C. T. AGERSBURG & J. A. LOFF.

ADJUSTABLE SHADE FIXTURE.

APPLICATION FILED APR. 8, 1908.

978,260.

Patented Dec. 13, 1910.

Fig. 1

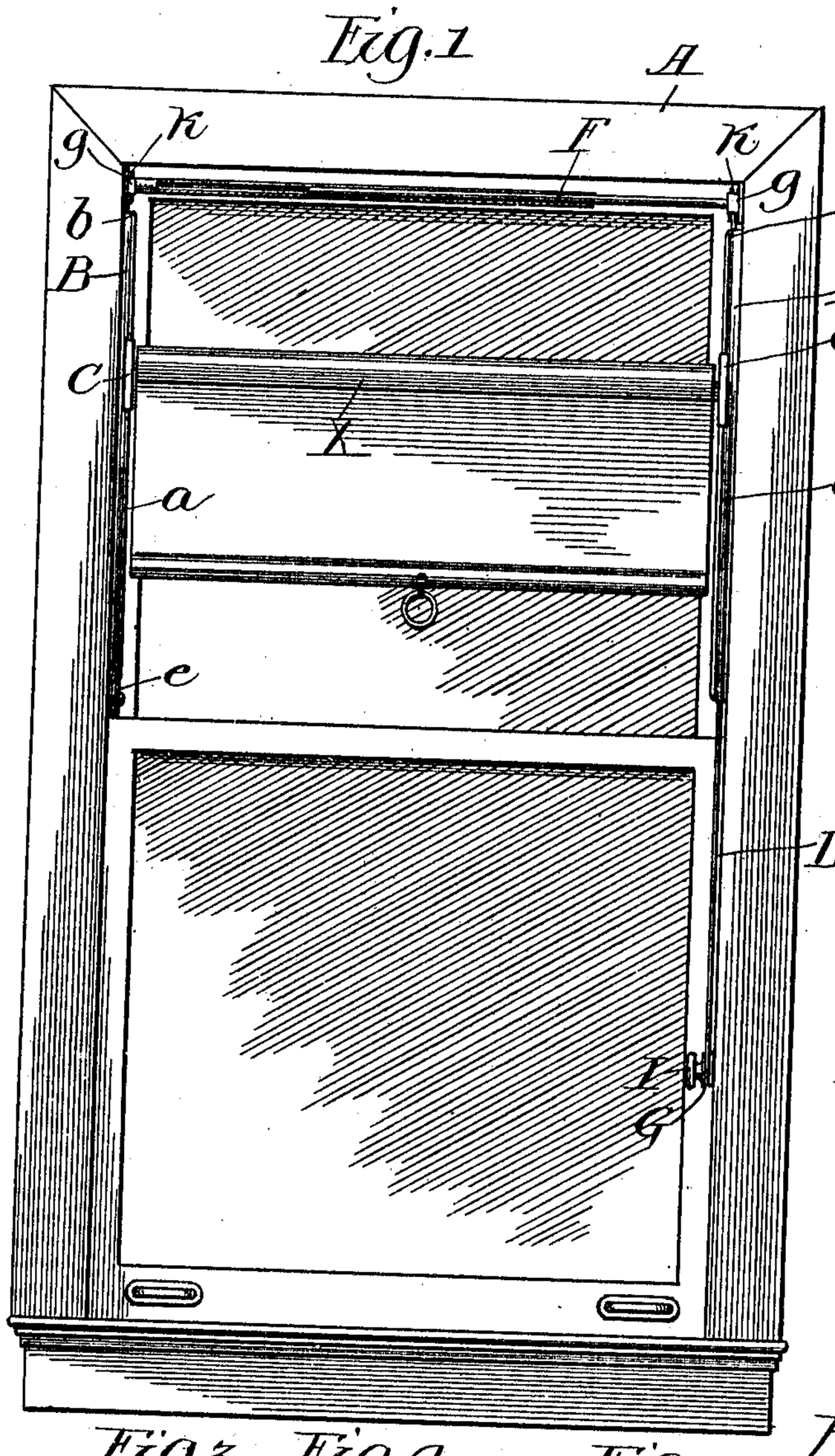


Fig. 2.

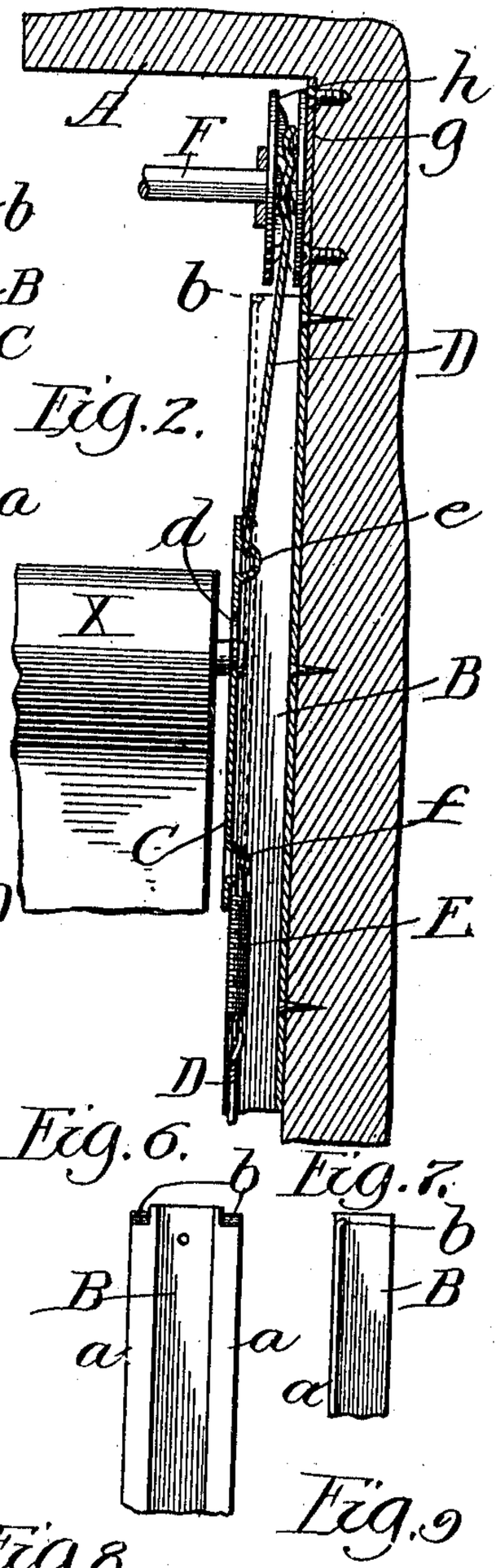


Fig. 6.

Fig. 7.

Fig. 9

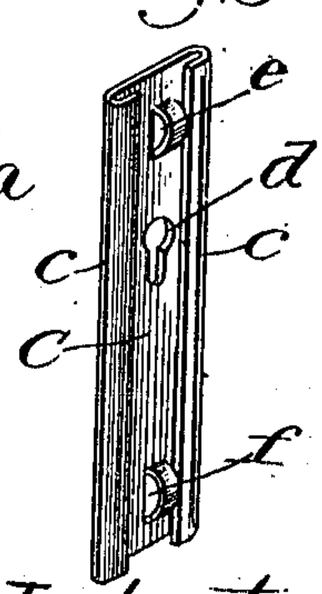


Fig. 3.

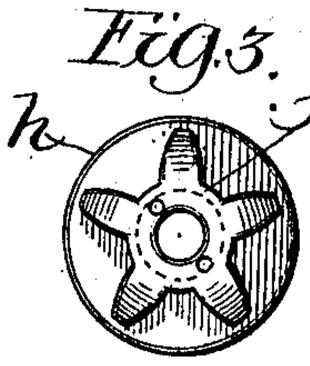


Fig. 4.

Fig. 5.

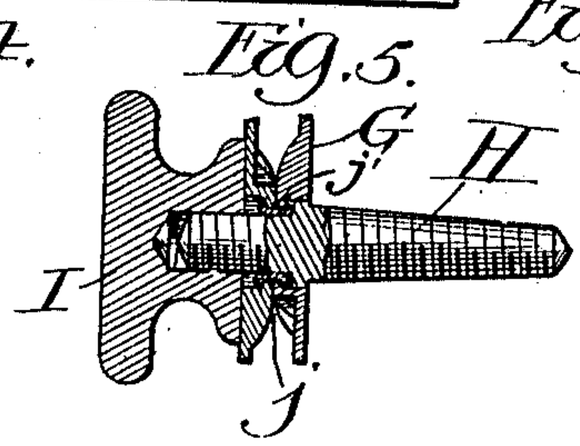
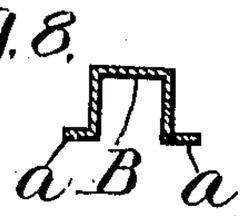


Fig. 8.



Witnesses:

O. M. Kemmis

E. K. Lundy

Inventors

Christian T. Agersburg.

John A. Loff.

by Frank D. Thomason Atty.

UNITED STATES PATENT OFFICE.

CHRISTIAN T. AGERSBURG AND JOHN A. LOFF, OF CHICAGO, ILLINOIS.

ADJUSTABLE SHADE-FIXTURE.

978,260. Specification of Letters Patent. Patented Dec. 13, 1910.

Application filed April 8, 1908. Serial No. 425,908.

To all whom it may concern:

Be it known that we, CHRISTIAN T. AGERSBURG and JOHN A. LOFF, both citizens of the United States, and residents of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Adjustable Shade-Fixtures, of which the following is a clear, full, and exact description.

Our invention relates to means for adjusting shade rollers and fixtures therefor so as to screen or cut off the outlook from any portion of a window while permitting an unobstructed view through the remainder of the same.

The object of our invention is to accomplish this result by means that positively moves the bearing fixtures at each end of the curtain roller simultaneously, and prevents the said fixtures from sticking or catching when moved up or down. This we accomplish by the means hereinafter fully described and as particularly pointed out in the claims.

In the drawings:—Figure 1 is an inside elevation of a window having our improvements applied thereto. Fig. 2 is a fragmentary view of the upper corner of a window-frame and part of the mechanism of our invention, drawn to a larger scale and in transverse section. Figs. 3 and 4 are detail views illustrating the upper rollers. Fig. 5 is a detail view showing the locking roller in longitudinal section. Figs. 6 and 7 are detail views illustrating the guides for the runners. Fig. 8 is a transverse sectional view of the guide for the runner. Fig. 9 is a detail view showing a runner in perspective.

In the drawings A represents a suitable window-frame.

B, B, are channel-iron guides, which are secured in any suitable manner to the inside of the frame in a vertical position, and so that they extend from corresponding points on each side of the window near the arch down to points near the top of the lower sash, when the latter is closed. The outer longitudinal edges of these channel-irons are provided with outward flanges *a*, *a*, that, preferably, extend the entire length of the channels and have their ends bent toward the adjacent side of the window-frame to form stop-lugs *b*, *b*. A runner C is mounted on each of these guides B between their ends, which runner consists of a flat elongated plate, the longitudinal edges of which are bent back so as to be in a parallel plane with the body of said plate and form guides *c*, *c*, that fit over and slide longitudinally on flanges *a*, *a* of the channel-irons B, B. Nearer their upper ends runners C are provided with suitable bearings *d* for the journals of the window-shades X, and between these bearings and the top and also at points very near the bottom said runners are provided with eyes *e*, *f*, that are, preferably, made by punching in the metal of the plate, substantially as shown. The eyes *e*, *f*, have the ends of a suitable cord or belt D secured thereto, but we prefer to connect the cord to the lower eye *f* by a suitable coil expansion spring E, substantially as shown in the drawings, so as to take up the slack of the belt, of which the runner forms the connecting link.

At a point a slight distance above the upper end of the channels, brackets *g*, *g*, are secured to the upper ends of the inner vertical portion of the window-frame, and are provided with bearings for an extensible or telescopic horizontal shaft F, which extends from side-frame to side-frame of the wondow and has its ends extend through its bearings and suitable pulleys *k*, *k*, secured thereto, around which the upper portions of the belts pass. One stretch of these belts passes down outside of the guide-channels to a point below the same, and the lower portions thereof pass around pulleys *e*, and G, which, on one side of the window is located above the top of the lower sash of the window when it is closed, and on the other side of the window is located in a plane about the center of height of said lower sash, substantially as shown. The lowermost of these pulleys, G, as shown in Fig. 1 of the drawings, is journaled on a suitable stud H, which projects from the side of the window-frame. Stud H upon the smooth portion of which pulley G is journaled, is screwed into the inner surface of the window-frame, and when it is desired to raise or lower the bearings of the window-shade roller, the pulley is permitted to revolve loosely on the stud, but when it is desired to securely hold the window-shade curtain in a certain position, said pulley G is clamped against the shoulder made by increasing the diameter of the wood-screw

portion of the stud H, by a thumb-nut I screwed onto the outer threaded extremity of the outer reduced portion of said stud.

The pulleys containing the guide-channels, as well as pulleys G and *e*, are, preferably, made of two circular disks, that are stamped so as to leave a central circular boss *j* on one side, from which a series of equidistant points radiate, which latter normally diminish in prominence and gradually merge into the disk before reaching the outer circumference thereof. Two of these disks are placed concentric to the same axis with their embossed sides facing each other, and so that the points of the one will alternate with the points of the other, and then are suitably secured together, by means of a filler or sleeve *j'*, substantially as shown. As thus constructed, the cord-belts will describe a wavy course as they pass around said pulleys, and the pulleys will thus obtain a better hold upon the belts and prevent the same from slipping.

What we claim as new is:—

1. An adjustable shade fixture comprising upper and lower pulleys, endless belts engaging said pulleys, guide-channels the side edges of which are flanged outward and have their ends bent to form stop-lugs, runners secured to and carried by said belts having bearings therein for a shade roller, and having their side edges bent back so as to embrace said flanges, and means carried by the axis of one of the pulleys for adjustably clamping said pulley.

2. An adjustable shade fixture comprising upper and lower pulleys, endless belts engaging said pulleys, guide-channels the side edges of which are flanged outward, runners having their side edges bent back so as to embrace said flanges which runners have eyes in which said belts are secured and have bearings for a shade roller, and means for adjustably clamping said lower pulley.

3. An adjustable shade fixture comprising upper and lower pulleys having alternating radiating points on each side of their peripheral concavity, endless belts engaging said pulleys, guide-channels the side edges of which are flanged outward, runners having their side edges bent back so as to embrace said flanges which runners have eyes in which said belts are secured and have bearings for a shade roller, and means for adjustably clamping said lower pulley.

4. An adjustable shade fixture comprising upper and lower pulleys having alternating radiating points on each side of their peripheral concavity, endless belts engaging said pulleys, guide-channels the side edges of which are flanged outward and have their ends bent to form stop-lugs, runners secured to and carried by said belts having bearings therein for a shade roller and having their side edges bent back so as to embrace said flanges, and means for adjustably clamping one of said pulleys.

5. An adjustable shade fixture comprising upper and lower pulleys one of said lower pulleys being divided transaxially, endless belts engaging said pulleys, guide-channels the side edges of which are flanged outward, runners secured to and carried by said belts having bearings therein for a shade roller and having their side edges bent back so as to embrace said flanges, and means for clamping said divided pulley together.

6. An adjustable shade fixture comprising upper and lower pulleys, one of said lower pulleys being divided transaxially, endless belts engaging said pulleys, guide-channels the side edges of which are flanged outward and have their ends bent to form stop-lugs, runners secured to and carried by said belts having bearings therein for a shade roller, and having their side edges bent back so as to embrace said flanges, and means for adjustably clamping said divided pulley together.

In testimony whereof we have hereunto set our hands and seals this 3d day of April, A. D., 1908.

CHRISTIAN T. AGERSBURG. [L. S.]
JOHN A. LOFF. [L. S.]

Witnesses:
M. G. STOLL,
E. K. LUNDY.