J. W. DELANO & L. C. NORTON.

SHUTTER WORKER.

No. 187,459. Patented Feb. 20, 1877.

Fig. 1.

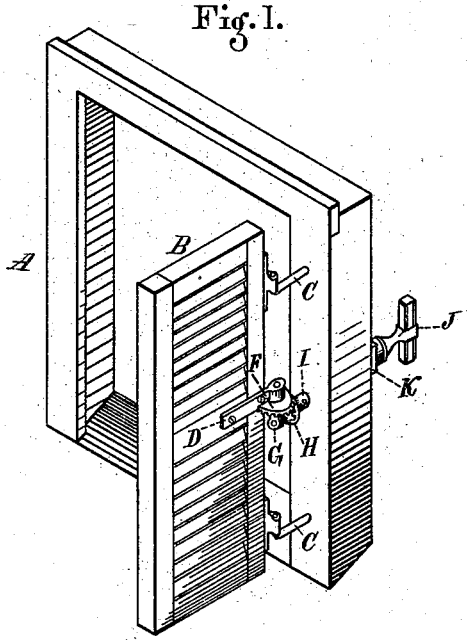
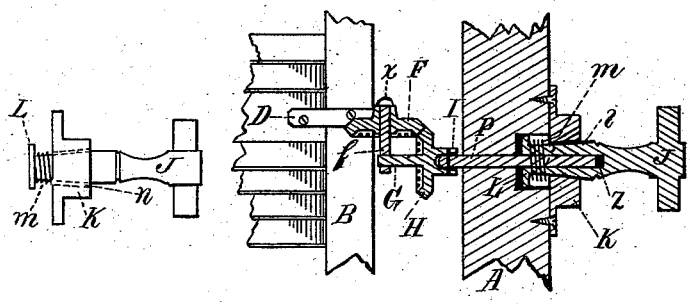


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN W. DELANO, OF MARION, AND LEWIS C. NORTON, OF AUBURNDALE, MASSACHUSETTS.

IMPROVEMENT IN SHUTTER-WORKERS.

Specification forming part of Letters Patent No. **187,459**, dated February 20, 1877; application filed October 14, 1876.

To all whom it may concern:

Be it known that we, JOHN W. DELANO, of Marion, county of Plymouth, and State of Massachusetts, and LEWIS C. NORTON, of Auburndale, in the county of Middlesex, State of Massachusetts, have invented certain new and useful Improvements in Window-Blind Fasteners, of which the following is a description sufficiently full, clear, and exact, to enable any person skilled in the art or science to which our invention appertains to make and use the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is an isometrical projection, showing the fastening in use; and Fig. 2, sectional views, showing the method of locking or securing the blind.

Like letters of reference indicate corresponding parts in the different figures of the drawing.

Our invention relates to that class of window-blind fastenings which are operated from the inside of the window or room to which the blind is attached, without opening the window, and consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed.

In the drawing, A represents the window-frame; B, the blind; and C C the hinges. Attached to the outer stile of the blind by the strap D there is a segmental bevel-gear, F, with the teeth projecting downwardly. This gear carries the lug *f*, which is fitted to rotate easily in a vertical hole through the center of the gear, and is supported by the head *x*. A bevel-gear, H, provided with the journal G, intersects with the gear F, being supported on the rod P, and by the lug *f*, in which the journal G is fitted to revolve. A plate, K, is attached to the inner side of the window-frame, through which plate there is a tapering hole, *n*. Fitted to work in this hole there is a handle, J, holding a tapering body, *i*, and provided with the annular head or plate L, which prevents it from being withdrawn from the plate K. Around the body of the handle J, and arranged between the head L and the inner side of the plate K, there is a coiled spring, *m*, acting expansively, to force the handle J in the direction of the gear H. The rod P is fitted to slide in a suitable hole bored laterally through the frame A, its outer end being secured in the gear H by means of the pin I, and its inner end sliding in the hole *z*, drilled longitudinally in the body *i* of the handle J, but not rotating therein, being prevented from rotating by a square (not shown) on its inner end.

In the use of our improvement the blind is operated by the handle J, and may be secured in any desired position by forcing the tapering body *i* into the correspondingly-tapering hole *n*, where it will be firmly held by friction in a manner which will be readily obvious to all conversant with such matters, without a more explicit description.

Having thus explained our improvement, what we claim is—

In a window-blind fastener, substantially such as described, the handle J, head L, rod P, spring *m*, gear H, lug *f*, and gear F, constructed and arranged to operate substantially as and for the purpose set forth and specified.

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