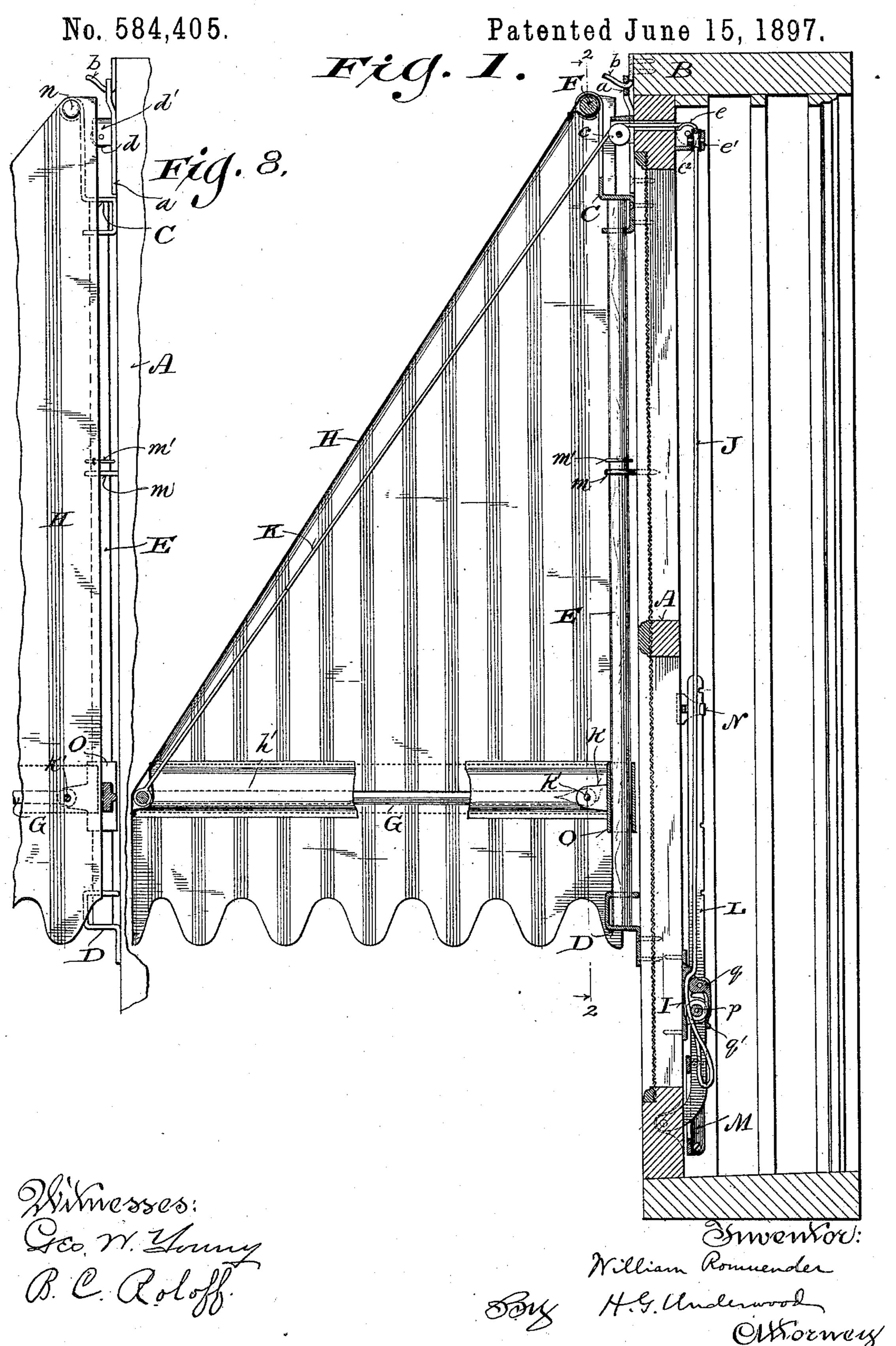
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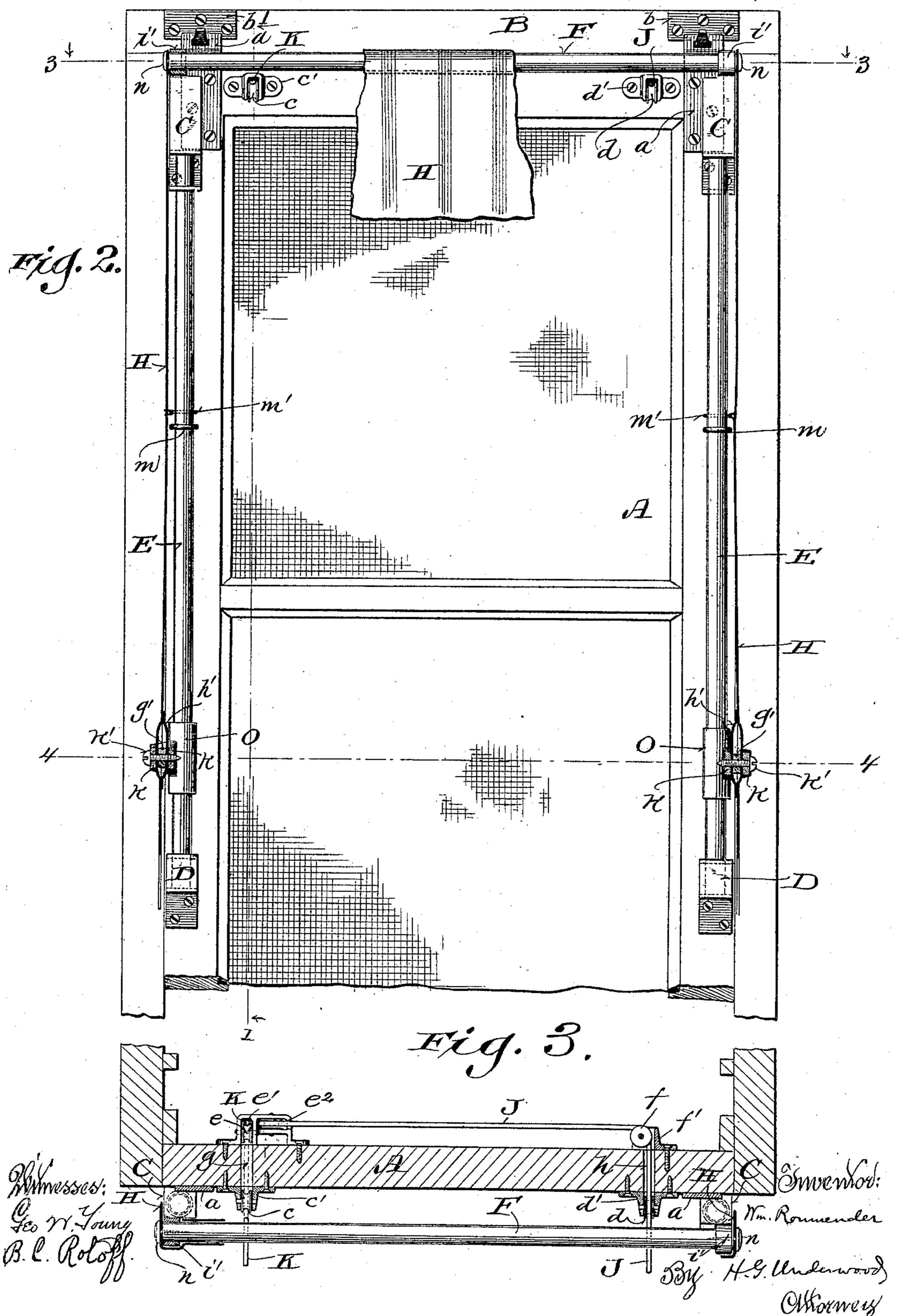


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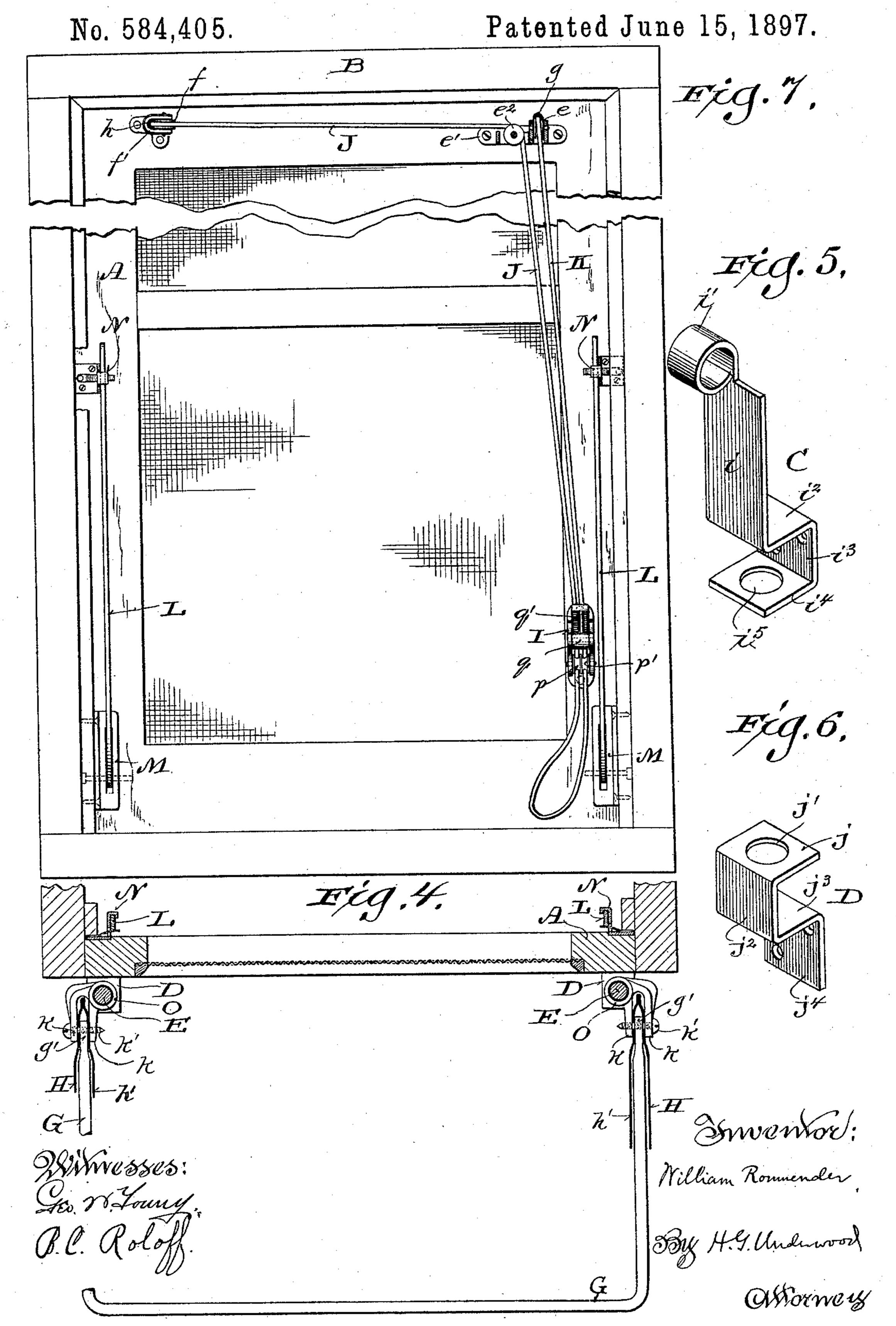
No. 584,405.

Patented June 15, 1897.



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#### COMBINED WINDOW SCREEN AND AWNING.



# United States Patent Office.

WILLIAM ROMUENDER, OF MILWAUKEE, WISCONSIN.

## COMBINED WINDOW-SCREEN AND AWNING.

SPECIFICATION forming part of Letters Patent No. 584,405, dated June 15, 1897.

Application filed March 15, 1897. Serial No. 627,619. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ROMUENDER, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in a Combined Window-Screen and Awning; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to combined windowscreens and awnings; and it consists in certain peculiarities of construction and combination of parts constituting improvements over the devices secured by Letters Patent No. 542,312, dated July 9, 1896, all as will be fully set forth hereinafter and subsequently claimed.

In the drawings, Figure 1 is a vertical sectional view of my improved device on the line 1 of Fig. 2. Fig. 2 is an outside elevation, partially broken away and partly in section, on the line 2 of Fig. 1. Figs. 3 and 4 are horizontal sectional views on the lines 3 3 and 4 4, respectively, of Fig. 2. Figs. 5 and 6 are detail perspective views of brackets forming parts of my present invention. Fig. 7 is an inside elevation. Fig. 8 is a detail side view showing the method of fastening the edges of the awning.

The object of my present invention is to improve and simplify the construction illustrated in the prior patent hereinbefore named, while retaining all its advantages.

Referring to the drawings, A represents a 35 window-screen adapted to fit snugly within a window-casing and being suspended from the top B of said casing by means of separable hinges a b, as shown. Vertically-arranged pulleys c d, in suitable blocks c' d', are se-40 cured to the upper part of the frame of the screen A, adjacent to the hinge parts a a. A double pulley-block e' is secured to the inner face of the screen-frame A, opposite the pulley-block c', and carries vertically-arranged 45 pulleys e e<sup>2</sup> at right angles to each other, while opposite to the pulley-block d' is a pulleyblock f', carrying a horizontally-arranged pulley f, the said screen-frame being transversely perforated to form cord-passages, one 50 of which, g, is in line with the pulleys c e and the other, h, in line with the pulleys df. The general arrangement of these parts is similar |

to that of the like-lettered parts in said prior patent, but the construction and attachment of the awning-frame is materially different in 55 my present invention from that set forth in said patent and will be next described.

C C represent a pair of brackets, the lefthand bracket of said pair being shown in detail in Fig. 5. Each of said brackets is made 60 of a single strip of metal, suitably bent, so as to have a straight portion i, with an upward extension at the outer edge thereof and onehalf the width bent to form a circular bearing i', while the lower part is bent first horizon- 65tally, as shown at  $i^2$ , thence vertically downward, as shown at  $i^3$ , and thence horizontally again, as shown at  $i^4$ , the bottom part  $i^4$  having a hole i5 therethrough for the reception of the upper end of the vertical guide-rod E on 70 each side, as hereinafter explained, and the part  $i^3$  of the bracket is provided with screwholes whereby the brackets are secured to the upper portion of the screen-frame.

D D represent the lower pair of brackets, 75 one being shown in detail in Fig. 6, and same are exactly like the lower half of the brackets C C inverted, showing in use a flat top plate j, with hole j' therethrough to receive the lower end of the guide-rod E, a downward 80 vertical part  $j^2$ , a lower horizontal part  $j^3$  for the said lower end of the guide-rod to rest on, and a lower vertical part  $j^4$ , provided with screw-holes for attachment. The rods E E are light round sticks of wood. F is a similar 85 stick of wood whose ends are received in the described bearings i' of the upper brackets C C and which forms the upper member or horizontal cross-piece of the awning-frame.

G is the lower member of the awning-frame, 90 made, preferably, of a metal rod bent to have two straight side pieces and a straight connecting front piece, as shown best in Fig. 4, each inner end g' of the member G being preferably flattened and received (after the 95 frame has been covered with the awning H) between the arms k k, projecting from the sleeve O, which latter slides on the rod E, a screw k' serving to secure the parts together. The screw-holes in the arms k k are tapped, nobut the holes in the ends g' of the member G are smooth-bored, so that the screws k' act as hinge-bolts to permit the said member G to fold upwardly when drawn by the cords J K,

as hereinafter described. The side pieces of the member G are held to place within pocketpieces h', stitched to the inner sides of the awning H. In the former device one objec-5 tion was that the rear side edges of the awning were not close enough to the screen-frame to keep out the sun, especially if there was any wind blowing. To obviate this objection is one object of my present invention. The 10 rods E pass through screw-eyes m, which screw into the side frames A of the screen, and just above these screw-eyes are rings m', loose on said rods, but stitched or otherwise fastened to the rear side edges of the awning, 15 and the upper extremities of said edges come flush with the parts i' i' of the upper brackets C C and are secured by the headed nails or pins n n, driven through the fabric of the awning into the ends of the wooden upper 20 member F of the awning-frame. The top of the awning is stretched over and then secured around the said upper member F and the front lower edge of the awning similarly secured around the front portion of the lower member 25 G of the awning-frame.

The awning-operating cords are similarly disposed as in said prior patent. Both cords start from a cord-holder I, (whose peculiar construction will presently be described,) se-30 cured to the inner face of one of the screenframe stiles. From this point one cord J extends up along the stile and around pulley  $e^2$ , thence along the upper rail of the screenframe and around pulley f, thence through 35 cord-passage h and around pulley d, and thence down beneath the awning to one end of the front part of the lower member G of the awning-frame, while the other cord K starts from a point just at one side of the starting-40 point of cord J and extends up along the inner surface of the stile parallel with the cord J and passes around pulley e, thence through cord-passage g and around pulley c and thence down beneath the awning to the other end of 45 the front part of the lower member G of the awning-frame. The means of locking the screen-frame to place within the window-casing are likewise substantially the same as in said prior patent, No. 542,312, and in the still 50 earlier patent, No. 532, 483, comprising notched spring-arms L, pivoted to the screen-frame and engaging with loops M on the windowcasing strips and hooks or catches N on the screen-frame, but these details of course have 55 nothing to do with the present invention.

The cord-holder I, hereinbefore referred to, consists of a back plate with screw-holes therethrough, whereby the device may be attached to the screen-frame, and side pieces, 60 between which is pivoted a double pulley p p', beneath the grooves of which the described cords J K extend, as shown in Figs. 1 and 7, and a cam-stop q is likewise pivotally secured between said side pieces so that the head 65 thereof may be crowded down against the cords to stop them, as shown in Fig. 1, or so that the lever q' of the cam-stop may be raised

to free said cords, as shown in Fig. 7, when an adjustment of the awning is desired.

The operation of my improved device will 70 be readily understood from the foregoing description of the construction taken in connection with the accompanying drawings. As the lower front member G of the awning-frame is of metal, the awning will be held by weight 75 and gravity in proper position when fully lowered, and a slight pull of the cord will serve first to fold and then to raise the awning to the desired point, and as the guiderods E are of wood there will be a freedom 80 from rattling and noise impossible where iron slides upon iron, and altogether my present device will be found simpler, cheaper, and more satisfactory than the construction shown in the prior patents hereinbefore referred to. 85

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

1. An awning-frame comprising a suitable supporting-frame, a pair of lower brackets re- 90 movably secured thereto, each bracket being formed of a strip of sheet metal bent to form an attaching-piece a central rod-supporting plate and an upper plate with a perforation therethrough, a pair of upper brackets also 95 removably secured to said frame, each of said upper brackets being of the same form as that of the lower brackets, but applied in an inverted position and having one extremity formed into a circular horizontal bearing, ver- 100 tical wooden guide-rods engaging with and secured in position by said upper and lower brackets, an upper horizontal wooden crossrod held in the described bearings of the upper brackets, a vertically-movable sleeve on 105 each vertical guide-rod, said sleeves having each a pair of arms projecting laterally therefrom, and parallel with each other, and said arms being provided with registering screwthreaded holes therethrough, a lower frame 110 member, consisting of a metal rod bent to present a straight front and rearward-projecting side pieces, the inner ends of said side pieces fitting between the arms on the sleeves and having smooth-bored holes therethrough, and 115 sharp-pointed screw-bolts passing through the screw-threaded holes in the said sleevearms and through the smooth-bored holes in the intermediate ends of the side pieces of the said lower member, forming a pivotal connec- 120 tion, substantially as set forth.

2. The combination with a suitable supporting-frame, of a pair of upper brackets, removably secured thereto, and having vertical bearings in their lower ends and horizontal bearings in their upper ends, a pair of lower brackets removably secured to said frame, and having vertical bearings in their upper ends, a pair of screw-eyes secured to said frame, one on each side, at a point intermediate between said upper and lower brackets, and in line with the vertical bearings therein, a pair of vertical guide-rods in engagement with said screw-eyes and vertical

bearings, a transverse wooden rod supported in the horizontal bearings of the said upper brackets, and forming the upper frame member, vertically-movable sleeves on the said 5 guide-rods, said sleeves having each a pair of arms projecting laterally therefrom and parallel with each other, and said arms being provided with registering screw-threaded holes therethrough, a lower frame member consist-10 ing of a metal rod bent to present a straight front and rearward-projecting side pieces, the inner ends of said side pieces fitting between the sleeve-arms, and having smooth-bored holes therethrough, an awning stretched over 15 and secured to the upper frame member and the front part of the lower frame member, pocket-pieces stitched to the inner side portions of the awning and inclosing the side pieces of the said lower frame member, sharp-

pointed pivotal screw-bolts passing through the screw-threaded holes in the sleeve-arms and through the smooth-bored holes in the fabric-covered ends of the lower frame member interposed between said sleeve-arms, rings vertically movable on the guide-rods 25 above the screw-eyes, and secured to the rear side edges of the awning, and headed nails or pins driven through the fabric of the awning into the ends of the wooden upper frame member, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

Witnesses:

H. G. UNDERWOOD, B. C. ROLOFF.