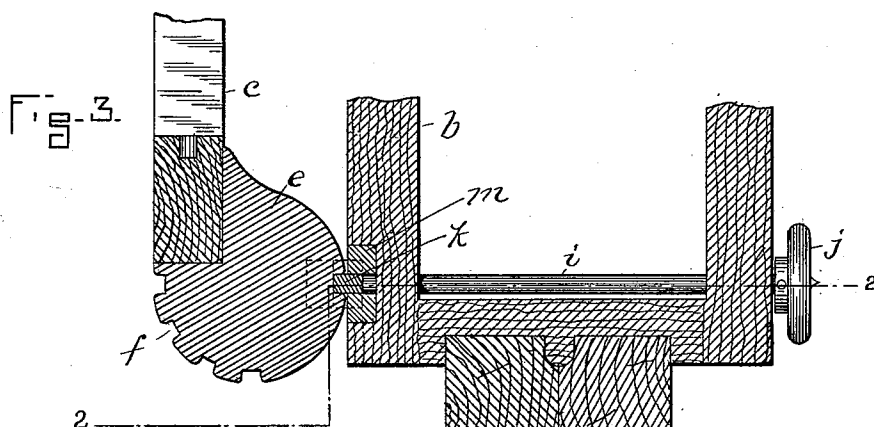
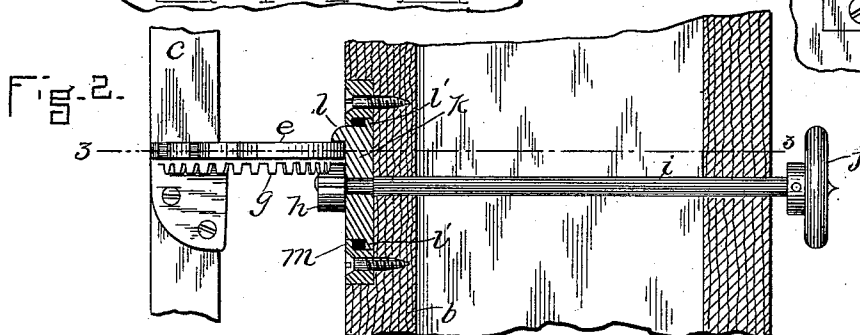
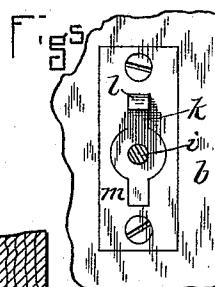
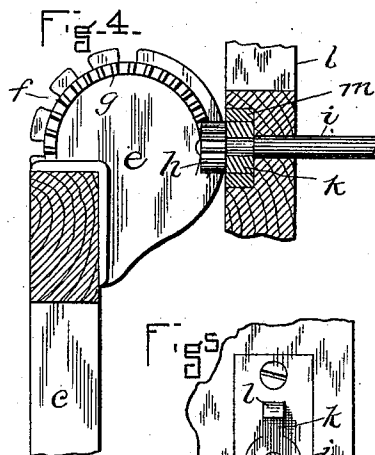
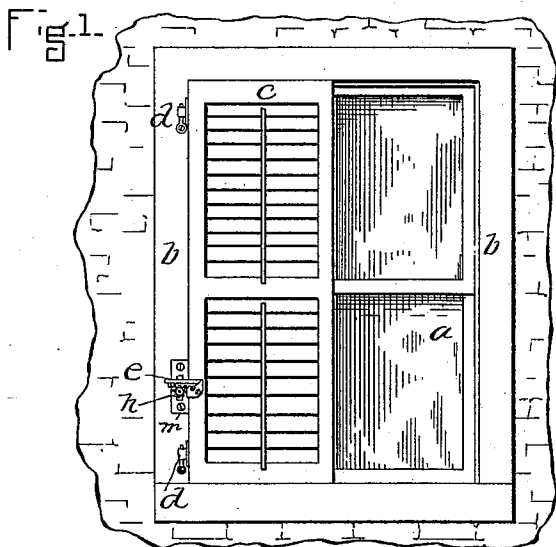


(No Model.)

C. F. GARLAND.
SHUTTER WORKER.

No. 465,257.

Patented Dec. 15, 1891.



WITNESSES.

James T. Ball,
Chas. Bartlett

INVENTOR

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By
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UNITED STATES PATENT OFFICE.

CHARLES F. GARLAND, OF CHELSEA, ASSIGNOR TO JOHN J. QUIGLEY, OF
EAST BOSTON, MASSACHUSETTS.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 465,257, dated December 15, 1891.

Application filed December 15, 1890. Serial No. 374,775. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. GARLAND, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Blind Fastening and Operating Means, of which the following is a specification.

My invention has relation to means for opening and closing blinds and locking the same in desired position without opening the windows, it being the object of the invention to provide a device which shall be the minimum in point of simplicity and cheapness of construction and the maximum in point of efficiency.

My invention will first be described in connection with the annexed drawings and the letters of reference marked thereon, forming a part of this specification, and then be pointed out in the appended claim.

Of the said drawings, Figure 1 is a front view of a window of a building, showing a blind in position equipped with my improvement. Fig. 2 is a vertical sectional detail taken on the line 2 2 of Fig. 3. Fig. 3 is a sectional detail in top plan, taken on the line 3 3 of Fig. 2. Fig. 4 is a bottom plan view, partially in section, of the invention. Fig. 5 is a front view of the latching or locking means, the operating-rod for the same being shown in section.

The same letters of reference designate the same parts or features, as the case may be, wherever they occur.

In the drawings, *a* designates a window, *b* a window-casing, and *c* a blind, hinged to the casing at *d*.

e designates a segment secured at any convenient point to the blind and provided in its periphery with notches *f*. The segment is also provided just within the line of its periphery with vertical teeth *g*, adapted to be engaged by the teeth of an elongated pinion *h*, secured upon the outer end of a longitudinally-movable rod *i*, having its bearing in the window-casing and adjuncts, through which it extends from side to side, being provided on its inner end with a hand wheel or knob *j*.

k designates a latch engaged with the outer end of the rod *i* adjacent to the pinion *h*, the rod being fitted to rotate in the latch and en-

gaged therewith, so that by the movement of the said rod longitudinally the latch may be also moved and engaged with and disengaged from the segment by being moved into and out of the notches *f*, the rod being adapted to rotate for the purpose of moving the blind without moving the latch. A plate *m*, secured to the window-casing, is provided with an aperture, through which the latch extends and by which it is in a measure guided and held in place. The upper end of the latch is provided with a lip *l*, which extends over the upper face of the segment and serves to prevent the blind from being raised off its hinges. The rear edge of the latch is provided with lips or shoulders *l'*, which prevent the latch from being pushed outwardly too far by striking the plate *m*.

The operation of the invention is as follows: The segment *e* being secured to the edge of the blind and the shaft *i* and its elongated pinion *h* and latch *k* being arranged in such position that the said pinion may engage the teeth *g* of the segment and the latch *k* be moved into and out of the notches *f* without disengaging the pinion from the teeth of the segment and the blind being locked in open position, as represented in Fig. 3, and there being a desire of a person on the inside of the house to close the same, the operator may take hold of the knob or handle *j*, draw the latter inward to disengage the latch from the segment, as shown in Fig. 2, turn the rod and pinion *h* so as to fully or partially close the blind, and then press the rod outward to again engage the latch with one of the peripheral notches of the segment.

The lip *l* of the latch, while serving to hold the blind against accidental removal from its hinges, in no way interferes with the operation of opening and closing the blind.

It is to be noted that the invention is composed of but very few parts, which renders it cheap of construction and little liable to get out of order.

It is obvious that changes may be made in the form and arrangement of parts comprising the invention without departing from the nature or spirit thereof.

Having thus explained the nature of my improvement and described one way in which

the same may be constructed and used, though without attempt to describe all of the forms in which it may be made, I declare that what I claim is—

- 5 A blind fastening and operating means consisting of a toothed and peripherally-notched segment, a longitudinally-movable rod having an elongated pinion secured thereto to engage the teeth of the segment and operate the
10 latter, and a latch in which the rod is adapted to rotate and which is movable with the rod to engage and be disengaged from the notches

of the segment, the said latch having a lip 7 arranged to extend over the edge or upper face of the segment, all constructed, arranged, 15 and operating as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 11th day of December, A. D. 1890.

CHARLES F. GARLAND.

Witnesses:

ARTHUR W. CROSSLEY,
A. D. HARRISON.