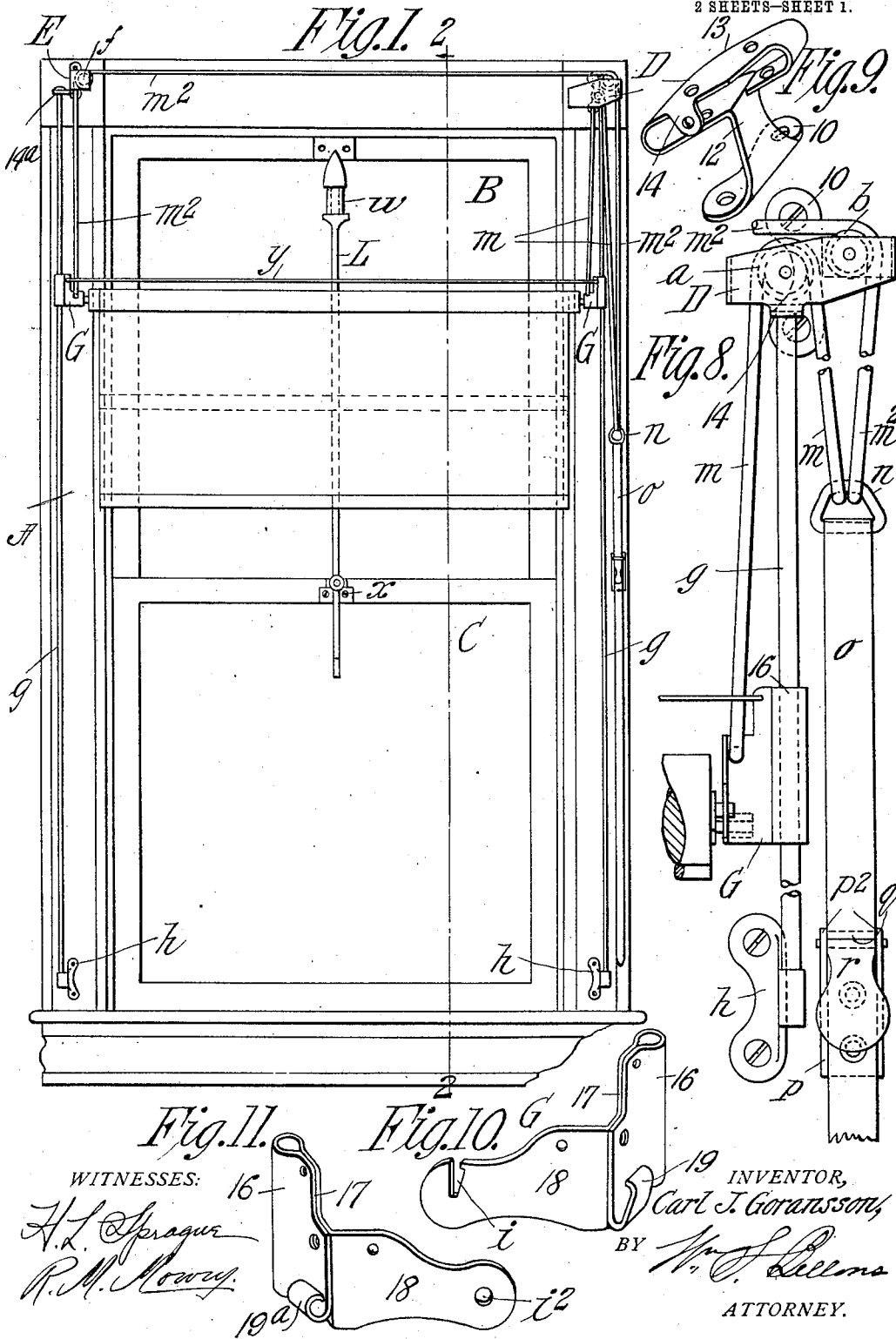


C. J. GORANSSON.
APPLIANCE FOR WINDOWS.
APPLICATION FILED JAN. 29, 1912.

1,047,043.

Patented Dec. 10, 1912.

2 SHEETS—SHEET 1.



WITNESSES:
H. L. Sprague
R. M. Noway

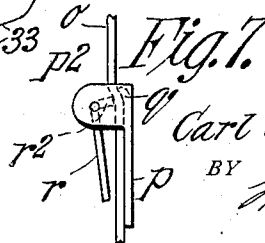
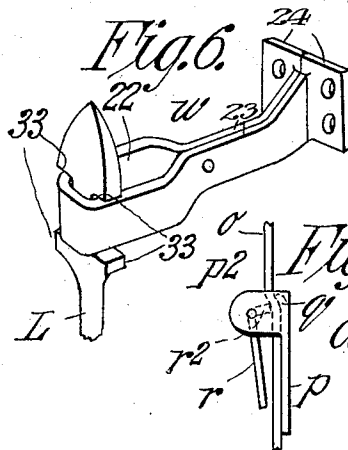
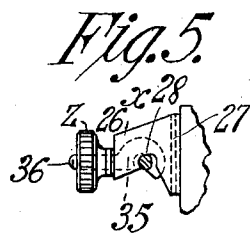
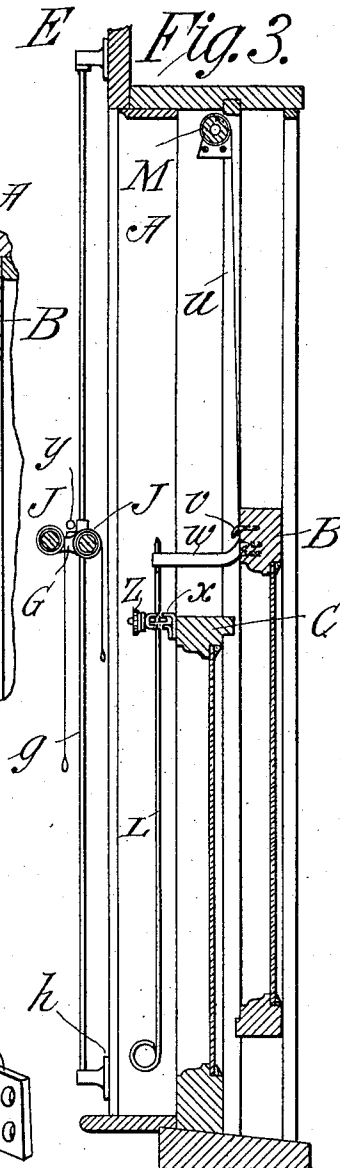
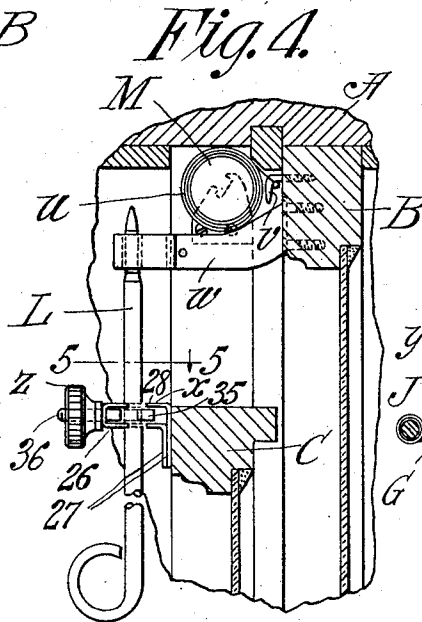
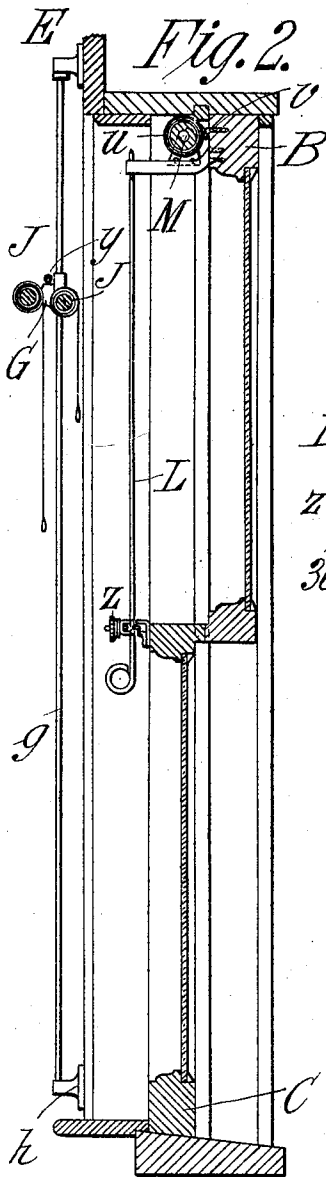
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2 SHEETS-SHEET 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

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APPLIANCE FOR WINDOWS.

1,047,043.

Specification of Letters Patent.

Patented Dec. 10, 1912.

Application filed January 29, 1912. Serial No. 673,975.

To all whom it may concern:

Be it known that I, CARL J. GORANSSON, a Swedish subject, and resident of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Appliances for Windows, of which the following is a full, clear, and exact description.

This invention relates to window fixtures or appliances and more especially to improved means whereby a curtain supporting roller or rollers may be bodily raised or lowered so as to be positioned either at the top of the window or at any place more or less below the top in order to permit light and air to enter either above or below the more or less drawn curtain; to improved means whereby, when the window is opened, the open portion will be automatically covered by a screen, and means for holding the two sashes in locked condition in any position, either closed or open, in which they may be placed, all conducing to comfort and sanitation in the apartment.

The object of the invention is to improve the devices as regards the combination and arrangement thereof for employment in conjunction with a window, and also as regards the particular construction of certain of the parts to the end of simplicity and cheapness.

The invention is described in conjunction with the accompanying drawings and is set forth in the claims.

In the drawings:—Figure 1 is a front elevation at the inner side of a window casing showing the improved appliances thereon. Fig. 2 is a vertical sectional view as seen on line 2—2, Fig. 1, the windows being shown closed. Fig. 3 is a view similar to Fig. 1, but showing the upper sash as lowered and also showing the double curtain in a lower position than that represented in Fig. 2. Fig. 4 is an enlarged vertical section for more clearly illustrating certain features and arrangements hereinafter referred to. Fig. 5 is a horizontal sectional view and partial plan as seen below line 5—5, Fig. 4. Fig. 6 is a perspective view of a bracket and the upper portion of the sash locking rod which has a supporting engagement with the bracket. Fig. 7 is an edge view of parts to be hereinafter referred to. Fig. 8 is a front view on a larger scale than Fig. 1 for more clearly showing some of the parts comprised in said first view. Fig. 9 is a per-

spective view of a bracket,—partially inverted,—which serves the double purpose of a support for paired cord guiding sheaves and a support for the upper end of a bracket guiding runner rod. Figs. 10 and 11 are perspective views showing the detailed constructions of the pair of brackets on which the pair of shades or curtain rollers are supported.

Similar characters of reference indicate corresponding parts in all of the views.

In the drawings, A represents a window casing having the upper and lower sashes B and C as usual.

D and E represent sheave supporting brackets at opposite sides of the window casing near the top of the latter. The bracket D which is shown as fixed on the upper right hand side of the window casing has a pair of guide sheaves *a* and *b* both understood as in the same frame, but one located slightly above the other, while the opposite bracket E has a single guide sheave *f* therein. The bracket D provided for the mounting of the sheaves *a* and *b*, as most clearly illustrated in Fig. 9, is made as a stamping from a single blank of thin metal and comprising the attachment foot piece 10, the forward extension member 12 continued in the angular and return bent portion to form the elongated frame 13 having perforations for the shafts or pintles of the sheaves; and this bracket forming blank of thin metal, furthermore, has the integral lug 14 in which the upper end of one of the vertical runner rods *g* is affixed. The other bracket E is similarly made of thin metal, the frame portion of which, however, is of less length than that of the bracket D, as only one guide sheave is required to be accommodated therein; but this bracket E like the one D has the integrally formed horizontally angular lug 14^a for the runner rod *g* at the corresponding side of the window casing. The lower ends of the runner rods are supported or steadied by the brackets *h h* screwed to the lower portion of the casing.

G G represent brackets which are vertically slidable on the runner rods *g g* and which are made with supports 19 and 19^a and *i*, and *i*², for the end journals of the pair of rollers J J employed for holding light and dark window shades or curtains. Each bracket G is made of a single blank of sheet metal bent at an intermediate portion

thereof to form the tubular guide 16 which has a sliding fit on the runner rod *g*,—the portions to one side of the tubular guide being superimposed as shown at 17 and secured together in any suitable manner, as by riveting or brazing, and one end portion 18 is angularly continued, and made with the recess or aperture *i* therein for the supporting engagement therein of one curtain roller journal while the other end portion of the blank is formed with a lug or tongue 19 or 19^a bent to form the other socket for one end journal of the second curtain rod, all as clearly represented in Fig. 10.

The form of the bracket to be employed at and for supporting the end of the pair of curtain rollers, the journals or endwise projecting shafts of which are flattened as usual, is that specifically shown in Fig. 10 wherein it is seen that the sockets *i* and 19 are of shape to permit easy engagement and detachment of the flattened curtain roller ends and yet to prevent rotative movement of such ends to permit of the usual action of the spring curtain rollers. The bracket shown in Fig. 11 for supporting the pair of rolls at the opposite side of the window is made in the same manner as the one shown in Fig. 10 with the exception that the aperture *i*² for one curtain end is made as a circular aperture while the socket 19^a is of a tube-inclosed formation. A cord *m* is connected with the slidable bracket which is at the same side of the casing as said double sheave carrying bracket; and this cord extends from its connection with the slidable bracket at such side, upwardly over one of the sheaves *a*, and then depends along the inner side of the window casing below the sheave. Another cord *m*² is connected with the slidable bracket *G*, at the opposite side of the window casing, it being thence guided over the single sheave *f* in the fixed bracket *E* and extended across the top of the window casing to guidance over and dependence below the second sheave *b* in the bracket *D*; and a member *o* preferably in the form of a flexible strap is applied in common to both of the cords *m* and *m*², the connection of this strap with the lower ends of the cord being as shown in Fig. 4, by means of the ring or connection piece *n*. When the strap *o* is drawn downwardly the double curtains will be bodily elevated by the roller supporting brackets *G* *G*, and when the strap is permitted to be elevated the curtain carrying brackets will gravitatively become lowered; and suitable means are to be provided for the confinement of the member in common to and having connection with both of the cords,—such means in the present instance consisting of a plate *p* having opposite ear lugs *p*² and a transverse rib *q* mounted in the ear lugs of which is a pivoted lever *r* having an inwardly pro-

jecting lip *r*² for holding an intermediate portion of the strap in a nipped engagement with said rib. The forward swinging of the lever member is effective to release the strap so that the curtain may be positioned as desired.

At one end of the window casing, here shown as the upper end, a spring roller *M*, shown in Figs. 2, 3 and 4, is mounted in suitable brackets or fixtures therefor, with which a screen *u* has a winding engagement. The free end of this screen is detachably connected with the adjacent horizontal rail of the window sash so that upon the opening of the latter the window space will be automatically covered by the screens and whereby upon the closing of the window the screen will be automatically rewound upon its roller *M*. The means of detachable connection of the free edges of the screen with the sash rail is indicated as consisting of hooks *v* provided at suitable intervals on the sash rail which engage through perforations therefor in the reinforced edge portion of the screen; and it may be here mentioned that the screen roller is made the same as the ordinary spring curtain roller with the pawl and ratchet devices commonly employed in such rollers being omitted as undesirable and unnecessary.

The upper horizontal rails of the upper and lower sashes have respectively horizontally extending brackets *w* and *x* affixed thereon, one being directly above the other, and both preferably in a vertical line about centrally of the window. The upper bracket *w* as most particularly shown in Fig. 6 is made of a single blank or stamping of thin metal intermediately bent to form an approximately oblong loop or eye 22 said blank having its extremities 23 brought to contact with each other and terminating in the oppositely outwardly extended attachment lugs 24, 24. The bracket *x* as shown in Figs. 4 and 5 is also made as a stamping intermediately bent to form a horizontal sidewise opening casing 26 while its superimposed extremities 27 extending vertically and at right angles to the portion 26 constitute a member for the attachment of the bracket on the sash rail. This bracket is made with a sidewise opening recess 28 for the introduction therein of the thrust rod *L*, the inner portion of such recess being of approximately circular form. The upper end portion of the thrust rod *L* is made with a comparatively wide and flat head having opposite side recesses whereby upper and lower pairs of shoulders 33, 33, are formed, so that by inserting the wide flat head through the oblong loop 22 of the upper bracket and then turning it a quarter way around, the upper and lower pairs of shoulders have engagements with the bracket *w* so that to all-intents and pur-

poses the rod L and bracket *w* are as a unit. The lower intermediate portion of the rod L is engaged by the hook shaped inner end 35 of a screw stud 36 which protrudes through an aperture therefor in the front of the bracket *x* and receives the screw engagement therewith of a knurled nut *z*, so that by turning the nut properly the rod L may be securely confined to hold the sashes against being moved, or to release the confinement so that through the thrust or draft movement of the rod one of the sashes may be moved as much or little relatively to the other as may be desired.

15 The aforementioned brackets G G may be united by a horizontal brass wire *y* as shown in Fig. 1 for preventing any spreading action or distortion of such brackets and the runner rod on which they are vertically 20 guided.

The equipments at a window such as hereinabove described, and shown, permit the window to be opened in any extent desired, securing in conjunction therewith a screening of the window; they provide means 25 whereby the curtains may be lowered whenever desired and in any extent necessary to permit the entrance of light or air through the window above the curtains, and all of 30 the parts having the forms and constructions set forth are susceptible of such cheap production as to make the entire equipments extremely inexpensive.

I claim:—

35 1. Curtain roller supporting brackets each made of thin metal intermediately bent to form a vertical guide tube having portions thereof transversely extended in contact with each other, one thereof having a lug 40 or tongue bent to form a roller supporting socket and the other extremity being right angularly extended and having means for receiving the support therein of a second curtain roller, in combination with vertical 45 runner rods with which the tube comprising brackets have sliding engagements,

sheave guided cords by which the brackets are suspended and operating and confining means for the cords.

2. The combination of one sash of a window having a bracket formed of a strip of sheet metal, intermediately bent to form an oblong loop having portions thereof beyond the loop adjoining and having the extremities thereof angularly turned to form lugs 55 for attachment on the sash, and the other sash having another bracket, a thrust rod having opposite recesses, forming upper and lower pairs of shoulders engaged as explained in the oblong opening of the first 60 bracket and having a guiding engagement through the second bracket, and means for the confinement of said rod in the second bracket.

3. The combination with a sash provided 65 with a forwardly extending bracket and a thrust rod having a fixed engagement with and extending vertically from said bracket, of the other sash of a window provided with a bracket formed of a sheet of thin 70 metal intermediately bent to form a horizontal sidewise opening casing and having its extremities superimposed and extending angularly to said hollow portion to constitute an attachment member and which mem- 75 ber is secured on the sash rail, said bracket having a hole vertically therethrough through which said thrust rod passes, and a screw stud, of a hook form at its inner end which is located within the hollow 80 bracket while the straight stud portion protrudes through an aperture therefor in the front of such bracket, and a thumb nut screwing on said stud and engaging against the front of the bracket. 85

Signed by me at Springfield, Mass., in presence of two subscribing witnesses.

CARL J. GORANSSON.

Witnesses:

E. S. BERG,
WM. S. BELLOWS.