

(No Model.)

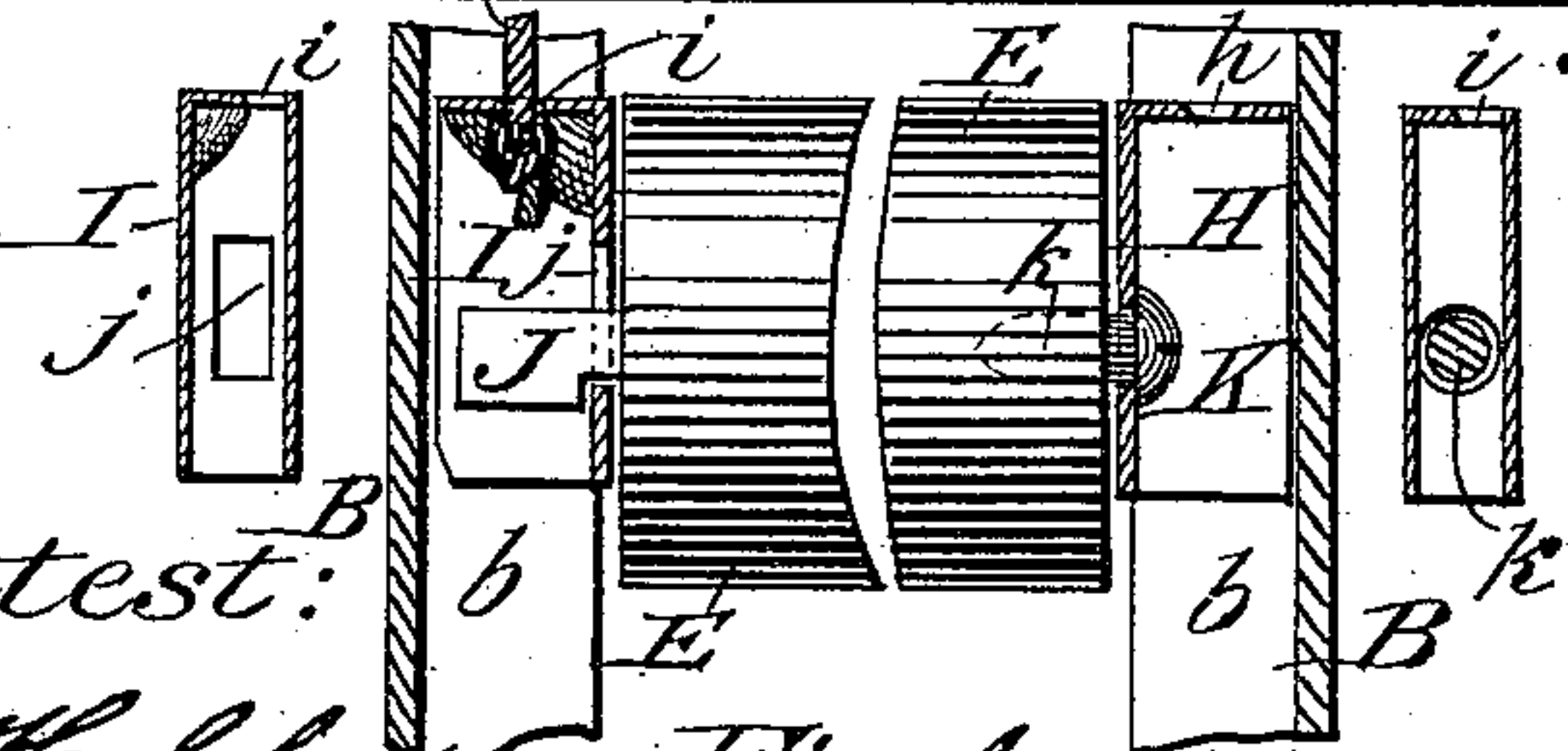
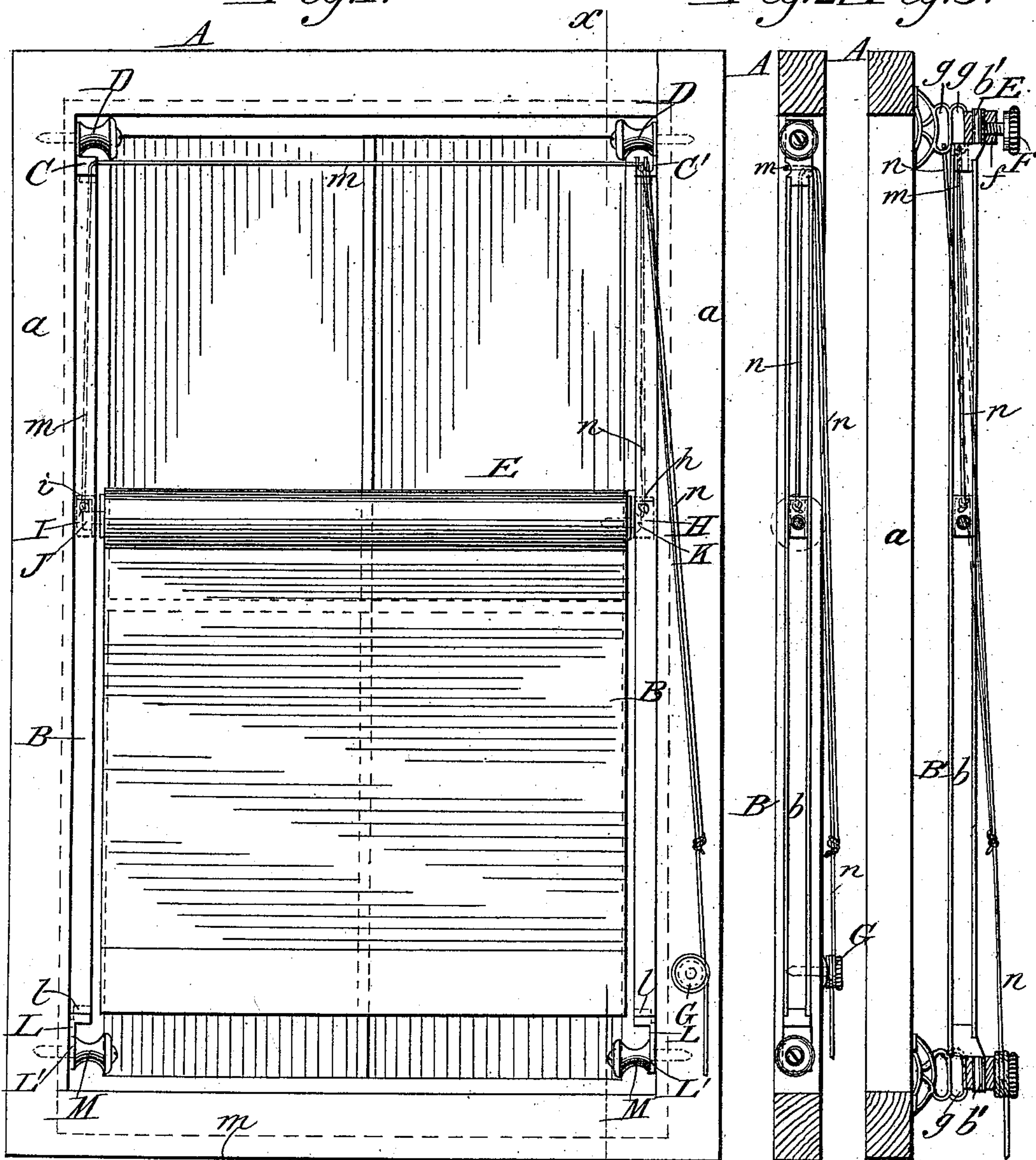
A. C. SPICER.  
WINDOW SHADE HOLDER.

No. 441,595.

Patented Nov. 25, 1890.

Fig. 1.

Fig. 2. Fig. 3.



Attest:

*J. H. Schott*  
*Fred E. Parker*

Fig. 4.

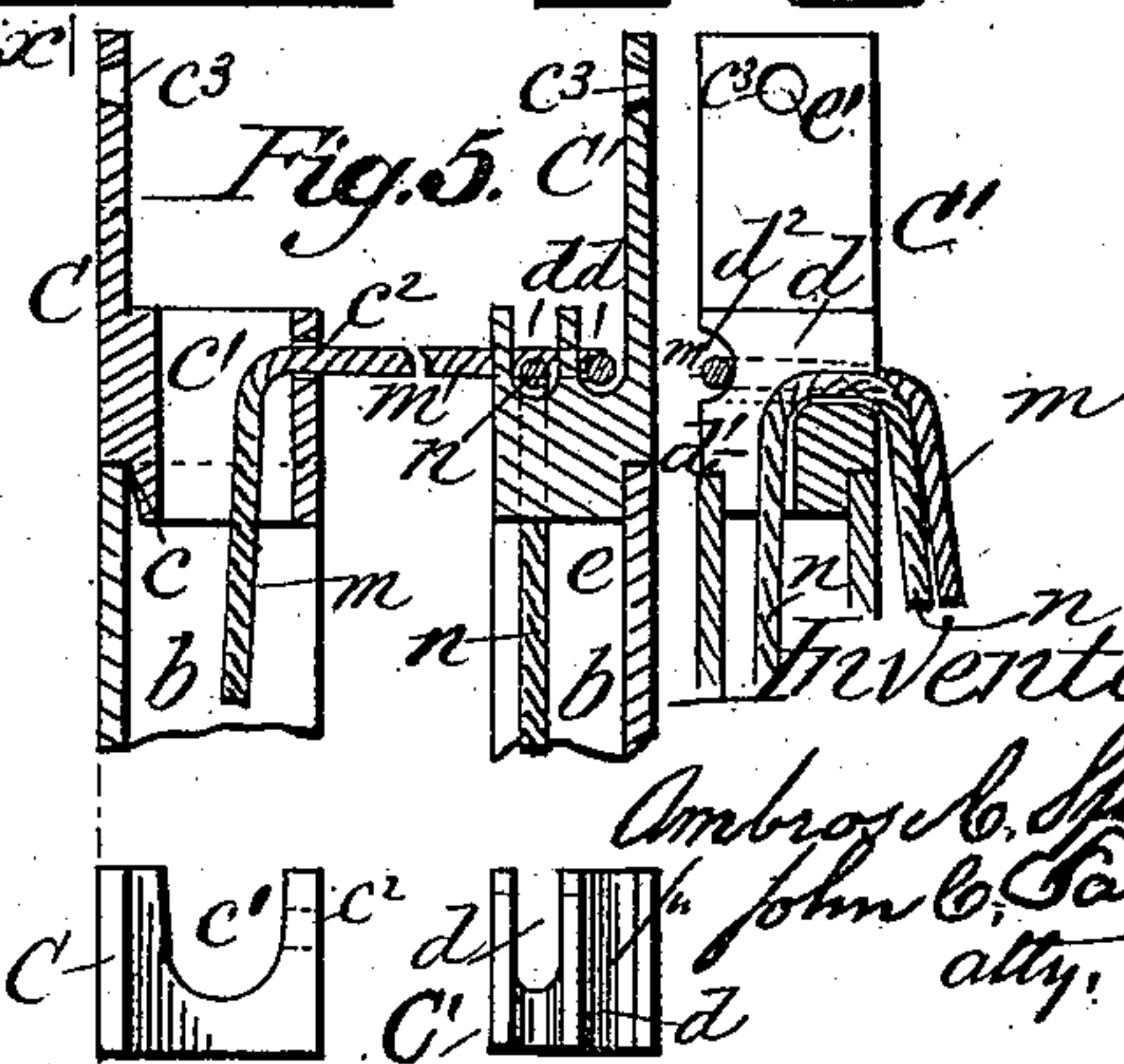


Fig. 5.

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# UNITED STATES PATENT OFFICE.

AMBROSE C. SPICER, OF BATTLE CREEK, MICHIGAN.

## WINDOW-SHADE HOLDER.

SPECIFICATION forming part of Letters Patent No. 441,595, dated November 25, 1890.

Application filed June 5, 1890. Serial No. 354,365. (No model.)

*To all whom it may concern:*

Be it known that I, AMBROSE C. SPICER, a citizen of the United States, residing at Battle Creek, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Window-Shade Holders; and I do hereby 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.

This invention relates to an improvement in devices for adjusting a curtain or shade roller or similar curtain-support, so that it may occupy any desired height with relation to the window with which it is used, the object of the invention being to provide efficient and useful means for arranging a curtain-roller at any desired height without the sacrifice of any of the advantages belonging to the curtain-roller ordinarily employed, which occupies a fixed and non-removable position at the top of the window; and the invention therefore consists, essentially, in the construction, arrangement, and combination of the several parts, substantially as will be hereinafter described, and then pointed out in the claims.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of a window-frame provided with my improved device for adjusting the curtain-roller. Fig. 2 is a vertical cross-section on the line  $x x$  of Fig. 1. Fig. 3 is a similar cross-section showing the window-frame provided with supporting-brackets, which hold the grooved guide-rails, instead of having these rails foxed to the inner faces of the jamb, as in Figs. 1 and 2. Figs. 4 and 5 represent in enlarged sectional detail the construction of the several parts of the invention.

Like letters of reference designate corresponding parts throughout the different figures of the drawings.

The castings at the lower ends of the guide-rails are used only for the purpose of fastening the rails in position, but the castings at the upper ends of the guide-rails serve the double purpose of securing said guide-rails in place and providing supporting devices for the draw-cords, which are operated to lift and lower the curtain-roller.

A denotes a window-frame of any desired shape, size, and kind, my invention being equally applicable to window-frames of all kinds. Hence the frame A is taken by way of illustration simply. It has the uprights or jambs  $a a$ .

E denotes a curtain or shade roller, which may be a spring-roller or any other kind, as may be preferred.

B B denote vertical guide-rails, made of wood, metal, or any other substance, and having the longitudinal grooves  $b$  extending from end to end thereof. These grooved guide-rails are, in that form of the invention shown in Figs. 1 and 2, firmly secured to the inner opposing faces of the jambs  $a a$ , closely adjacent to the window-sash. At the upper and also at the lower end of each guide-rail is secured a casting, which assists in keeping the guide-rail in position as well as performing other functions, which will be hereinafter described. Said castings are secured to the jambs and have projecting parts that enter the ends of the grooves in the guide-rails. Said guide-rails are usually attached to the jambs by means of screws passing through the bottom of the grooves and entering the jambs; but these castings help to keep the rails in position, besides presenting an ornamental appearance.

L L denote the castings at the lower end of each of the guide-rails, which castings have projections  $l l$  of the proper size and shape to fit within the lower ends of the grooves in each rail. They also have shanks or plates  $L'$  integral therewith, which are perforated and through which pass screws  $M M$ , by means of which the said castings  $L L$  are securely held in place.

C denotes the casting located at the upper end of one of the guide-rails, preferably that on the left side of the window, while  $C'$  is the casting located at the upper end of the other guide, preferably that on the right-hand side of the window. Said castings  $C$  and  $C'$  are shown in enlarged detail in Fig. 5. They both have oppositely-projecting shanks, which are perforated at  $c^3$  for the passage of the screws  $D D$ , which enter the jambs and securely fasten the castings  $C$  and  $C'$  in place. The said screws  $D D$ , as well as the aforesaid screws  $M M$ , are preferably provided with or-



namental heads. The casting C has a downward projection *c*, which enters the upper end of the groove in the left-hand guide-rail B, while the casting C' has likewise a bottom  
 5 projection *c*, which enters the upper end of the groove in the right-hand guide-rail B. The casting C also has a vertical passage *c'* therein, the side wall of which is perforated at *c*<sup>2</sup>. Through this perforation *c*<sup>2</sup> and down-  
 10 ward through the passage *c'* into the groove *b* of the guide-rail B passes the draw-cord *m*, the function of which will be hereinafter explained. The casting C' has two parallel upward projections *d d*, between which are  
 15 grooves. It also has a vertical groove *d'* leading into one of the grooves made by the projections *d d*. Furthermore, the outer ends of these projections *d d* are concaved or rounded at *d*<sup>2</sup>. (See Fig. 5.) The grooves made by  
 20 the projections *d d* are adapted to receive the two draw-cords—to wit, the draw-cord *m* and the draw-cord *n*. Said draw-cord *n* passes through one of the said grooves and then downward through the passage *d'* into the  
 25 groove *b*, found in the right-hand vertical guide-rail B. Thus the cord *m* passes from the left hand of the window transversely across to the right hand through one of the grooves made by the projections *d d* in the casting C',  
 30 and thence downward, while the other cord *n*, running up from the right-hand end of the roller, passes through the other groove in the casting C', and thence back downward along-  
 35 side the cord *m*, said cords being connected together at a suitable point, so that one cord may be located at the right hand of the win-  
 40 dow to be grasped by the operator for the purpose of manipulating the curtain-roller, said cord being preferably attached to a projec-  
 45 tion or journal J, said journal having thereon a shoulder or rabbet or notch.

Within the groove *b* of the left-hand guide-rail B is a vertically-movable slide I, which is preferably hollow, and has a side slot *j*, which  
 50 receives the flat journal J of the roller. The upper end of this slide I is perforated to receive the end of the draw-cord *m*, which passes through this perforated end and is knotted on the under side, thus being firmly con-  
 55 nected to the slide I.

Within the groove of the guide-rail B, at the right-hand side of the window-frame, is a vertically-movable slide H, which has a side perforation *k* therein, through which passes  
 60 the roller-journal K. Said slide H has in its upper end a perforation *h*, through which enters the draw-cord *n*, said cord being knotted on the under side of the upper end of the slot so as to be thus firmly connected thereto.  
 65 The roller E may be a spring-roller, or not, as desired. It is unnecessary to explain further its detailed construction, as when it is to be

used for a spring-roller any of the ordinary spring devices may be employed with it. Furthermore, it may be proper to state that  
 70 the slides within each of the guide-rails may be constructed similarly, and I do not intend to be confined to the precise construction herein given.

In operating my improved device all that  
 75 the operator needs to do is to manipulate the draw-cord, and the result of this manipulation will be to lift or lower the roller E horizon-  
 80 tally and thus situate it at any desired height where it will be located with sufficient firm-  
 85 ness and strength to perform all its functions.

It is sometimes found desirable to locate the guide-rails at a little distance from the window-sash instead of securing them di-  
 85 rectly to the jamb. In cases where this is preferred I provide brackets, as shown in Fig. 3. E denotes one of these brackets. It has  
 90 a socket *f* bored with a central passage, which receives a round pin or upward projection *b'* on the upper end of the guide-rail B'. The  
 95 bracket, furthermore, has loops *g g*, and it is provided with the set-screw F, which passes through the side of the socket *f* and bears upon the pin *b'* within the central passage of  
 100 said socket. At the lower end of the guide-rail B' is a similar bracket to the bracket E, constructed in the same manner, and having  
 105 a socket which receives the pin *b'* on the lower end of the guide-rail B'. Thus it will be ob-  
 110 served that when the guide-rails are not connected to the jamb, but are removed a slight distance therefrom and supported by means  
 115 of projecting sockets, the castings located at the upper and lower ends of the guide-rails are dispensed with, and the said brackets perform  
 120 all the functions of the said castings. The draw-cords *m* and *n* will pass through the loops *g g* in the bracket, so as to operate in the same  
 125 manner that they operate in connection with the grooves and other parts of the castings C  
 130 and C'. It will be noted that in this case I employ grooved guides located on the inner opposing faces of the window-frame. In an-  
 135 other pending case of mine, Serial No. 354,364, I have shown other means for supporting the slides, consisting of vertical rods secured  
 140 alongside of the window-frame.

Having thus described my invention, what I claim as new, and desire to secure by Let-  
 120 ters Patent, is—

1. The combination of the vertical guide-rails, the castings at the lower ends of these guide-rails having projections that enter the  
 125 grooves of said guides and serving to fasten the said guide-rails in position, and the cast-  
 130 ings at the upper ends of said guide-rails, likewise having projections that enter the grooves of the guides, and provided also with  
 135 grooves and perforations through which pass the draw-cords, said upper castings thus serv-  
 140 ing to secure the guide-rails in place and sup-  
 145 ports for the draw-cords, all in combination with the curtain or shade roller having slides at each end thereof which operate in the



grooved guide-rails, substantially as described.

2. The combination of the roller and its slides, the grooved guides within which said slides operate, and the upper castings C and C', said casting C being at the upper end of one guide-rail and having the downward projection *c* and the passage *c'*, and the casting C' at the upper end of the other guide-rail, having the projections *d d'*, and the passage *d'*, together with the draw-cords *m* and *n*, one of which is attached to one slide and the other to the other slide, substantially as described.

3. In combination with the grooved guides,

the lower castings L L, having projections *l l*, that enter the grooves of the guides, and the upper castings C and C', having projections that enter the grooves of the guides, said casting C having a passage *c'*, and said casting C' having the projections *d d'*, all in combination with a shade or curtain roller having slides which operate within the guides.

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

AMBROSE C. SPICER.

Witnesses:

W. E. JOHNSON,

HALE JULIAN SPICER.