

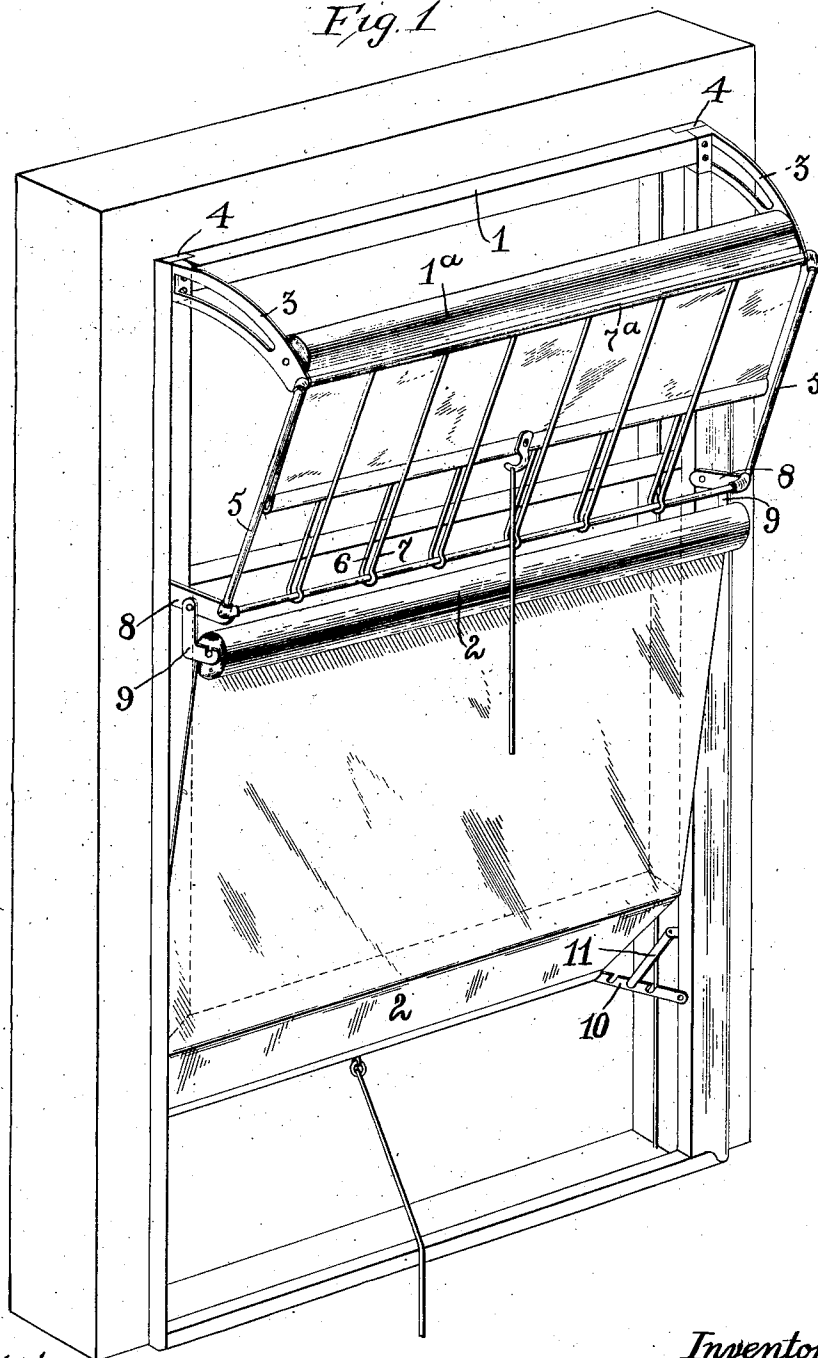
E. H. LUNKEN.
SHADE SUPPORTING DEVICE.
APPLICATION FILED OCT. 29, 1908.

942,967.

Patented Dec. 14, 1909

2 SHEETS—SHEET 1

Fig 1



Attest:

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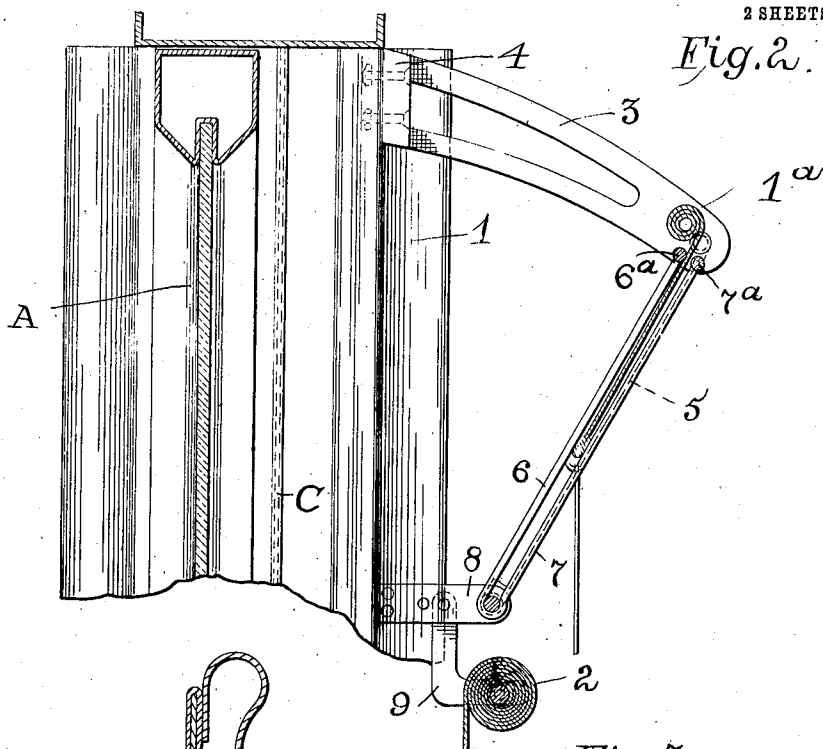
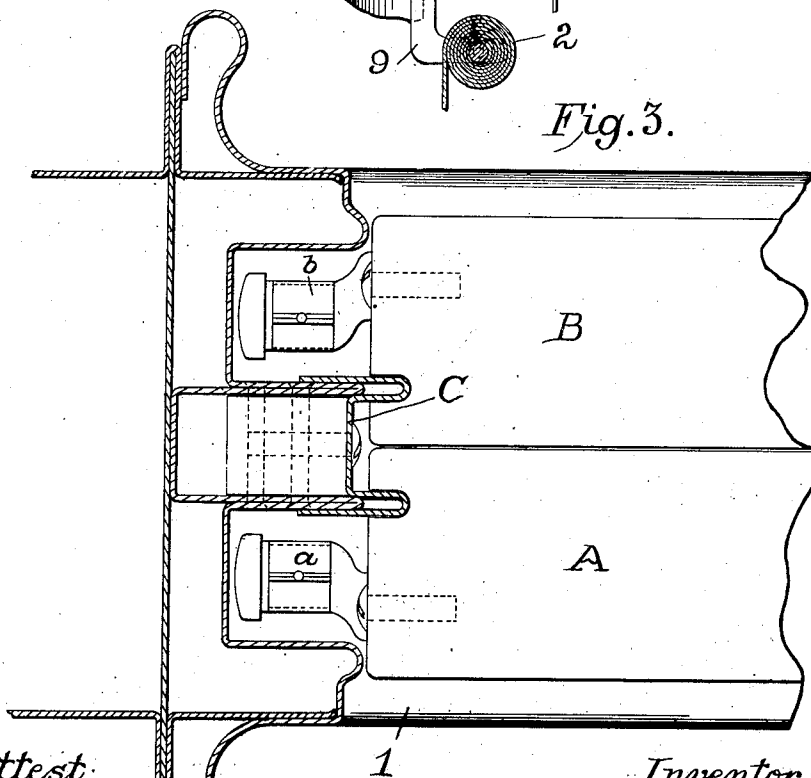


Fig. 3.



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UNITED STATES PATENT OFFICE.

EDMUND H. LUNKEN, OF CINCINNATI, OHIO, ASSIGNOR TO THE LUNKEN STEEL WINDOW CO., OF CINCINNATI, OHIO.

SHADE-SUPPORTING DEVICE

942,967.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed October 29, 1908. Serial No. 460,096.

To all whom it may concern:

Be it known that I, EDMUND H. LUNKEN, a citizen of the United States, residing at Cincinnati, Ohio, have invented certain new and useful Improvements in Shade-Supporting Devices, of which the following is a specification.

The present invention relates to improvements in shade supporting devices, and is designed more especially for holding shades in conjunction with windows having double sliding and swinging sashes such, for example, as shown in Letters Patent of the United States dated Nov. 3, 1908, 902,979 though applicable also to windows of the ordinary type.

The object of the invention is to provide a construction which will not only effectually exclude the sun, but which will also permit ample ventilation without blowing or slatting of the shade or shades.

An embodiment of the invention is illustrated in the accompanying drawing, in which—

Figure 1 shows a perspective view with the improved shade supporting means and shades applied to a window; Fig. 2 is an enlarged detail partly in section; Fig. 3 is a transverse sectional view through one side of the window frame and sash only.

Referring by reference characters to this drawing, the numeral 1 designates the window frame having the upper and lower sliding and swinging sashes A and B, these having hinge pins *a* and *b* guided in channels in the frame and being held normally against swinging by guide bars C having ribs engaging grooves in the channels, as set forth in the aforesaid patent. The window frame is provided with two shades, an upper one 1^a and a lower one 2, which are designed to be wound upon spring shade rollers in the usual manner.

The upper shade roller is carried at the outer ends of bracket arms 3, which are secured at their inner ends to corner blocks 4 and are preferably curved outwardly on the arc of a circle which has, as its center, the pivotal axis of the upper sash.

To the outer ends of the arms 3 is secured the upper corners of a frame 5 with double wires 6 and 7, between which the shade passes and is guided as it is unwound from and rewound upon the roller. The wires 6 and 7 are supported at the top by

the parallel wires or rods 6^a and 7^a between which the shade also passes. This frame inclines downwardly toward the window, being secured at its lower edge to arms or brackets 8 carried by the frame members, to which arms are secured shade brackets 9 carrying the lower shade roller, as shown.

By this construction the upper shade may be drawn down between the inclined frame bars and be securely held thereby against blowing or slatting, and in this position will effectually exclude the sun while at the same time ample space is provided for ventilation.

In order to provide for ventilation at the lower part of the window when the shade 2 is drawn down, and at the same time exclude the sun, arms 10 are provided which may be held in suitable position by adjustably connected bracing members 11, by which the lower part of the lower shade may be drawn outward under the bottom edge of the lower sash and held so as to act as an awning.

Having thus described my invention what I claim is:—

1. In combination with a window, a shade roller, means for supporting the same at the top of the window on the inside at a suitable distance from the window, and means for causing the shade, when drawn down, to occupy a position inclining downwardly toward the window.

2. In combination with a window, a frame located at the top thereof inside the window, and having its upper portion spaced from the top of the window, said frame inclining downwardly toward the window, and a shade roller carried at the top of the frame and a shade carried by the roller, and sustained by the frame in a position inclining toward the window when the shade is drawn down.

3. In combination with a window, an inclined frame located at the top thereof on the inside of the window, the top of the frame being spaced from the top of the window and the frame inclining downwardly toward the window, said frame having two sets of guiding members, and a shade roller carried at the top of the frame and having a shade guided between said members.

4. In combination with a window, brackets carried at the top thereof, a shade roller and shade carried at the outer ends of said brackets, a guiding frame inclining down-

wardly and inwardly from said roller toward the window for guiding the shade.

5 5. In combination with a window, a shade roller carrying a shade located at the top thereof, a second shade roller carrying a shade and located at a portion of the window intermediate its top and bottom, and means for holding each of said shades in an inclined position.

10 6. In combination with a window, a shade supporting frame having inner and outer guides, means for holding said frame at a suitable distance from the window opening at the upper end thereof, a shade roller mounted on the frame and a shade adapted to move up or down between said inner and outer guides, whereby the shade, when unrolled, forms a sunblind without obstructing the circulation of air, and without displacement by the action of the wind, substantially as described.

20 7. In combination with a window, a shade supporting frame located opposite the upper portion of the window and spaced therefrom for permitting ventilation, a shade roller mounted at the top of the frame, said frame having transversely disposed parallel members between which the shade is adapted to be drawn when unrolled from the roller and by which both the edges and intermediate portions of the shade are held

against flapping or displacement by the action of the wind, substantially as described.

8. In combination with a window, a shade supporting frame having inner and outer guides, means for holding said frame in an inclined position at a suitable distance from the window opening at the upper end thereof, a shade roller mounted on the frame and a shade adapted to move up or down between said inner and outer guides, whereby the shade, when unrolled, forms a sunblind without obstructing the circulation of air and without displacement by the action of the wind, substantially as described.

9. In combination in a window, upper and lower shade rollers and shades therefor, with means for supporting them in place, means whereby the upper shade, when drawn from its roller, may be held in a plane inclining upwardly and inwardly away from the window, and means whereby the lower portion of the lower shade, when unrolled from its roller, may be held in a plane inclining downwardly and outwardly away from the window, substantially as described.

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

EDMUND H. LUNKEN.

Witnesses:

FREDERICK T. HENRY,
GEORGE W. GILMORE.