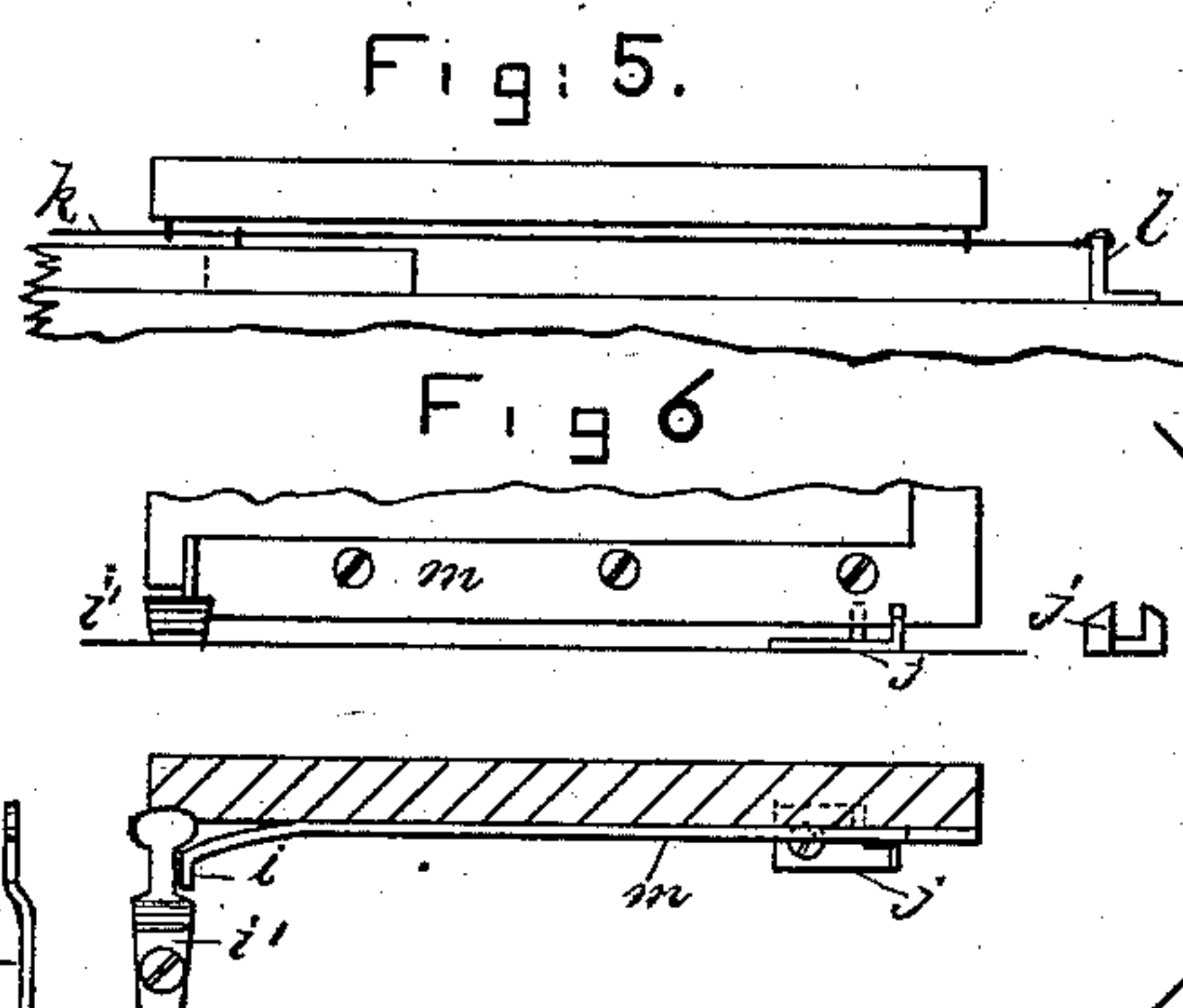
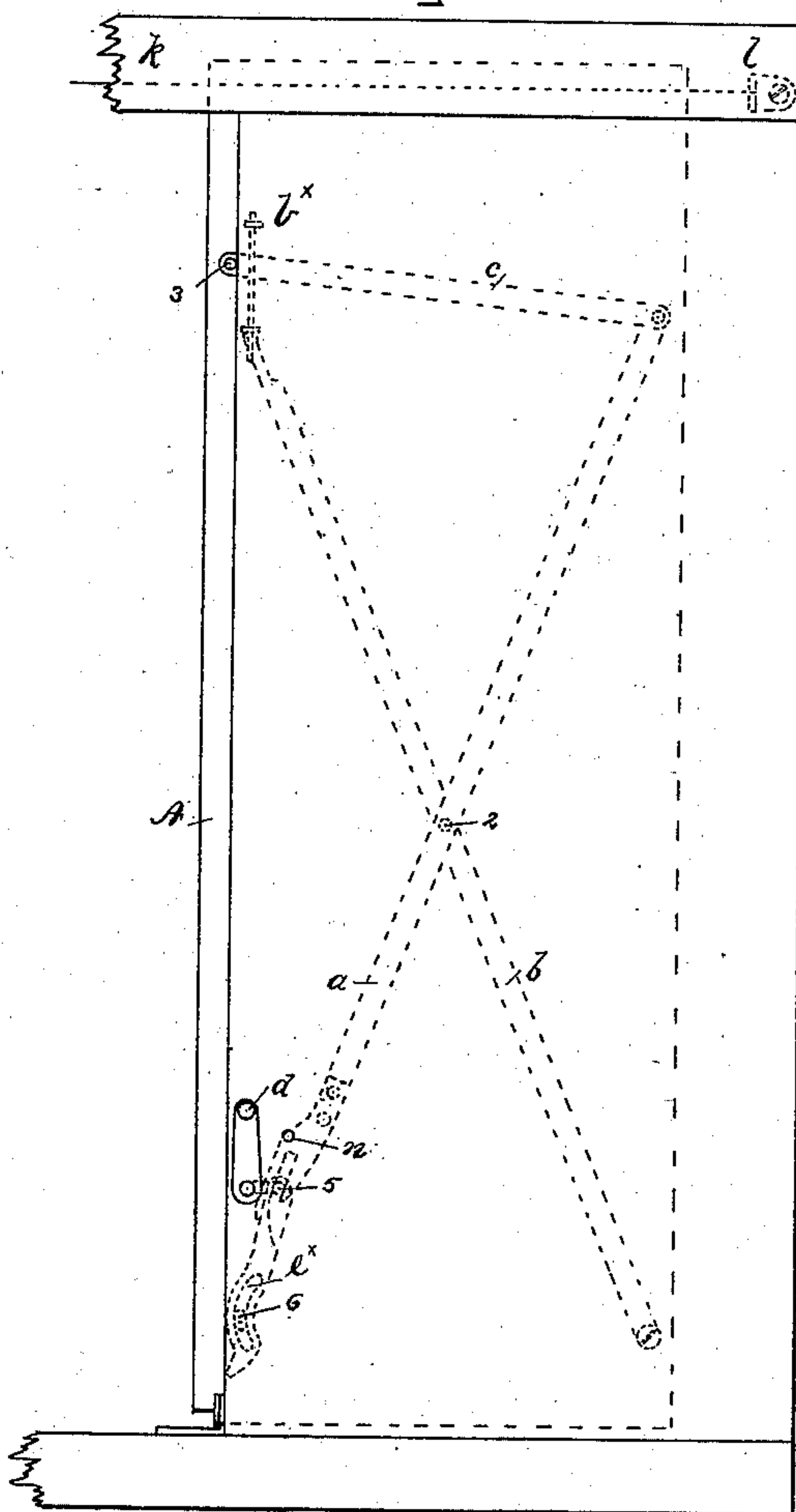


E. PRESCOTT.
Blind Operator.

Patented Sept. 7, 1880.

Fig: 2.



INVENTOR-

by - Edwin Prescott.
Groshy Langory Atty's

UNITED STATES PATENT OFFICE.

EDWIN PRESCOTT, OF HAMPTON FALLS, NEW HAMPSHIRE.

BLIND-OPERATOR.

SPECIFICATION forming part of Letters Patent No. 231,931, dated September 7, 1880.

Application filed April 5, 1880. (Model.)

To all whom it may concern:

Be it known that I, EDWIN PRESCOTT, of Hampton Falls, county of Rockingham, State of New Hampshire, have invented an Improvement in Blind-Operators, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to blinds or doors, and is intended as an improvement upon that class wherein the said blind or door is provided with levers so arranged and connected together as to sustain and permit a sliding or reciprocating instead of the usual swinging movement of the blind—as, for instance, in United States Patent No. 196,990, heretofore granted to me, and to which reference may be had.

The object of this my invention is to provide means to move the said blind from the interior of the house, to thereby obviate the necessity of raising the window when it is desired to open the blind, and thus do away with the discomfort heretofore experienced in stormy weather; also, to automatically lock the blind when closed, and to provide means to open or close the slats, as desired, when the blind is locked in its closed position, all of which may be independently and quickly done by a person inside the house.

As herein shown, a single crank is employed, the said crank being adapted, during a portion of its rotation, to move the blind bodily, it then engaging one of the supporting-levers thereof, and during a continuation of its rotation it operates the slats of the blind, which are then closed, the crank being then disengaged from and not moving the blind bodily.

Figure 1 represents, in elevation, a blind provided with my improvements, as seen from the interior of the room to which it is applied, a portion of the window-casing being broken away to show the devices for operating it; Fig. 2, a similar view, showing the blind open, the supporting-levers being shown in dotted lines; Fig. 3, an enlarged detail, showing the crank and slat-operating lever; Fig. 4, a sectional view of Fig. 1 on the dotted line *xx*; Fig. 5, a partial top view of Fig. 2, and Fig. 6 details of the stops to limit the movement of the blind.

The blind *A* is hung on the levers *a b*, pivoted together at 2, the former one, *a*, being attached at its lower end to the frame or side of

the house and at its upper end to a radius-bar, *c*, pivoted at 3 to the blind. The lever *b* is pivoted at its lower end on the blind, and at its other end is free to move up and down on a guide, *b^x*, attached to the house. (See dotted lines, Fig. 2.) Such a system of levers, having been previously patented to me, is not by itself herein claimed.

The lever *a* has a slot or notch, 4, near its lower end, which is adapted to be engaged by the crank-pin 5 when rotated in the direction of the arrow, Fig. 1, by the handle *d*, which will be upon the inside of the house. After the notch 4 is so engaged by the crank-pin 5 a further rotation in the same direction carries the said lever and connected blind to the position shown in Fig. 2, the final movement pressing the blind against a stop and holding it securely, to prevent any rattling or movement of the blind from without. A reverse rotation of the crank first closes the blind, and thereafter, in the further rotation of the crank, it is disengaged from the slot 4, passing out the lower end thereof, and has no further effect on the lever *a* to move the blind.

A slat-operating link, *e*, attached to the crank and provided with a curved guiding-slot, *e^x*, (shown as engaged by the pin 6, upon which the lever *a* is pivoted to the house,) is provided at its lower end with a projection, *f*, (see Fig. 4,) which at the proper time, after the blind has been closed by and the lever *a* disengaged from the crank, engages a lever, *g*, herein denominated the "slat-operating lever," pivoted at 8 to the blind and connected at its other end to the usual slat-rod. This slat-operating lever *g* is preferably fork-shaped at its free end, one prong of said fork being herein shown as shorter than the other, to facilitate the easy entrance and exit of the finger or projection *f* into and out of the fork.

It will be seen that just after the disengagement of the crank from the lever *a*, after the blind is closed, a further rotation of the said crank will cause the link *e* to move downward far enough to insure the engagement of its projection *f* with the lever *g*, when a further rotation of the crank will rock the link *e* upon its pivot 6 and cause the positive engagement of the said link with lever *g*, and in its further movement, after passing its lower center, will

raise the said lever and thus open the slats. The slats are shown as moved positively in both directions by the lever *g*, a spring, however, being provided to retain the slats closed after the disengagement of link *e* from the said lever.

If desired, the slats may be moved positively in only one direction, and a strong spring, *h*, be used to move the slats in the other direction.

In blinds having stationary slats, instead of pivoting the lever *g*, as described, it will be rigidly attached to the blind, its function then being to act only as a catch to lock and hold the blind when closed. The blind is guided at its upper end by a guide-wire, *k*, attached at its ends to L-shaped ears *l*, connected by screws to the casing. The wire may be drawn taut in any suitable manner. Upon the lower stile of the blind is metal cross-piece *m*, which may extend a short distance up along the side stile (see Fig. 6) to stay or brace the joint of the said stiles, one end of said cross-piece being preferably bent to form a stop, *i*, which co-operates with stops *i'* *j* upon the casing of the window, to limit the extent of movement of the blind.

It will be obvious that, instead of pivoting the lever *a* to a radius-bar attached at its opposite end to the blind, I might provide the said lever with a pin, to enter and be guided by a slot in the blind, or any well-known sliding connection may be used.

The handle of the crank is preferably made of spring-steel, so as to be sprung over a stop, *n*, upon the casing, the said stop *n* preventing the accidental reverse movement of the crank after the blind is locked in its closed position.

I do not, however, limit myself to this particular form of stop, as any equivalent device for preventing reverse motion of the crank might be used.

I claim—

1. In a blind, the system of levers to support the blind, one of such levers being fixed at one end and at the other connected to the blind by a movable joint, combined with the crank adapted to engage and move the levers and blind, substantially as described.

2. The combination of the hanging lever *a*, a slat-operating lever, a pin, and a slotted lever for connecting them and a crank to operate them, the said crank being adapted to engage the hanging lever and move the blind during a portion of its rotation and the slat-lever during a continuation thereof, to enable the movement of the blind and the operation of the slats to be independent of each other, all of which may be governed by a person from the interior of the house, substantially as described.

3. The crank and its attached link *e*, slotted as shown, and provided with a projection to engage the slat-operating lever, combined with the slat-operating lever to control the movement of the slats, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN PRESCOTT.

Witnesses:

N. E. C. WHITNEY,
JOS. P. LIVERMORE.