A. BIJUR.
Shutter.

No. 207,641. Patented Sept. 3, 1878.

Fig: 1.

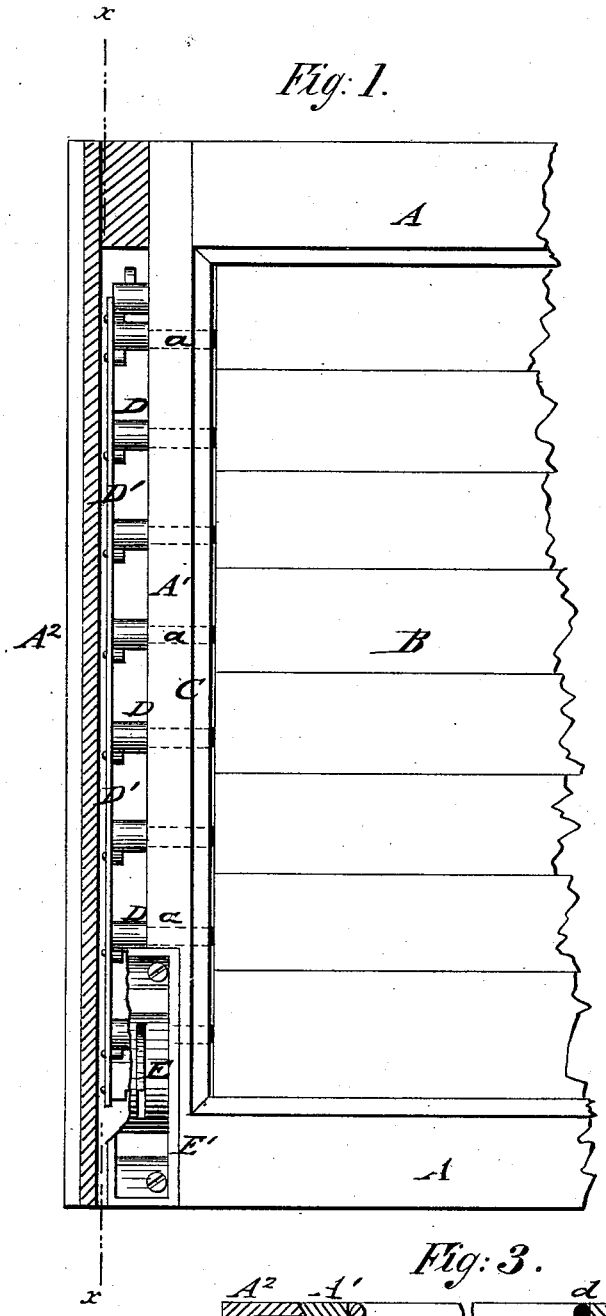


Fig: 2.

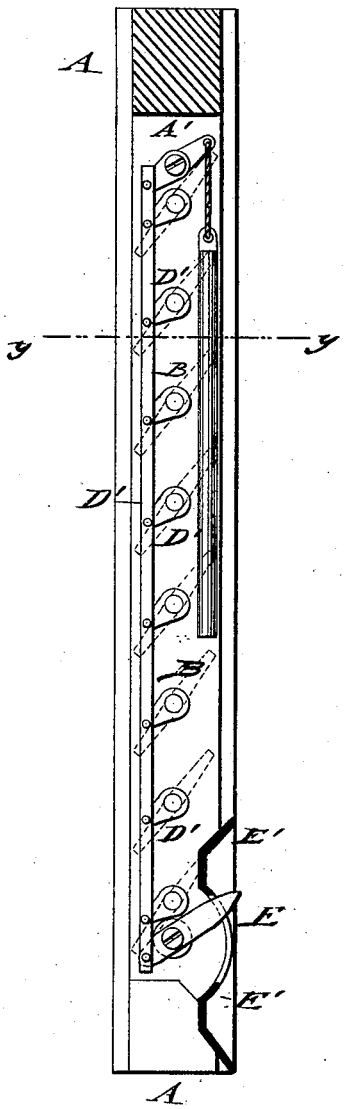
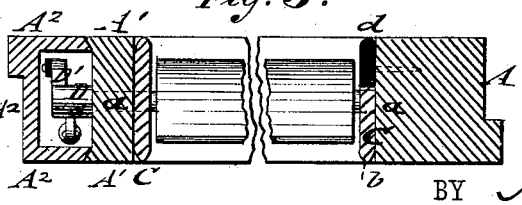


Fig: 3.



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UNITED STATES PATENT OFFICE.

ASHER BIJUR, OF NEW YORK, N. Y.

IMPROVEMENT IN SHUTTERS.

Specification forming part of Letters Patent No. **207,641**, dated September 3, 1878; application filed July 29, 1878.

To all whom it may concern:

Be it known that I, ASHER BIJUR, of the city, county, and State of New York, have invented a new and Improved Shutter, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a front elevation, partly in section, of my improved shutter. Fig. 2 is a vertical transverse section of the same on line *x x*, Fig. 1; and Fig. 3, a horizontal section on line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to improvements in the construction of the shutter for which Letters Patent have been granted to me heretofore, dated January 22, 1878, and numbered 199,402, so that the slats may be adjusted with greater facility, and the manufacture and repairing of the shutter made cheaper and easier.

The invention consists of the combination, with the rod that connects the crank-arms of the journaled slats, of a fulcrumed and guided thumb-lever for setting all the slats at the same time; and it consists, secondly, of making one stile of the shutter-frame with a recessed and detachable end section or rail, and of a fixed inner section, through which the studs or journals of the slats are placed. The opposite journals are set into recesses of the interior frame of the shutter and secured by a removable strip.

In the drawings, A represents a shutter or blind of the usual construction for outside or inside use, and B the slats, which swing by end studs or journals *a* at one side in perforations of the shutter-stile, and at the opposite side in recesses of the inner lining or frame, C, of the shutter. Frame C is for this purpose made at the recessed side of a fixed strip, *b*, into which the resesses for the slat-studs are cut, and of a detachable strip, *d*, that closes the recesses and retains the slat-studs in position. The perforated shutter-stile, in which the opposite studs of the slats are supported, is made of two parts or sections, A^1 A^2, of which the inner fixed section, A^1, is perforated, and the outer detachable section, A^2, longitudinally recessed to provide space for the crank-arms and operating mechanism of the slats. The crank-arms D, keyed to the projecting studs of the slats, are connected by a pivot-rod, D′, and balanced by a suitable weight, to be more easily operated. For putting the slats into the shutter-frame, the strip *d* and the outer recessed section, A^2, of the shutter are detached, the slat-studs then inserted into the perforations of the stile and recesses of the inner frame, the strip *d* replaced, the crank-arms, rod, and counter-balance applied to the studs, extending through the fixed part of the stile, and, finally, the outer recessed section, A^2, screwed onto the fixed section, completing thus the shutter. The recess of the removable section is closed at the upper and lower ends by suitable fitting blocks.

It has been found objectionable in practice to adjust the slats either by a thumb-rest attached to one of the slats or by taking hold of one of the slats, as thereby too great a strain is exerted on that slat, especially in larger shutters, in which a number of slats have to be set. I have therefore connected to the pivot-rod D′ of the slats a fulcrumed thumb-lever, E, that is guided in a slotted face-plate, E′, of the shutter-frame, and pivoted preferably to the lower end of the rod. The thumb-lever projects through the slotted face-plate to the outside, and is operated either by raising or lowering the same. The slotted part of the face-plate is convex, so that the thumb-lever is flush with the shutter-frame in its extreme positions. The raising of the thumb-lever closes the slats, while the lowering of the same opens them to their full width, admitting thus the easy and convenient adjustment of the slats to any desired position without the inconveniences arising from the attaching of the thumb-rest to one of the slats, and furnishing a construction of the shutter that admits of the quick and convenient inspection and repairing of the operating parts.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a shutter-frame, A, of slats B, that swing by their studs or jour-

nals at one end in recesses of the inner slat-frame, C, and by the opposite studs in perforations of a fixed section, A^1, of the shutter-stile, the ends of the latter studs being provided with short crank-arms D, connected by a pivot-rod, D′, counterbalanced by a weight, and inclosed by an outer removable and recessed stile-section, A^2, substantially as described, and for the purpose specified.

2. The combination of a swinging thumb-lever, a connecting pivot-rod, and a slotted arc-plate flush with shutter, as and for the purpose specified.

ASHER BIJUR.

Witnesses:
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