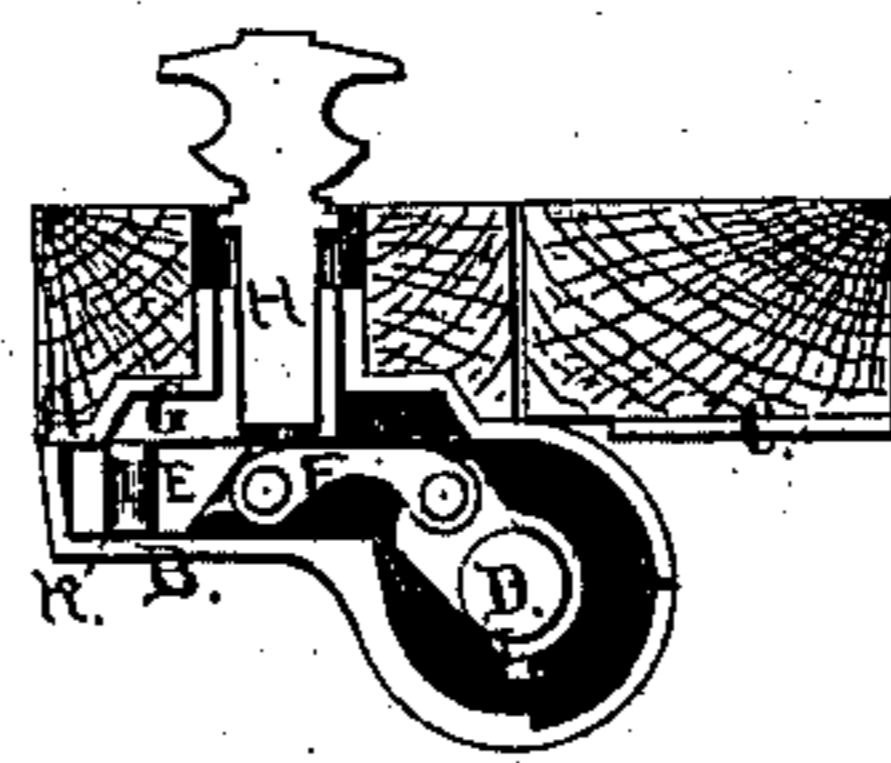


Fig.III.

WITNESSES:

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INVENTOR:

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# United States Patent Office.

HERMANN WOLFF, OF MILWAUKEE, WISCONSIN.

*Letters Patent No. 105,403, dated July 12, 1870.*

## IMPROVEMENT IN SHUTTER-WORKERS.

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

I, HERMANN WOLFF, of Milwaukee, in the county of Milwaukee, in the State of Wisconsin, have invented certain Improvements in Blind-Workers, of which the following is a specification.

The nature and object of the invention is to open and close the blinds from the inside by turning a knob.

### Description of the Drawing forming part of this Specification.

Figure I, side view;

Figure II, a view of the worker, with the cover removed; and

Figure III, a sectional view.

### General Description.

A is the leaf of the worker, to which are attached the works.

B, the cover, which incloses the works.

C, the leaf of the worker, fastened to the blind and slipped onto the pintle, which is square at the top.

D, the pintle.

E, slotted piece.

F, middle connection-piece, one end of it connected to the pintle by a rivet, and the other end to slotted piece E.

G, crank, with a square hole in its shank, into which fits the shaft H.

I, crank-pin, which fits in slot K in piece E.

L, projections on pintle D, which rests on piece E, and prevents the pintle from being turned too far back.

The operation of this worker is to turn the shaft H, and the crank-pin I will move piece E, and the blind will be opened or closed, as desired.

### Claim.

I claim as my invention—

Revolving pintle D, pieces E and F, in combination with crank G, and crank-pin I, substantially as described.

HERMANN WOLFF.

### Witnesses:

J. B. SMITH,

W.M. HORNOR.