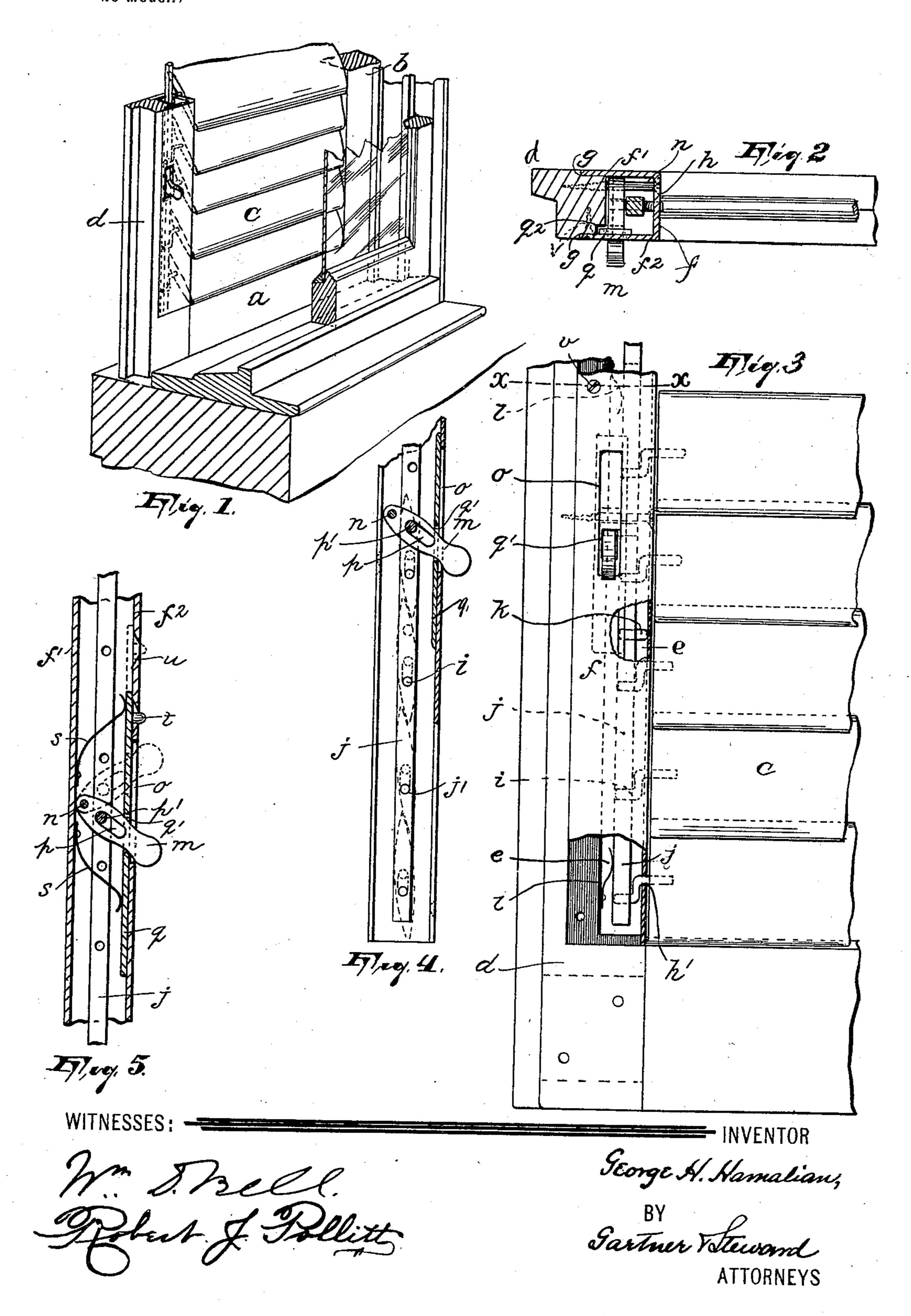
## G. H. HAMALIAN. WINDOW SHUTTER OR BLIND.

No Model.)

(Application filed Mar. 11, 1899.)



## United States Patent Office.

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## WINDOW SHUTTER OR BLIND.

SPECIFICATION forming part of Letters Patent No. 629,680, dated July 25, 1899.

Application filed March 11, 1899. Serial No. 708,632. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. HAMALIAN, a citizen of the United States, residing in Paterson, in the county of Passaic and State of 5 New Jersey, have invented certain new and useful Improvements in Window Shutters or Blinds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled to in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates particularly to blinds or shutters having movable slats; and the object of the invention is to provide a blind or shutter of this kind with means for adjusting its slats to various positions, it being a fur-20 ther object to so construct a blind or shutter provided with this adjusting means that simplicity, inexpensiveness, and facility in oper-

ation will be attained.

The invention consists in a blind or shut-25 ter provided with my improved slat-adjusting means and in the combination and arrangement of the various parts, substantially as will be hereinafter pointed out and finally embodied in the clauses of the claim.

My invention is fully illustrated in the ac-

companying drawings, wherein-

Figure 1 is a perspective view showing a blind or shutter mounted in position in a window-frame and provided with my improved 35 slat-adjusting means, certain parts being shown in section. Fig. 2 is a transverse sectional view taken on the line x x in Fig. 3. Fig. 3 is an enlarged view in elevation of a portion of the blind and my slat-adjusting 40 means, portions of the latter being broken away to clearly show certain details thereof. Fig. 4 is an inside view of the casing of said slat-adjusting means, showing certain of the parts of said means operatively arranged 45 therein; and Fig. 5 is a longitudinal sectional view of a modified form of my improved slatadjusting means detached from the blind.

In said drawings, a designates the frame of a shutter or blind, in one of whose vertical or

side rails b the slats c are pivotally supported 50 and in the other of whose side or vertical rails d my improved slat-adjusting means is mounted. Said side or vertical rail d is provided with a longitudinal recess e, that is formed in the side of said rail which is adjacent the 55 slats. Said recess e extends approximately as far as from the top to the bottom rail of the blind or shutter frame.

f designates a metallic three-walled casing which is substantially rectangular in cross- 60 section and which receives between its two side walls  $f' f^2$  the rail d, being so disposed thereon as to cover the recess e in said rail. In order that the outer surfaces of the side walls  $f' f^2$  of the casing may be flush with 65 the corresponding faces of the rail, said side walls are set into grooves g, formed in the latter. The third wall h of the casing f is provided with a series of orifices h', which provide bearings for crank-shaped pins i, one 70 of which projects from the adjacent end of each slat.

j is a reciprocating rod which is arranged in the recess e and which is provided with a series of holes j', each of which receives the 75 free end of one of the crank-shaped pins i. Said rod is provided with a pin k, which projects toward the wall h of the casing and abuts against the same, so as to prevent an undue binding between the rod and the pins 80 There may be one or more of these pins k,

as desired.

l designates elongated bent springs which are secured in the recess between the rear wall of the same and the rod, said springs 85 acting to firmly maintain the latter in its operative engagement with the crank-shaped pins i.

m is an operating-lever for the reciprocating rod j. Said lever is pivoted near one of 90 its ends on a pin or screw n, that projects through the wall h of the casing and into the rail d, thereby serving the double function of a securing means for said casing and a fulcrum for the lever. It will be obvious, of 95 course, that the lever may be fulcrumed upon any other pin or screw, if desired. Said lever projects through and is movable in a longitudinal opening o, formed in the inner side wall  $f^2$  of the casing, and it is provided with a longitudinal opening p, that receives a pin p', projecting from the reciprocating rod j.

of q denotes a slide having an orifice q' therein just large enough to admit the lever m, said slide being adapted as a closure for the longitudinal opening o in the wall  $f^2$  of the casing and being maintained in its operative position by virtue of the fact that it is set into an elongated recess  $q^2$ , formed in the rail d and communicating with the larger recess e therein.

In the modified form of my invention I have provided means whereby the reciprocating rod, and consequently all the movable parts connected therewith, may be automatically locked in such a way that the slats can only be operated from the inside of the blind.

The device in this instance is substantially the same as that hereinbefore described, with the exception that instead of providing a recess in the rail wherein the slide q moves and whereby it is maintained in its operative po-

whereby it is maintained in its operative position—that is to say, against the inner surface of the wall  $f^2$  of the casing—elongated bent springs s are secured in said casing to its side wall f' and bear at their free ends against the slide, said slide being provided with a knob or lug t, that is adapted to engage either one of two or more openings u. These openings u taper toward the outer sur-

face of the wall  $f^2$  of the casing, and the free end of the lug or knob is rounded.

y is a screw which penetrates one of the

side walls of the casing and projects into the rail d, so as to secure said casing in place. I have only shown one of these screws, but several may be used for this purpose.

It will be apparent that when it is desired to adjust the slats at any desired angle it will only be necessary to move the lever m up or down about its fulcrum. If the device is provided with the locking means comprised in the modified form of invinvention it is

only necessary to first press inwardly the knob or lug t, so as to release the slide and permit the actuation of the lever. The openings u are tapered outwardly, and the lug or

knob t is rounded at its free end, of course, 50 so as to facilitate the disengagement.

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

1. In a blind or shutter having pivoted 55 slats, a casing secured to one of the vertical rails of said blind, a reciprocating rod arranged in said casing and having an eccentric connection with each slat, a suitably-ful-crumed actuating-lever for said rod, said cas-60 ing having an opening for the lever, and a slide disposed over and closing said opening and penetrated by and loosely connected to said lever, substantially as described.

2. In a blind having pivoted slats, a casing 65 secured to one of the vertical rails of said blind, a reciprocating rod arranged in said casing and having an eccentric connection with each slat, a suitably-fulcrumed actuating-lever for said rod, said casing having an 70 opening for the lever, a slide inclosed in said casing, covering the opening and penetrated by and loosely connected to said lever, and means for maintaining said slide in contact with the casing, substantially as described. 75

3. In a blind having pivoted slats and provided with an elongated recess formed in the inside of one of its vertical rails, a casing secured over said recess and to the rail, a reciprocating rod arranged in said casing, 80 crank-shaped pins projecting from each of said slats and connected to said rod, a screw or pin penetrating the casing and projecting into the rail, an actuating-lever fulcrumed on said screw or pin and having a pin-and- 85 slot connection with said rod, said casing having an opening for the lever, a slide inclosed in said casing, covering the opening and connected to said lever, and means for maintaining said slide in contact with the 90 casing, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of March, 1899.

GEORGE H. HAMALIAN. Witnesses:

JOHN W. STEWARD, ALFRED GARTNER.