

(No Model.)

G. ROXER.
WINDOW.

No. 438,596.

Patented Oct. 14, 1890.

Fig. 1.

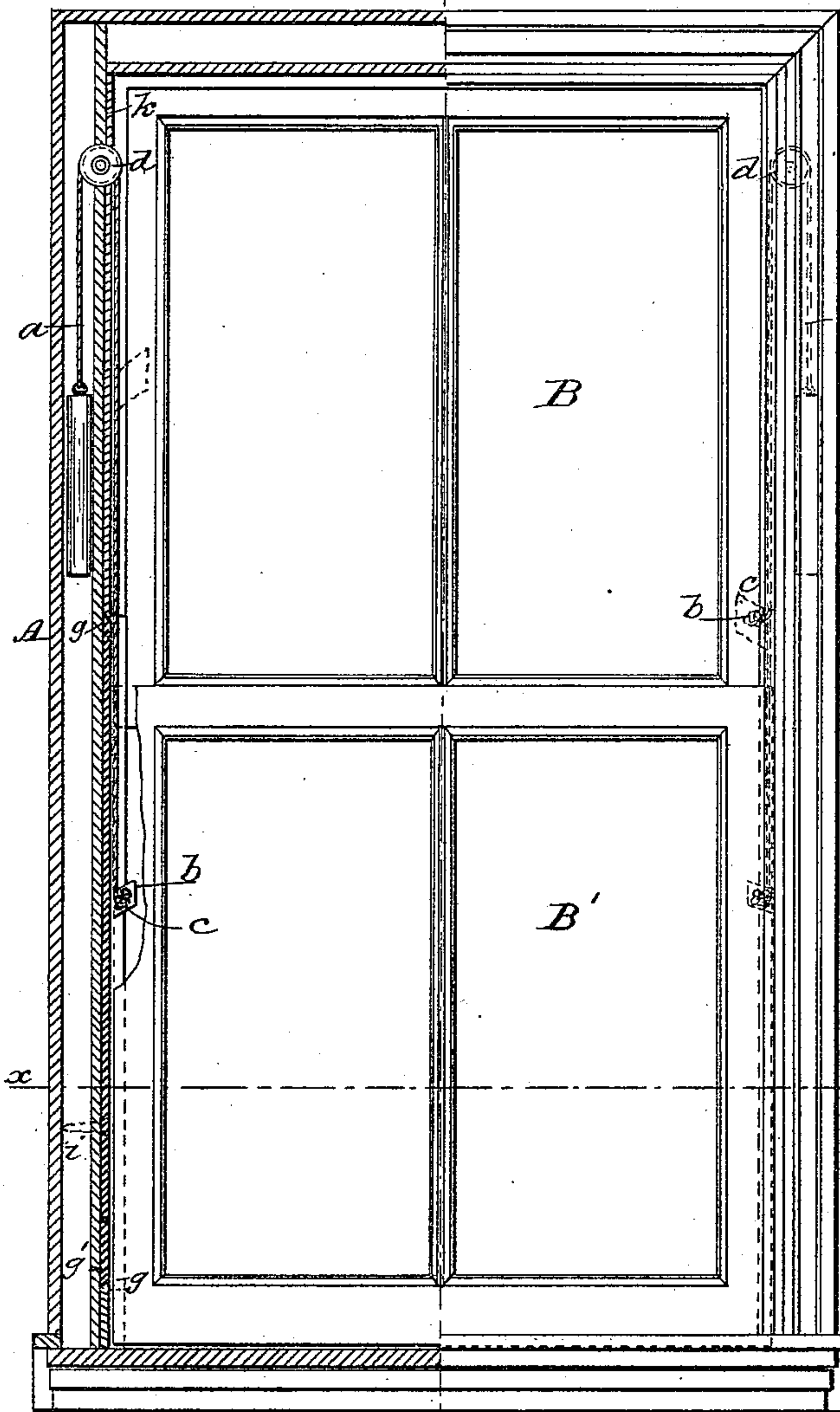


Fig. 3.

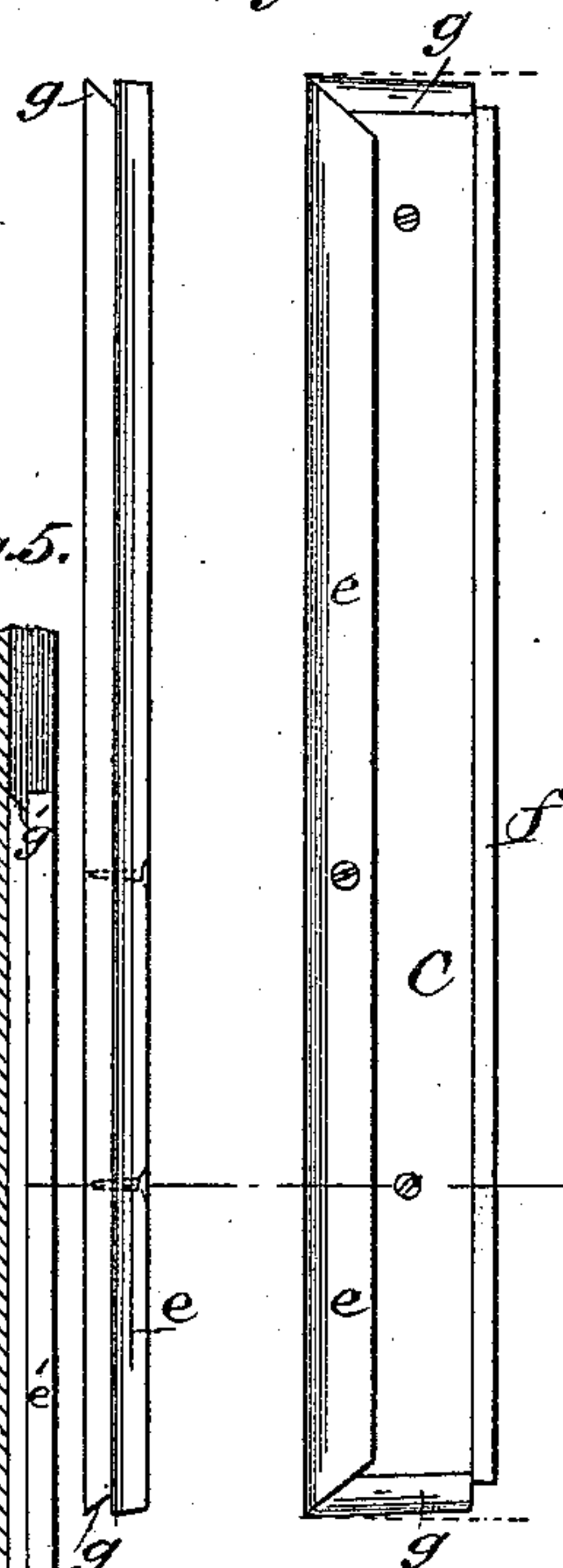


Fig.5.

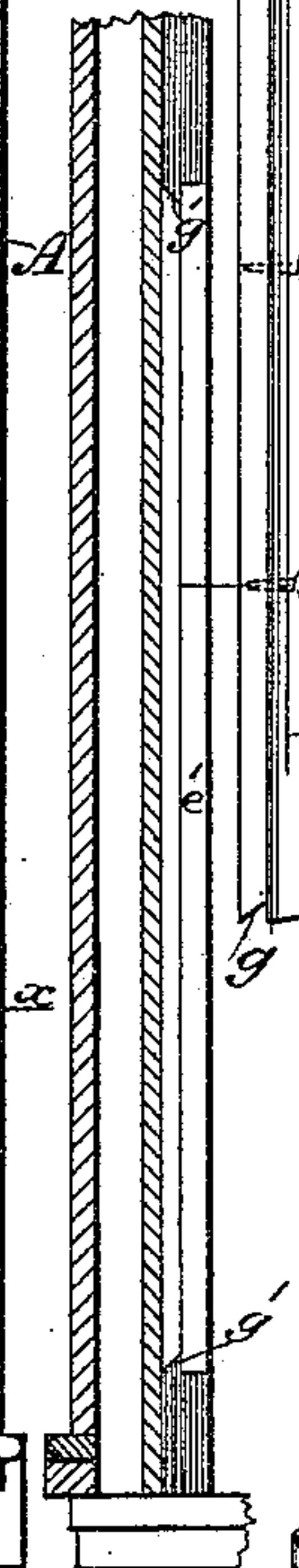


Fig. 4.

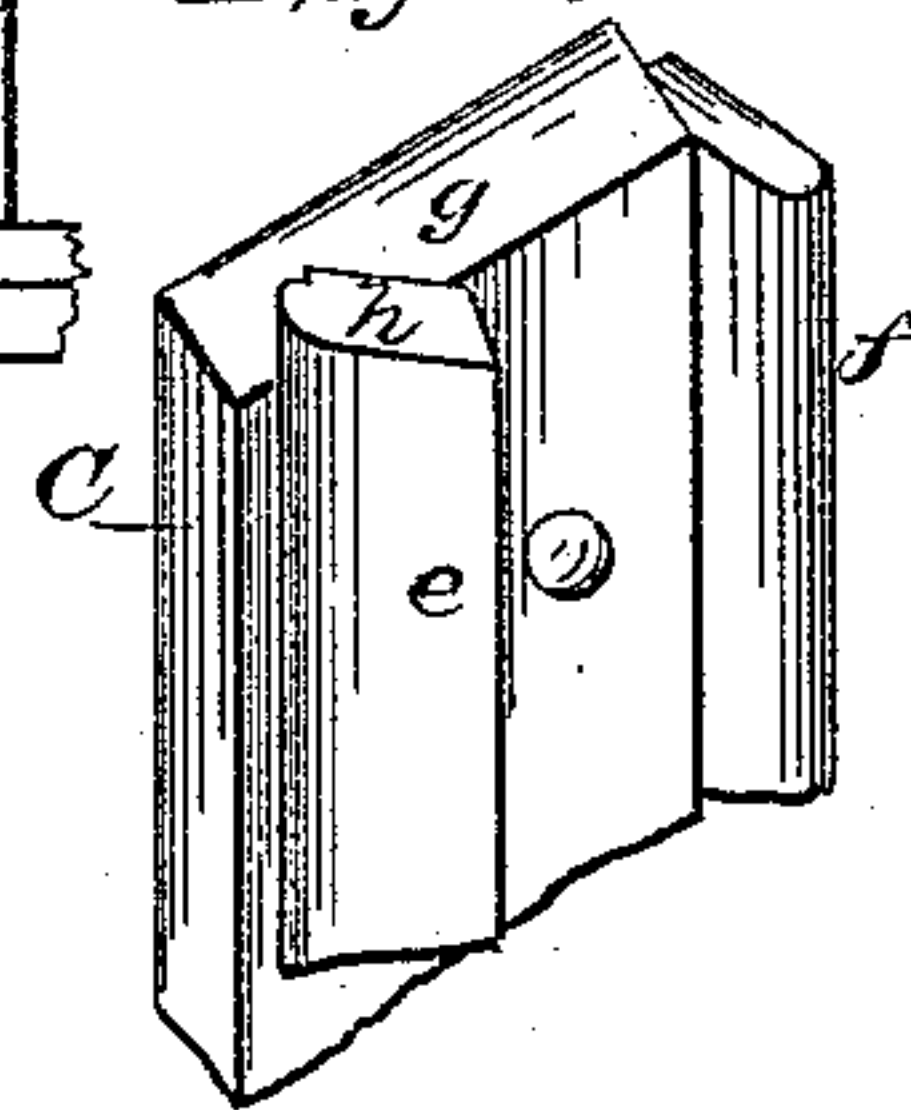
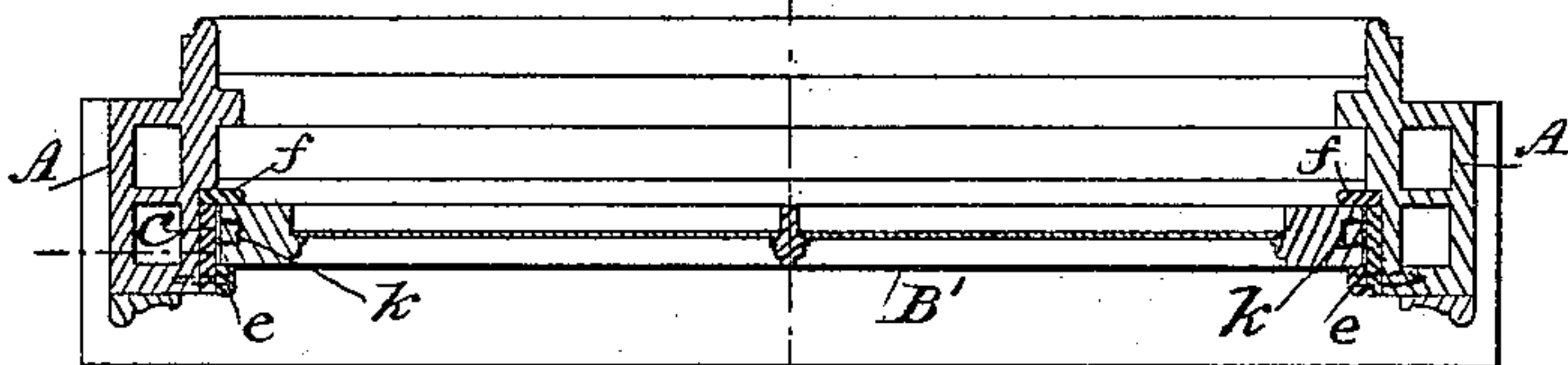


Fig. 2.



Witnesses:

H. F. Ashton
William L. Gelston.

Inventor:

Gustav Roxer,
By J. C. Brecht,
Attorney.

UNITED STATES PATENT OFFICE.

GUSTAV ROXER, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-HALF TO CHARLES G. ROGIER, OF SAME PLACE.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 438,596, dated October 14, 1890.

Application filed March 24, 1888. Serial No. 268,444. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV ROXER, of Washington, in the District of Columbia, have invented certain Improvements in Windows, of which the following is a specification.

The invention consists in the construction of certain details and combination of parts, as will be more fully described hereinafter, and specifically pointed out in the claims, reference being had to the accompanying drawings, and the letters of reference marked thereon.

Like letters indicate similar parts in the different figures of the drawings, in which—

Figure 1 represents a front view of a window, partly in section, with my improvements applied. Fig. 2 is a horizontal section of the same on the line *xx* of Fig. 1. Fig. 3 represents the removable part of the window-frame in elevation and section on an enlarged scale. Fig. 4 is a perspective view of said window-strip in detail on a larger scale. Fig. 5 is a detail view showing the removable strip in face or edge view in position more clearly.

In the drawings, A represents a window-frame of the ordinary construction, in which the upper and lower window-sashes B B' are arranged and connected to the weights and cords. The cords or chains *a* are provided with knots *b*, which are inserted in a hole *c*, bored in an inclined manner, as shown in Fig. 1, so as to be readily removable whenever desired for the purpose of removing the sashes. The cords and weights pass over the ordinary pulleys or sheaves *d* now in use, and when detached from the sashes remain in their places in the box-frame. The cords pass to the top of the sash-frame and support the weight, the knots being large enough to rest against the pulleys.

The sides of the window-frame are provided with a removable part C, to which the stop or window-strip *e* is secured on its side, while the central strip *f* is secured to the rear edge thereof. The part C is provided with oblique ends *g*, and the stop or bead *e* with inclined ends *h*, which fit snugly into correspondingly-cut recesses *e'* and *g'*, Fig. 5, in the sides of the window-frame, so as to pre-

vent any rattling or looseness of the window-sashes. The part C after being inserted in its place in the window-frame is secured by one or more screws *i*.

A groove *k* for the reception of the cord *a* is arranged in the edges of the sashes and communicates with the holes *c*.

If desired, one side only of the window-frame may be arranged with the removable strip C, but both sides may be fitted up in such manner, although usually not necessary. If one side only is fitted with the strip C, it is only necessary to first take out the screw or screws, then slightly raise the sash B', so as to bring it opposite the space formed for the reception of the removable strip C, and so that it can then be withdrawn from its place, and both can then be withdrawn from their places, and as the middle strip *f* is secured to said strip C the upper sash B can also be removed through the same space by lowering it until it comes opposite to it. The sashes are merely slightly canted or drawn toward one side, the knots *b* are removed from their holes *c*, and the cords and weights are left in place in the window-frame, while the sashes can be removed.

To replace the sashes, the knots are first inserted in their positions, the strip C is held against the edge of the sash and together they are inserted in place on the window-frame, when they can be raised or lowered in the usual manner, and the screw *i* is then applied and firmly secures the strip in its place.

If desired, the parts may be made of iron or other suitable metal or other material.

The screws *i* may be placed above or below or in the middle of the strip C, if desired.

I am aware of the patents to Myers, No. 85,394, and to Kanzler and Nega, No. 97,648, and disclaim the construction therein shown.

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

1. In a window-frame, the removable strip C, cut in opposite directions on its ends and having the middle bead *f* and the front bead or stop *e* secured thereto and formed with beveled ends *p*, said strip C and stop *e* fitting

into correspondingly-cut recesses in the window-frame, all constructed and arranged as specified.

2. The combination of a strip C, having
5 oblique ends *g*, the middle bead *f* and front
bead *e* secured to it, and the window-frame
having a recess cut correspondingly to receive
said strip, with the oblique holes *c* and groove
k in the sash for holding the cord and weight,
10 all constructed and arranged as set forth.

3. The combination of a strip C, having
oblique ends *g*, the middle bead *f*, and front

bead *e* with oblique ends *h*, with the window-
frame provided with a recess to receive said
strip, and the sash provided with the holes *c* 15
and groove *k*, all constructed and arranged
as shown and specified.

In testimony whereof I hereunto set my
hand in the presence of two attesting wit-
nesses.

GUSTAV ROXER.

Witnesses:

J. CHAS. DEVANTIER,
T. C. BRECHT.