J. BELCHER.

SLAT HOLDERS FOR BLINDS.

No. 176,581. Patented April 25, 1876.

Fig. 1.

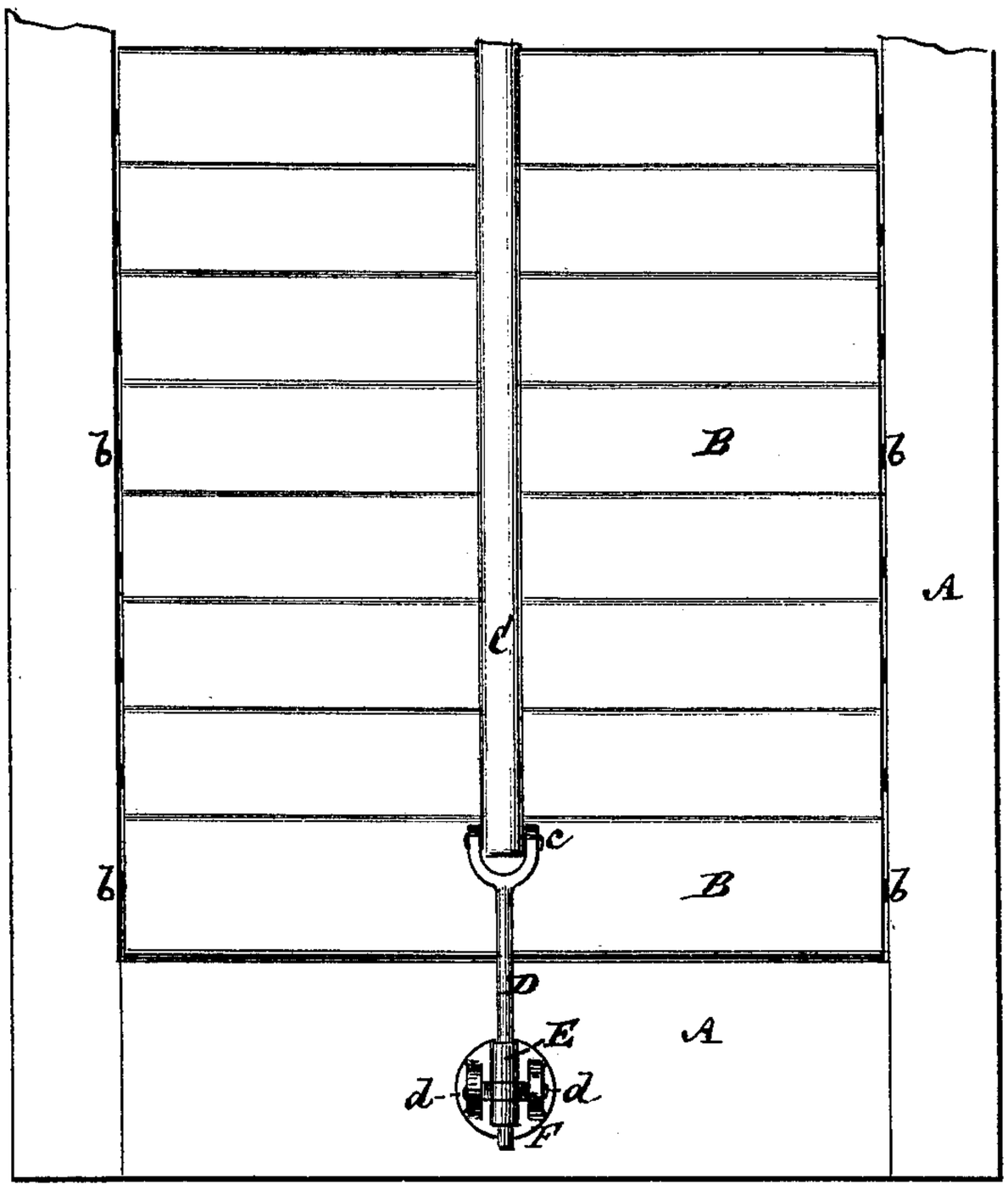


Fig. 2.

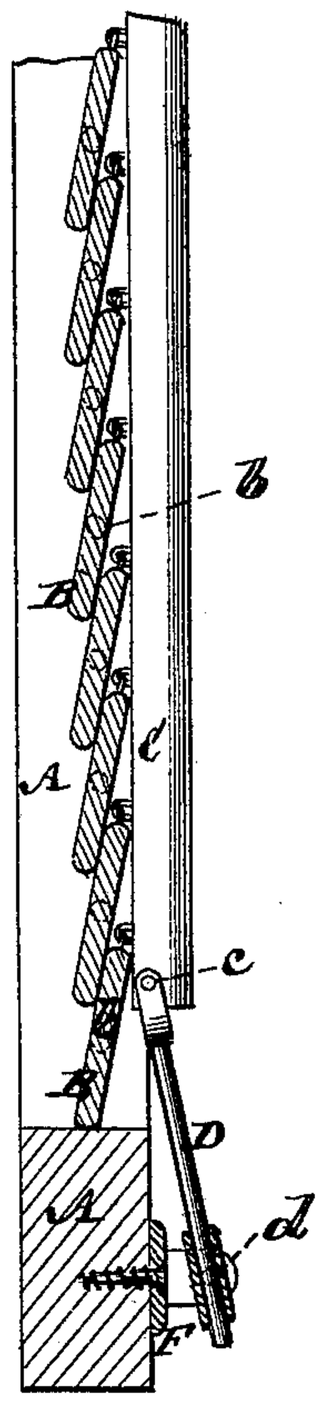
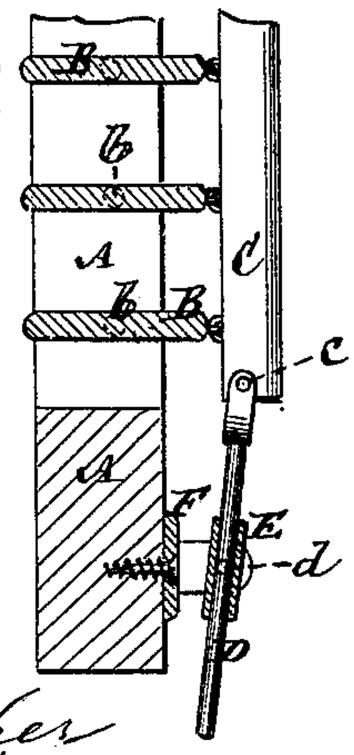


Fig. 4.

Fig. 3.



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JOSEPH BELCHER, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN SLAT-HOLDERS FOR BLINDS.

Specification forming part of Letters Patent No. **176,581**, dated April 25, 1876; application filed October 19, 1875.

To all whom it may concern:

Be it known that I, JOSEPH BELCHER, of the city of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Slat-Holders for Venetian Blinds; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

My invention is designed to be applied to Venetian blinds for windows, doors, and other purposes, in which the slats composing the blind are movable on or by end pins in the inner sides of the frame of the blind.

The invention relates to means for holding the movable slats of the blind in any desired position to which they may be adjusted—that is, more or less open or fully closed—and so that when the slats become loose, either by the drying or shrinking of the material of which they are composed, or from other causes, the slats when turned or adjusted to their required position will remain there against action of the wind on them or other extraneous disturbing cause, and whereby rattling of the slats also is avoided.

Numerous devices for such purpose have before been proposed, including spring-holders applied to the slats direct; also, similar or other holders applied to the operating-bar, by which the several slats are manipulated, and so controlling all the slats, although independent of them. This latter arrangement is on many accounts preferable, and my invention more particularly belongs to slat-adjusting devices or holders of that description in which, among other arrangements, a rod pivoted to the operating-bar of the slats, and working through a friction-block on the blind-frame, has been used, such friction-block being of rubber, leather, or other soft and elastic material, and being a stationary attachment to the blind-frame.

My invention consists in a combination of an oscillating split metal tube composing the friction device or clamp, with the pivoted rod fitted to slide therethrough, said tube and rod being respectively connected the one with the blind-frame and the other with the bar by which the slats are manipulated. A slat adjuster or holder thus constructed possesses the advantages of combining durability with efficiency, and of preserving the parallelism of the split friction-tube with the pivoted rod in all adjustments of the slats, and thereby maintaining a uniform gripe. Such slat-holder is in nowise identical with holders in which a perforated pendent plate is passed loosely through a fixed metal socket and locked, after the slats have been adjusted, by a cross pin or wire.

Figure 1 of the drawing represents a face view of a Venetian blind in part having my invention applied to it; Fig. 2, a vertical section of the same with the slats closed, and Fig. 3 further vertical section with the slats in an open position. Fig. 4 is a horizontal section, upon an enlarged scale, through the cross-bar of the frame which carries one of the main portions or devices of the holder.

A is the frame of a blind, which may be composed of one or more slatted sections or panels. B B are the overlapping slats provided with end pins *b b*, which work in the sides of the frame. C is the bar for manipulating or adjusting the slats to their open or closed positions, said bar being freely connected with the upper or one longitudinal edge of each slat, as usual, or in any suitable manner. Pivoted to either end of this bar, as at *c*, is a rod, D, arranged so that in adjusting the slats by the manipulating bar C said rod slides within or through a longitudinally-split and elastic metal tube, E, which is free to oscillate on or by trunnions *d d* of a surrounding strap, in ears projecting from the face of a plate or disk, F, which is secured, in any suitable manner, to the bottom or other cross rail of the frame, according to which end of the bar C the rod D is attached to. This oscillating split metal tube E, the oscillating axis of which is parallel with the oscillating axes of the slats, forms a friction clamp or clasp, which binds with a sufficient pressure on the rod D, that slides through it, to hold the slats B in any position in which they may be set by the manipulating-bar C. The oscillating attachment with the frame of the spring or split metal tube E and the jointed or pivoted connection of the rod D with the bar C provide for the holder accommodating itself to the varied positions of

the bar C as produced by the oscillating or rocking of the slats on or by their end pins *b* when being opened or closed. This joint action of the rod D and friction tube or clamp E is important, inasmuch as by it I am enabled to use a split metal tube for the clamp, wich is not only more durable than a rubber or leather friction-block, but by the oscillating attachment of the clamp or tube E the latter is always preserved in the same line of parallelism with the pivoted rod D during every adjustment of the slats, and a uniform gripe of said rod by the friction device established at all times, no matter what the changed position of the slat-operating bar may be.

In case of it being necessary at any time to increase the frictional hold of the clamp, it is only requisite to slightly pinch or further close the split tube E, so as to cause it to bear harder on the rod D.

It may here be observed that it is immaterial whether the rod D be attached to the bar C and the oscillating split tube E to the frame A, or whether such attachments of the main portions of the slat-holder be reversed—that is, the rod D to the blind-frame and the oscillating tube E to the bar C.

I claim—

The oscillating and longitudinally-split metal friction-tube E, in combination with the pivoted rod D, fitted to slide therethrough, for operation in relation with the blind-frame and the slat-operating bar C, substantially as shown and described.

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