

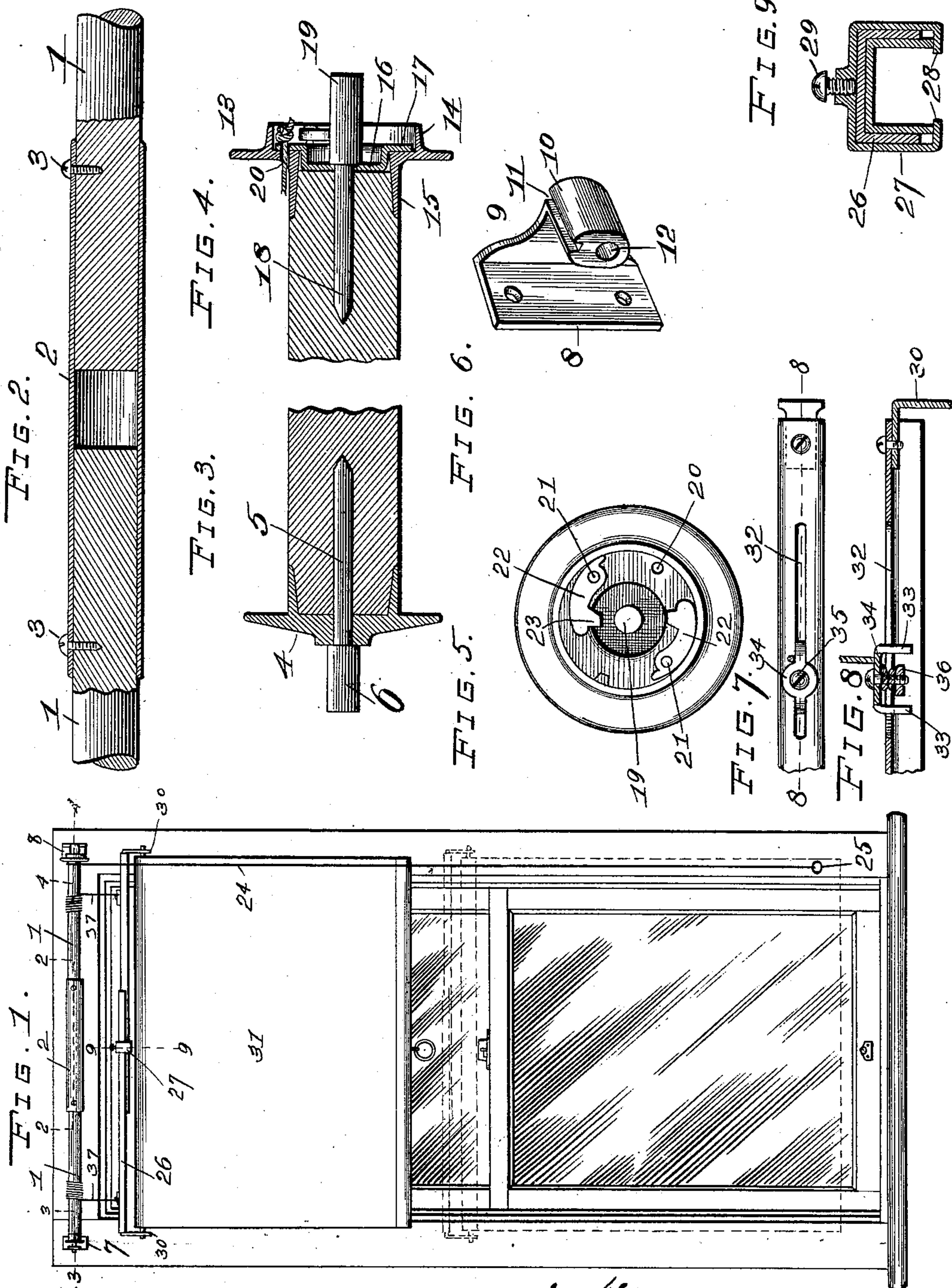
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Patented Oct. 31, 1899.

H. M. STURGIS.
WINDOW SHADE ADJUSTER.

(Application filed Mar. 20, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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WINDOW-SHADE ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 636,082, dated October 31, 1899.

Application filed March 20, 1899. Serial No. 709,821. (No model.)

To all whom it may concern:

Be it known that I, HERBERT M. STURGIS, of Kansas City, Jackson county, State of Missouri, have invented certain new and useful
5 Improvements in Window-Shade Adjusters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to window-shade adjusters; and it consists of the novel construction, combination, and arrangement of parts hereinafter described and claimed.

Figure 1 is a front elevation of a window with my improved window-shade adjuster in
15 position thereon. Fig. 2 is an enlarged detail sectional view taken approximately on the line 2 2 of Fig. 1. Fig. 3 is an enlarged sectional view taken approximately on the line 3 3 of Fig. 1. Fig. 4 is an enlarged detail sectional view taken approximately on the line
20 4 4 of Fig. 1. Fig. 5 is an end elevation of the adjusting-roller made use of in carrying out my invention. Fig. 6 is a view in perspective of a bracket made use of in my improved adjuster. Fig. 7 is a plan view of the
25 right-hand end of the curtain-supporting bar. Fig. 8 is a longitudinal sectional view taken approximately on the line 8 8 of Fig. 7. Fig. 9 is an enlarged cross-sectional view taken approximately on the line 9 9 of Fig. 1.

In the construction of my improved adjuster I make use of a longitudinally-adjustable roller 1, the same being composed of two rods or rollers, of wood or analogous material, the
35 same being of the same diameter and length, and the meeting ends of said two members slide into a metallic tube 2, and screws 3 are passed through said tube into the meeting ends of the members 1 to rigidly connect said tube and members. By removing the screws
40 3 and moving the portions of the roller 1 inwardly or outwardly said roller may be adjusted to different widths of windows. Upon the left hand of the roller so constructed is
45 arranged a plate 4, the same being held in position by an axially-arranged pin 5, the outer end 6 of which forms a trunnion or journal upon the roller 1. This trunnion or journal is rotatably arranged in a suitable bracket 7,
50 fixed upon the upper left-hand corner of the window-casing. Arranged upon the upper right-hand corner of the window-casing and

in horizontal alinement with said bracket 7 is the bracket seen in Fig. 6, the same comprising a rectangular plate 8, on the outer edge
55 of which projects forwardly an integral arm 9, and integral with the forward end of said arm and projecting inwardly or toward the bracket 7 is the lug 10, the same being oval in cross-section and provided in its top with the
60 notch 11, and passing longitudinally through said lug, immediately below said notch, is the circular aperture 12. Upon the right-hand end of the roller, previously described, is arranged a ring 13, with the outer face of which
65 is formed integral the laterally-projecting centrally-arranged flange 14, and integral with and projecting outwardly from the opposite side of said ring 13 is a concentric flange 15, which engages directly upon the right-hand
70 end of the roller 1. Removably located in the center of this ring 13 is the plate 16, the same being provided with a flange 17, which is normally positioned directly against the outer face of the ring 13, said flange extending
75 to the flange 14. Passing through the center of this plate 16 and into the right-hand end of the roller 1 is a pin 18, the outer portion of which forms a trunnion or journal 19 for the right-hand end of the roller, said trun-
80 nion or journal being positioned in the aperture 12, which performs the function of a journal-bearing.

Formed through the edge of the flange 17 and through the ring 13, just outside the
85 flange 15, is an aperture 20, the purpose of which will be presently shown.

Pivotally held upon pins 21, which are seated in the flange 17, are the gravity-pawls 22, the rectangular lugs or points 23 of which
90 project inwardly toward the journal or trunnion 19, and when the roller is properly positioned in its bearings said rectangular lugs or points alternately engage in the notch 11 of the lug 10.

The operating-cord 24 has its upper end passed through the aperture 20, previously mentioned, and a knot is formed in the end so passed through in order to prevent the
95 pulling through of said cord, and a ring or tassel 25 is carried by the lower end of said
100 cord, which cord when unwound from the roller 1 reaches approximately to the bottom of the window-casing.

The means I employ for carrying the shade-roller comprises a pair of straight bars 26, the same being bent from suitable sheet metal and being of inverted-U shape in cross-section, one of said bars being slightly smaller than the other in order that it may telescope and slide therein, and passing around the center of the meeting or overlying portions of the members is a rectangularly-bent clip 27, the inwardly-bent ends 28 of which bear directly against the under side of the lowermost one of the members forming the bar, and a set-screw 29 is passed through the top of said clip and bears directly on the upper side of the top one of said members. When said set-screw is tightened, the two portions of the bar are very rigidly clamped together, and a very stiff bar is thus provided to carry the shade-roller. Removably arranged in the ends of the members of this bar are the depending ears 30, in which depending ears are arranged the trunnions or bearings of the ordinary shade-carrying roller on which operates in the usual manner the ordinary window-shade 31.

Formed in the ends of the members forming the bar 26 are the longitudinally-extending slots 32, and adjustably located in said slots 32 are the downwardly-bent ends 33 of cord-retaining clips 34, there being screws 35 passed through said clips and engaging in nuts 36, located within the inverted-U-shaped members forming the bar 26. The cords 37 extend between the roller 1 and the shade-carrying bar and have their upper ends secured in any suitable manner to the roller 1, and said cords are wound upon said roller in a direction opposite to that in which the cord 24 is wound upon said roller, and the lower ends of said cords 37 are engaged by the cord-clips 34, carried by the bar 26.

The operation is as follows: The cords 24 and 37 being wound upon the roller 1 in different directions, the cords 37 will be entirely wound upon the said roller 1 when the cord 24 is entirely unwound, and when in this position the curtain-roller will be held in the desired position at the top of the window-casing and just above the upper end of the upper sash. The curtain, operating upon an ordinary curtain-roller, can then be raised or lowered in the usual manner. When the curtain-roller is thus held in position, one of the pawls 22 has its point or rectangular lug 23 resting in the notch 11 of the lug 10. Thus the roller 1 is held against rotation, and the bar 26, carrying the curtain-roller, is retained in an elevated position. When it is desired to lower the bar 26 and curtain-roller, so as to shade or cover the lower portion of the window, the operator engages the cord 24 and gives the same a slight pull downwardly. This movement disengages the lug or point of the lug 22, that is engaged in the notch 11, and as soon as this movement takes place the bar 26 and curtain-roller will descend by gravity as the operator allows the cord 24 to

pay out between the thumb and fingers. In so doing the roller 1 will rotate and the cords 37 will unwind therefrom, and at the same time the cord 24 will wind up on the roller 21. When it is desired to stop the bar 26, the operator only has to stop the cord 24, and in so doing the roller 1 is prevented from rotating, and the point of one of the pawls 22 will engage in the notch 11. Thus the bar 26, carrying the shade-roller, will be retained at the position desired below the top of the window, and the curtain can now be unwound from the roller in the usual manner, so as to shade or close that portion of the window between the bar 26 and the bottom of the lower sash. The positions assumed by the bar 26 and curtain as last described are shown by the dotted lines in Fig. 1. When it is desired to elevate the curtain-roller and bar 26, the operator manually engages the cord 24 and pulls the same downwardly, and in so doing the roller 1 rotates in such a direction as to rewind the cords 37 thereon and unwind the cord 24 therefrom.

In a window-shade adjuster of my improved construction the various parts can be very quickly and easily adjusted to fit windows of different widths, the device is very easily operated, will not easily get out of order, and the cords will wind upon the roller very evenly, and the curtain, therefore, will not sag at either end.

I claim—

1. In a window-shade adjuster, a pair of brackets secured to the upper portion of the window-casing, in one of which brackets is formed a notch, a roller rotatably arranged in said brackets, pawls pivotally secured to one end of said roller, the points of which engage in the notch to prevent the rotation of the roller in one direction, cords wound upon said roller, a curtain-carrying roller carried by the lower ends of said cords, and an operating-cord wound upon the first-mentioned roller in a direction opposite to that of the first-mentioned cords, substantially as specified.

2. In a window-shade adjuster, a pair of brackets secured to the top of the window-casing, in the top of one of which brackets is formed a notch, a longitudinally-adjustable roller rotatably held in said brackets, a plurality of pawls pivotally arranged at one end of said roller, the points of which pawls engage in the notch to prevent the rotation of the roller in one direction, an operating-cord secured to and arranged to wind upon said roller, a pair of cords secured to and arranged to wind upon said roller in a direction opposite to that of the first-mentioned cord, a longitudinally-adjustable bar carried by the lower ends of the last-mentioned cords, and a curtain-carrying roller rotatably carried by said bar, substantially as specified.

3. In a window-shade adjuster, a pair of brackets secured to the upper portion of the window-casing, in one of which brackets is

formed a notch, a roller rotatably arranged in said brackets, which roller comprises a pair of alined members, a tube connecting the meeting ends of said alined members, a plate secured to one end of said roller, a plurality of pawls pivotally arranged upon said plate, the points of which pawls engage in the previously-mentioned notch, an operating-cord fixed to and arranged to wind upon the roller, a pair of cords fixed to and winding upon said roller in a direction opposite to that of the first-mentioned cord, a bar comprising a pair of telescoping members carried by the lower ends of said pair of cords, hangers removably carried by the ends of said bar, and a curtain-carrying roller rotatably arranged in said hangers, substantially as specified.

4. In a window-shade adjuster, a roller com-

prising a pair of alined members, a tube in which the meeting ends of said alined members are arranged to slide, a plate fixed upon the outer end of one of said members, a pin passing through said plate, a ring arranged upon the outer end of the opposite member, a plate arranged against the outer face of said ring, a plurality of pawls pivotally carried by said plate, and a pin passing through said plate to lock said plate and ring upon the end of said roller, substantially as specified.

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

HERBERT M. STURGIS.

Witnesses:

EDWARD E. LONGAN,
M. P. SMITH.