L. M. Townsley,

Shutter Fastener.

No. 64,264. Patented Apr. 30, 1867.

Fig. 1

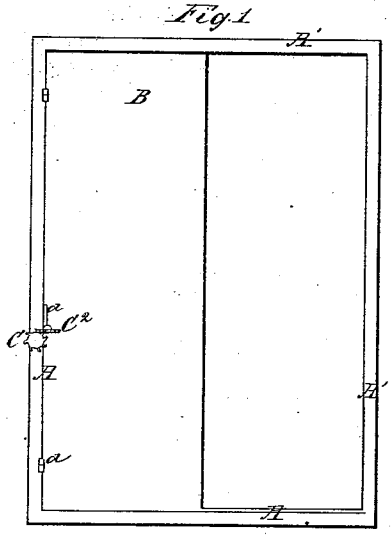


Fig. 2

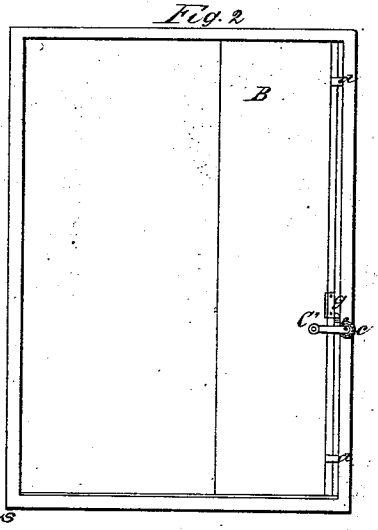


Fig. 3

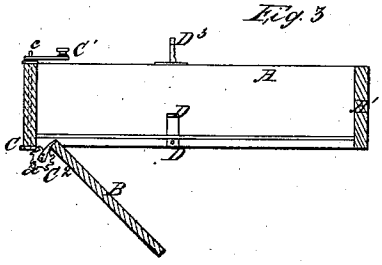
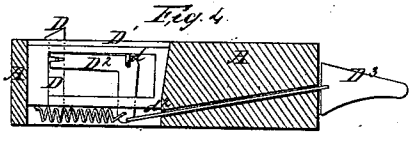


Fig. 4



Witnesses:
S. M. Randolph
Chas. H. Boyle

Inventor:
L. M. Townsley
By his attys
M. Randolph & Co

United States Patent Office.

L. M. TOWNSLEY, OF SEDALIA, MISSOURI.

Letters Patent No. 64,264, *dated April* 30, 1867.

IMPROVED FASTENING FOR WINDOW-BLINDS.

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, L. M. TOWNSLEY, of Sedalia, in the county of Pettis, and State of Missouri, have invented a new and useful "Window-Blind Fastener and Operator;" and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of this invention consists, firstly, in the application to a window-blind of a cog-wheel, the cogs of which are of such a peculiar construction that they will gear into the cogs of a similar wheel in a line coinciding with the prolongation of the axis of the blind-hinges, although the latter wheel is attached to the window-frame to the outside of the former wheel, and in such a position that a radial line or diameter of it, drawn on its face, will not intersect a similar line drawn on the face of the other wheel. The wheel which is attached to the window-frame is to be actuated by means of an axle, passing through the frame to the interior of the building, where it is provided with a crank, one half turn of which is sufficient to open or close the blind. This invention furthermore relates to a peculiar form of catch for holding the blind closed, which said catch can be operated from the inside of the house.

To enable those skilled in the art to make and use my improved window-blind fastener and operator I will proceed to describe its construction and operation.

Figure 1, of the drawings, is an outside elevation of a window fitted with one of the improved devices.

Figure 2 is an inside elevation of a window similarly fitted.

Figure 3 is a horizontal section of the window, showing the blind half open.

Figure 4 is a vertical central section of the window-sill, disclosing the catch used for holding the blind closed, and also the device for operating it.

A is the window-sill, and A′ is the balance of the window-frame, which is to be fitted with blinds or shutters B, which may be hung to the frame by means of the hinges *a*, such as are usually employed to hang blinds on house windows. The shaft *c*, which passes through the window-frame A′, has a cog-wheel, C, on its outer end, and a crank, C^1, on its inner end, which is used for the purpose of turning it. The cogs on the wheel C are not placed radially from its centre, but each cog is a segment of a circle, drawn from the base of the cog next in front of it, or from some point on the periphery of the wheel near the base of the preceding cog. Thus the cogs present a curved or hooked appearance, as shown in the drawings. The cogs on the wheel C^2 are similar to those described on the wheel C. The wheel C^2 is similar in every particular to the wheel C, and it is to be fastened to the blind in such a manner as to have the cogs of the two wheels gear into each other on a line drawn from the axis of one of the hinges *a* to the axis of the other hinge. By using the curved cogs already described the wheel C will be able to turn the wheel C^2, no matter in what position the blind may be, that is, open, closed, or partly open. I am aware that cog-wheels have been arranged to work within the casing of a window-frame in such a manner as to operate the blinds or shutters; but, owing to the difficulty and expense of fitting up windows in this manner, they have never come into general use, and consequently I have arranged the shaft *c* to pass directly through the window-frame, and then affixed the wheel C to it outside of the frame, thus using the minimum of labor and expense in the fitting up of these parts. Then the wheel C^2 is fitted to the blind or shutter B squarely with the back edge of it, and the curved cogs are used for the purpose of gearing one wheel into the other, substantially as above described. The crank and the size of the wheels C and C^2 are so arranged that one half turn of the crank C^1 will open or close the blind or shutter. This is a very desirable arrangement, as the shaft *c* has to pass through the jamb of the window-frame, and the thickness of the inside finish would prevent the crank from turning in that direction, unless the shaft *c* was made unnecessarily long. The knob on the end of the crank may be used for the purpose of attaching the cord of the window-curtain to, to hold the curtain up. The catch D, which is used to hold the blind shut, is arranged to slide up and down in a vertical mortise in the metallic frame D^1, which is secured to the window-sill A. The bent lever D^2 is pivoted to the frame D^1 at *d*, and the horizontal arm of the said lever has a slot, which embraces a pin inserted in the catch D. The spring d^1, attached to the lower end of the vertical arm of the lever, draws it forward so as to throw the catch up; and the wire or rod d^2, fastened to the lever, opposite its point of attachment to the spring d^1, is connected inside of the window-frame with a lever, D^3, by means of which the lever D may be operated so as to withdraw the catch D, and thereby release the blind or shutter.

Having described my invention, what I claim, is—

The combination and arrangement of the catch D, the spring *d*, and the levers D^2 and D^3, substantially as described and set forth.

L. M. TOWNSLEY.

Witnesses:

M. RANDOLPH,

S. M. RANDOLPH.