

P. J. DINN.
LOCK-HINGE.

No. 180,420.

Patented Aug. 1, 1876.

Fig. 1.

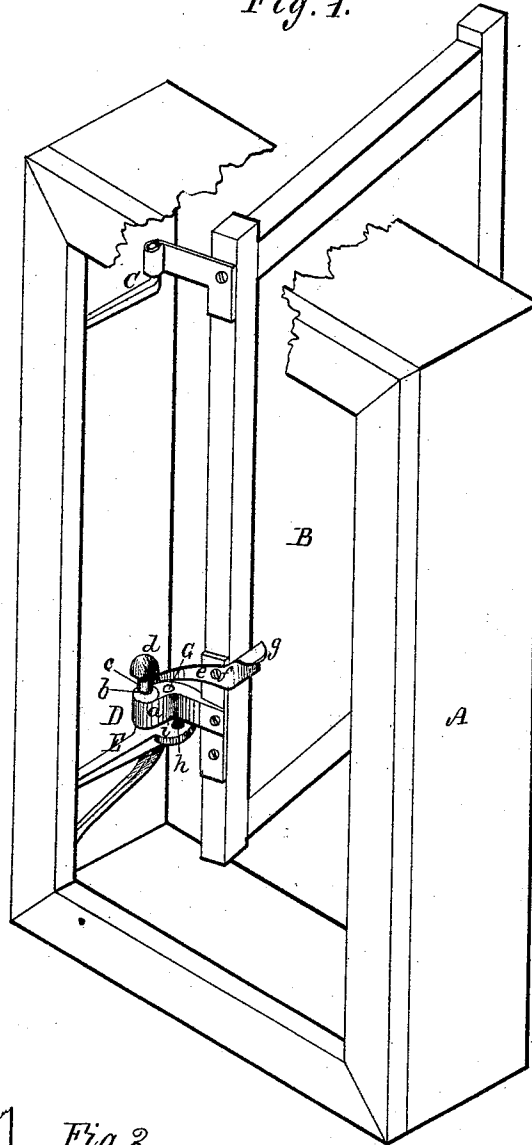


Fig. 2.

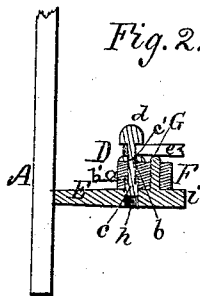
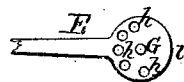


Fig. 3.



Witnesses.
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IMPROVEMENT IN LOCK-HINGES.

Specification forming part of Letters Patent No. **180,420**, dated August 1, 1876; application filed May 1, 1876.

To all whom it may concern:

Be it known that I, PATRICK J. DINN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Blind-Fastenings, of which the following is a specification:

The drawings accompanying this specification represent in Figure 1 an isometric elevation of a window-frame and blind, with my improvement attached, while Fig. 2 represents a vertical section of the locking device in which my improvement consists. Fig. 3 is a plan of the lower portion of the lower hinge, to be hereinafter explained.

In these drawings, A represents a window-frame, and B a blind or shutter combined therewith, substantially in the ordinary manner, by top and bottom hinges C and D, the lower or bracket portion of the latter, which is secured to the window-frame, being shown at E, and its upper portion which is secured to the blind at F, the pivot which connects the two, and is erected upon the shelf E, being shown at G.

In carrying my improvement into practice, I prolong the inner end of the upper and movable portion F of the lower hinge into a bent arm, *a*, and I create a vertical passage, *b*, in such arm, to receive a bolt, *c*, which is disposed within it, the upper extremity or head *d* of this bolt being swiveled, in a suitable manner, to the extremity of a latch, *e*, which in turn is pivoted, as shown at *f*, to the outer edge of the blind B, the inner end *g* of said latch being bent inward against the inside of such blind, and constituting a thumb-rest, by which the bolt *c* is easily raised, all as hereinafter more fully described and definitely claimed.

The shank *c'* of the bolt, between the enlarged lower part *c* and the head *d*, is reduced in size, and the vertical bolt-passages *b* in the arm *a* is correspondingly formed to fit both the reduced shank and the enlarged lower end, the lower portion of this passage consisting of a pocket, *b'*, of sufficient dimensions to receive the whole of the enlarged end of the bolt, when it is desired to raise the latter for the purpose of unlocking the two parts of the hinge.

The bolt, by this construction and arrangement of parts is, while allowed all the play needed for its operation, yet held securely in the arm *a*, and cannot be lifted therefrom. This construction necessitates the employ-

ment of the pivoted separate latch or lever *e*, to which the bolt is swiveled, as hereinbefore mentioned, so that it may be lifted by the latch without any tendency to lateral strain.

A series of vertical pockets or bolts, *h*, &c., are created in a shelf, *i*, which constitutes the outer termination of the bracket-portion E of the hinge D, this range of holes being concentric with the pivot G, and coincident with the bolt *c*, and so that, as the blind is turned upon such pivot, the bolt shall enter the first succeeding hole, and thereby lock such blind in the corresponding position.

The operation of my present device is simply this: To release the blind, press upon the thumb-rest *g*, which act raises the bolt *c* and leaves the upper part of the hinge free to rotate upon the lower. The blind is now turned upon the pivot G to the desired position, and the pressure upon the thumb-rest removed, when the bolt *c* will enter the coinciding or next succeeding hole *h*, and the blind is locked securely in position. When the blind is nearly or entirely open, and the thumb-rest *g* is most removed from the operator, the bolt may be raised by means of its head or knob *d*, and I have arranged the parts with reference to the various positions of the blind in such manner that when the blind is nearly or entirely open, the knob of the bolt is most conveniently reached, and when the blind is nearly or entirely closed the thumb-rest *g* is most accessible. By permitting the bolt to be operated from two points I obviate the reaching out and straining which would otherwise be necessary, to a certain extent, in closing the blind when open.

I do not, broadly, claim locking the two parts of a blind-hinge together by a bolt in the one part engaging pockets or sockets in the other part.

What I claim, and desire to secure by Letters Patent, is as follows:

The bolt *c*, formed with a head, *d*, and reduced shank *c'*, swiveled to the separate pivoted latch *e*, and working and held in the passage *b b'* in the part F of the hinge, as described, in combination with the part E of the hinge, provided with pockets or holes *h*, as set forth.

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Witnesses:

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