

(No Model.)

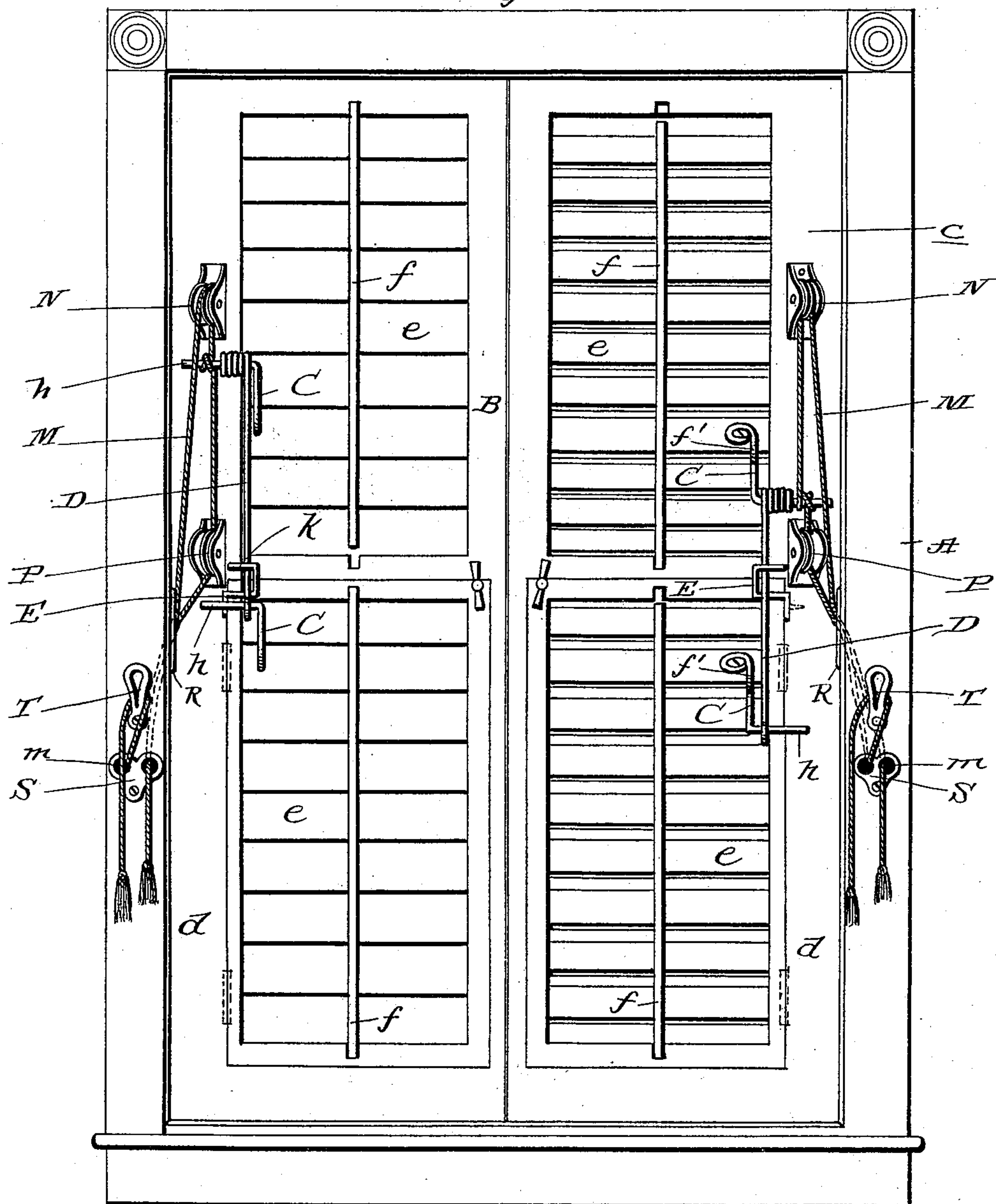
2 Sheets—Sheet 1.

L. JOBIN.  
BLIND STOP.

No. 518,368.

Patented Apr. 17, 1894.

*Fig. 1.*



Witnesses:

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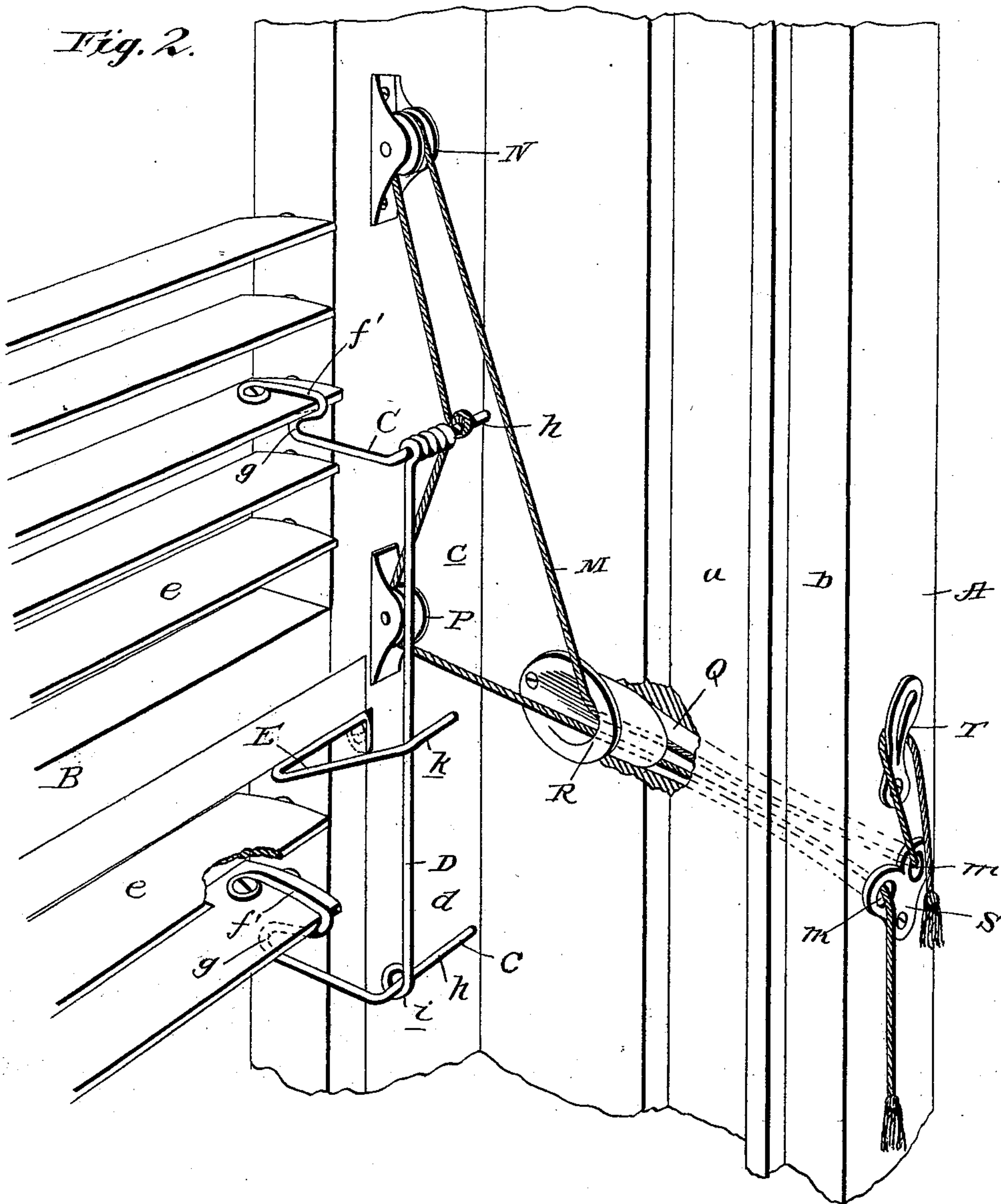
(No Model.)

2 Sheets—Sheet 2.

L. JOBIN.  
BLIND STOP.

No. 518,368.

Patented Apr. 17, 1894.



Witnesses:

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# UNITED STATES PATENT OFFICE.

LOUIS JOBIN, OF QUEBEC, CANADA.

## BLIND-STOP.

SPECIFICATION forming part of Letters Patent No. 518,368, dated April 17, 1894.

Application filed January 25, 1894. Serial No. 498,036. (No model.) Patented in Canada September 11, 1893, No. 44,234.

### *To all whom it may concern:*

Be it known that I, LOUIS JOBIN, a subject of the Queen of Great Britain, residing at Quebec, in the county of Quebec and Province of Quebec, Canada, have invented certain new and useful Improvements in Blind-Stops, (for which I have obtained Letters Patent in Canada, dated September 11, 1893, No. 44,234;) and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in apparatus for opening and closing the pivoted slats of window-blinds or shutters; and it has for its general object to provide such an apparatus of a cheap, simple, and efficient construction, and one through the medium of which the slats of outside shutters or blinds may be conveniently opened, closed and locked in various positions by a person within a room, without the objectionable necessity of raising the window sash.

Another object of the invention is to provide an apparatus for operating the slats of a blind or shutter, which will admit of a section of the shutter being thrown open when desirable.

Other objects and advantages of the invention will be fully understood from the following description and claims when taken in connection with the accompanying drawings, in which—

Figure 1, is a front elevation of a window casing and shutters equipped with my improvements, and Fig. 2, is a detail perspective view of the same on an enlarged scale.

Referring by letter to the said drawings: A, indicates a window casing of the ordinary construction, which is provided with ways *a*, *b*, for the sliding sash (not illustrated); and B, indicates a pair of shutters. These shutters or blinds B, by preference, respectively comprise the upper section *c*, which is fixed with respect to the casing A, and the lower section *d*, which is hinged and is adapted to be swung open; and the said sections *c*, and *d*, are provided with a requisite number of pivoted slats *e*, which are connected by rods *f*, as shown so as to move in concert. Connected to one of the slats *e*, of each shutter section and extending inwardly therefrom as

better shown in Fig. 2, of the drawings, are arms C, which are designed to serve as levers to enable the slats to be more easily operated as will be presently described. These arms C, are, by preference, respectively formed from a single piece of stout wire *f'*, which is connected at one end to the upper side of a slat adjacent to the outer edge thereof and is bent so as to form the loop *g*, beneath the slat and is also bent so as to form the lateral angular branch *h*. The said loops *g*, of the arms C, serve to materially strengthen the connection of the arms to the slats, since they bear against the slats when the arms are pulled upwardly and thereby take the strain off the connecting screw or device and reduce the liability of the slats being split.

The arms C, of the upper and lower sections of each shutter are connected by links D, which are designed to transmit motion from the upper arms to the lower arms so as to cause all of the slats of the shutters or blinds to move in concert. These links D, are fixedly connected to the arms C, of the upper fixed sections of the shutters, preferably by coiling the wire of which they are composed, several times around the branches *h*, of said arms, and they are provided at their lower ends with eyes *i*, to loosely receive the branches *h*, of the lower arms C, whereby it will be seen that while the links D, will serve to transmit motion to the lower arms C, and the slats of the lower sections *d*, they will not prevent or interfere with the opening of the lower sections *d*, since the branches *h*, of the arms C, of said lower sections will pull out of the eyes *i*, when the sections are swung outwardly upon their hinges.

Pivotaly connected to the fixed frame of the shutters or blinds B, as better shown in Fig. 2, are swinging arms E, which are designed to be adjusted preparatory to opening the lower sections *d*, so as to hold the links D, in such a position that the branches *h*, of the lower arms C, will re-enter the eyes *i*, when the sections *d*, are again closed. These arms C, are preferably formed from wire, and they are bent as shown so as to form the lateral angular branches *h*, which are designed to bear against the links D, and hold them in the desired adjusted position, for the purpose mentioned.

M, indicates the cords, through the medium



of which the arms C, are moved and the slats of the shutters adjusted. Only one cord M, is preferably employed in conjunction with each shutter B, and they are looped around  
5 or tied to the branches  $h$ , of the upper arms C, at an intermediate point of their length and their branches are passed around suitable sheaves or pulleys N, P, arranged above and below the arms C, and are then passed  
10 through suitable bores or passages Q, formed in the side stiles of the frame A, so as to be within convenient reach of a person in a room.

In the outer ends of the bores or passages Q, are arranged thimbles or bushings R, of  
15 metal or other suitable material, and at the inner ends of the bores or passages are arranged plates S, which are provided with a pair of apertures  $m$ , as shown.

The bushings or thimbles R, have their  
20 outer ends flared as shown, and they are designed to prevent unnecessary frictional wear of the cords, while the plate S, is designed to guide the cords and is also designed to enable a person to readily tell which cord to pull to  
25 open or close the slats.

T, indicates cleats which are preferably made of spring metal and are arranged above the plates S, as shown. These cleats T, are designed and adapted to securely hold the  
30 cords M, when they are placed in engagement therewith so as to securely lock the slats in their adjusted position.

From the foregoing description taken in connection with the drawings, it will be seen  
35 that my improved apparatus is very simple, light, and efficient and that it may be readily applied to shutters at present in use; and it will also be seen that through the medium of the said apparatus a person within a room  
40 may quickly and conveniently adjust and lock the slats of outside shutters without the necessity of raising the window sash.

I have specifically described the construction and relative arrangement of the several  
45 elements of my improved apparatus in order to impart a full and clear understanding of the same, but I do not desire to be understood as confining myself to such exact construction and arrangement as such changes  
50 or modifications may be made in practice as fairly fall within the scope of my invention.

Having described my invention, what I claim is—

1. In an apparatus for adjusting the slats  
55 of outside shutters or blinds, the combination of a window casing having a way to receive a sash and also having a bore or passage as Q, a shutter or blind embodying a series of pivoted slats, connected together so as to  
60 move in concert, an arm connected to one of the slats, guides as N, P, and a cord connected to the arm and taking around the guides N, P, and extending through the bore or passage Q, whereby the slats may be opened and closed  
65 by a person within a room without raising the window, substantially as specified.

2. In an apparatus for adjusting the slats of shutters or blinds, the combination of a shutter or blind embodying two series of pivoted slats, and bars connecting the several  
70 slats of each series, an arm connected to a slat of the upper series, a similar arm connected to a slat of the lower series, a link connecting the said arms, pulleys or sheaves as N, P, and a cord connected to the upper  
75 arm and taking around the sheaves or pulleys, substantially as and for the purpose set forth.

3. In an apparatus for adjusting the slats of blinds or shutters, the combination of a  
80 shutter embodying a fixed section provided with a series of pivoted slats, and a swinging section also provided with a series of pivoted slats, an arm connected to and extending inwardly from one of the slats of the fixed section  
85 and having a lateral branch, an arm connected to and extending inwardly from one of the slats of the swinging section and having a lateral branch, a link connected to the lateral branch of the arm of the upper section  
90 and having an eye to loosely receive the branch of the lower section, and a suitable means for moving the arms so as to rock the slats, substantially as specified.

4. In an apparatus for adjusting the slats  
95 of blinds or shutters, the combination of a shutter embodying a fixed section provided with a series of pivoted slats, and a swinging section also provided with a series of pivoted slats, an arm connected to and extending inwardly from one of the slats of the fixed section  
100 and having a lateral branch, an arm connected to and extending inwardly from one of the slats of the swinging section and having a lateral branch, a link connected to the  
105 lateral branch of the arm of the upper section and having an eye to loosely receive the branch of the lower section, and the pivoted arm E, having the lateral branch adapted to engage the link, substantially as and for the  
110 purpose set forth.

5. In an apparatus for adjusting the slats of outside shutters or blinds the combination of a window casing having a way to receive a sash, and also having a bore or passage as  
115 Q, a thimble or bushing at the outer end of the bore or passage and a plate S, at the inner end of the bore or passage provided with a pair of apertures, a shutter or blind embodying a series of movable slats, pulleys, or  
120 sheaves N, P, and a cord connected with and adapted to adjust the slats of the blind or shutter; the said cord being passed over the sheaves or pulleys and through the bore or passage of the casing and the apertures in  
125 the plate S, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS JOBIN.

Witnesses:

CHS. MARCOTTE,  
ERNEST MERCIER.