

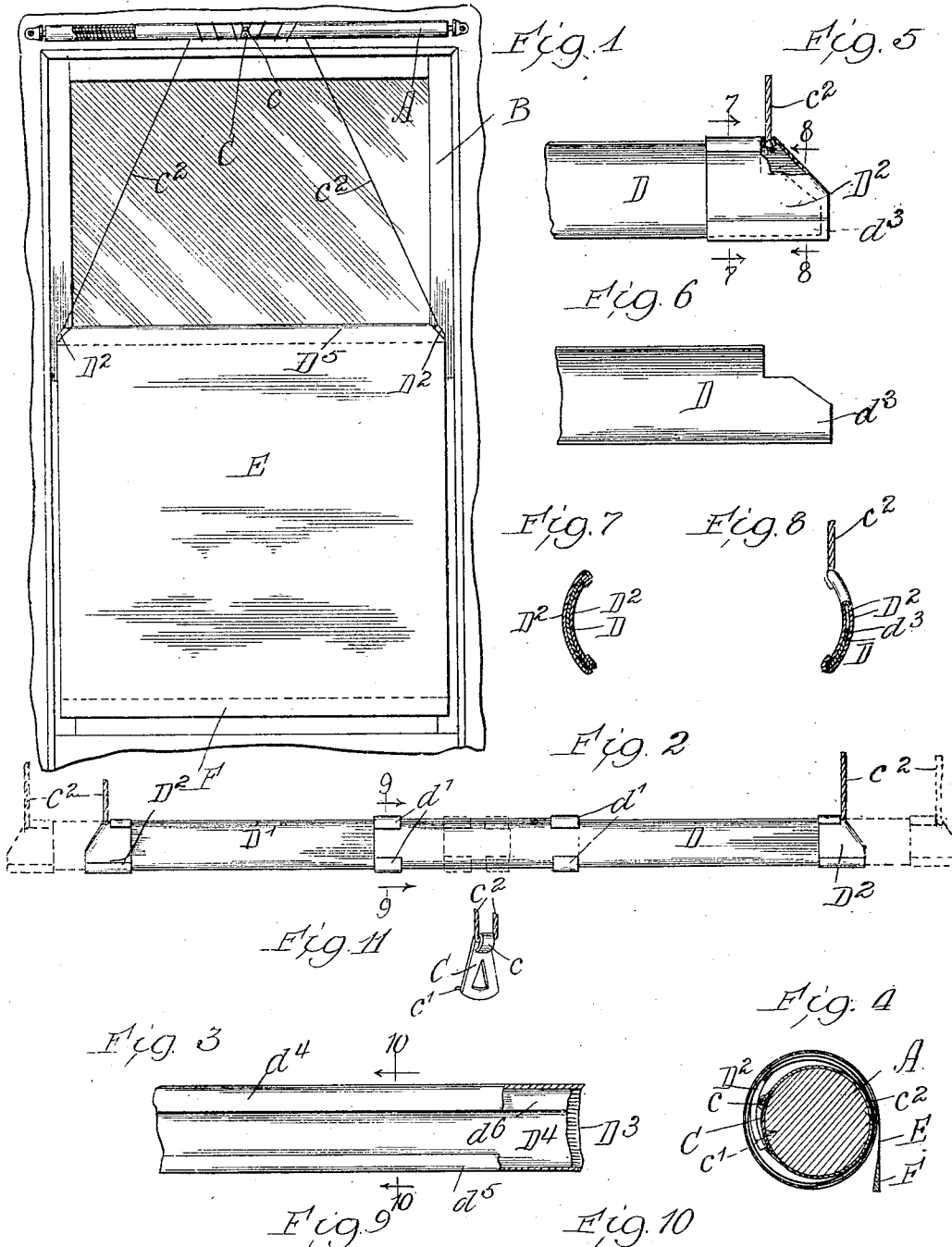
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PATENTED NOV. 13, 1906.

J. J. DENNIS.

ADJUSTABLE SHADE FOR WINDOWS OR THE LIKE.

APPLICATION FILED OCT. 26, 1905.



Witnessed
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ADJUSTABLE SHADE FOR WINDOWS OR THE LIKE.

No. 835,603.

Specification of Letters Patent.

Patented Nov. 13, 1906.

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To all whom it may concern:

Be it known that I, JOHN J. DENNIS, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Adjustable Shades for Windows or the Like; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference thereon, which form a part of this specification.

This invention relates to improvements in adjustable shades for windows or the like, and more particularly to a shade adapted to cover either the upper or the lower half of the window or opening, as preferred.

Heretofore it has been sought to attain the ends accomplished by this invention; but inasmuch as the supporting cords or wires upon which the shade has hung have usually wound upon the shade-roller at one place the devices have proved unsatisfactory and frequently injure the shade.

The object of this invention is to afford a cheap, simple, exceedingly durable, and easily-operated shade-hanger whereby the shade can be quickly and evenly adjusted to cover a part of the window and to permit a part to remain uncovered either at the top or the bottom of the window or at both the top and the bottom, as preferred.

It is also an object of the invention to afford a construction on which the supporting cords or wires for the shade will roll evenly upon the shade-roller and in rolling will distribute themselves for practically the entire length of the roll, thus retaining the uniformity of diameter necessary to insure the shade rolling evenly upon the roll.

It is also an object of this invention to afford an extensible shade stick or rod in combination with suitable supporting means adapted to be quickly and easily adjusted to suit any width of shade and provided with means for readily attaching the supporting-cords thereon.

The invention consists in the matters hereinafter described, and more fully pointed out and defined in the appended claims.

In the drawings, Figure 1 is an enlarged front elevation of a device embodying my invention, showing the same applied to a window-opening to obscure or cover the lower

half thereof. Fig. 2 is a view in elevation of an extensible shade-rod embodied in my invention. Fig. 3 is a fragmentary view, partly in section, of a modified form of the shade rod or stick. Fig. 4 is an enlarged transverse section taken through the curtain-roll with the curtain rolled thereon. Fig. 5 is an enlarged fragmentary elevation of the shade stick or rod, illustrating the means for attaching the cord thereto. Fig. 6 is a similar view with the cord-attaching clip removed. Fig. 7 is a section taken on line 7 7 of Fig. 5. Fig. 8 is a section taken on line 8 8 of Fig. 5. Fig. 9 is a section taken on line 9 9 of Fig. 2. Fig. 10 is a section taken on line 10 10 of Fig. 3. Fig. 11 is a perspective view of an attaching-clip for engaging the cords to the roller.

As shown in said drawings, A indicates a spring curtain-roll of the usual or any desired construction adapted to be secured to the top of the window B or the opening to which the curtain is to be applied in the usual or any suitable manner and acting automatically to roll up the curtain when actuated. Centrally engaged upon said roller, as shown, is an attaching-clip C, comprising, as shown, a piece of sheet metal bent to afford a hook c and provided on the under side with one or more downwardly-turned prongs c', as shown in Fig. 11, which are driven into the roll. Secured in said hook c, as shown in Figs. 1 and 11, is a cord, such as a wire picture-cord or any suitable flexible connection c², the middle of which lies in said hook, which is closed down thereon, so that the ends of the cord depend therefrom to a length usually greater than half the height of the window or opening. The ends of said cords are secured to the opposite extremities of the curtain stick or rod D⁵, as shown in Fig. 1. Said rod or stick may of course be constructed in any suitable manner; but conveniently the same is concave on its inner side or that which contacts with the roll when the curtain is raised. Said stick, as shown in Figs. 2 and 3, is adjustable as to length to enable the same to be adjusted for use with curtains of different widths, and, referring to Figs. 2, 5, and 9, said stick comprises a plurality of strips of sheet metal D and D', on the inner ends of each of which is secured a metallic clip d', which engages over and around the other to enable said strips or sections to slide in said clips, as indicated in dotted lines in Fig. 2,

though at all times held straight. As shown, the ends of the cord c^2 are detachably engaged on the ends of the stick by means of metallic socket pieces or clips D^2 . These, as shown, each comprise a piece of sheet metal folded and cut to afford a socket-piece, one side of which, as shown, is concave and the other convex and in which the reduced ends d^3 of the curtain-stick fits closely. The clips are shaped to afford an oblique downwardly-inclined upper corner, as shown in Fig. 5, and the ends of the cords are each inserted in a suitable aperture located in the upper edge of the corresponding socket-piece, as shown in Fig. 5, and is knotted therein to prevent the same withdrawing therefrom.

The stick illustrated in Figs. 3 and 10 comprises, as shown, two sections D^3 and D^4 , of which the lateral edges d^4 and d^5 of the outer section D^3 are rolled over the inner section D^4 and closed partly down, affording guideways in which the inner section can slide. The upper edge d^6 of the inner section D^4 is also bent downwardly or turned over, affording a rounded edge to slide within the groove afforded for the downturned edge of the outer section. In this construction the cord ends may be secured to the ends of the stick by providing an aperture through the upper edges d^4 or d^6 in said sections and passing the ends of the cord therethrough and knotting the ends before the edges are rolled down.

A curtain E of the desired length, usually approximately half the height of the window or opening, is provided with a hem at its upper edge adapted to receive the stick therein, as is usual, or is otherwise secured upon the stick and may be provided with the usual bottom stock F .

The operation is as follows: The curtain-roller of course operates as is usual. When released, the spring a causes the roller to revolve, winding the cord end c^2 around the same, as shown in Fig. 1, in opposite spirals from the middle toward the ends of the roller and elevating the curtain thereby. The curtain may of course be stopped in the usual manner by checking the same at any point desired, and the shade can be arranged to cover that portion of the window it is desired to obscure thereby. Should it be necessary or desirable to uncover the greater part of the window, the curtain is drawn upwardly on its roller by the continued rotation thereof until the concave side of the stick is brought in contact with the roller, as shown in Fig. 4, fitting over the spirally-wound cord and but slightly increasing the diameter. The continued rotation of the roller causes the curtain E to be rolled around said stick and roller, and, if desired, the entire window-opening may be exposed.

From the construction described it will be observed that devices embodying my invention may be applied in lieu of the usual cur-

tain to any window provided with the ordinary automatic spring-roller or any kind of roller, and inasmuch as the ends of the cord c^2 are of equal length and connected at their ends with the ends of the stick the curtain must at all times wind true to the window and upon the roller. Furthermore, the curtain-stick, cord, and attachment may be manufactured in large quantities of standard sizes, and stock sizes may be very quickly applied to a curtain of any width, inasmuch as the stick is extensible. Thus light and air may be obtained from the upper part of the window without danger of injuring the curtain or exposure of the room to view from the outside.

While I have described my invention as embodied by fastening the middle portion of the cord centrally on the roller, it is obvious that said cord or two separate cords may be fastened at any suitable points upon the roller and stick to permit the cords to wind spirally on the roller, distributing the same with approximate uniformity thereover preliminary to the stick and curtain rolling thereon, and I do not purpose limiting this application for patent to the specific details of construction herein described, as obviously many details of construction and operation may be varied without departing from the principles of my invention.

I claim as my invention—

1. A shade-attaching mechanism embracing a shade-roller, a clip secured centrally on said roller, a cord secured at its center on said clip and extending obliquely therefrom, an extensible curtain-stick engaged at its ends to the ends of said cord, said cord being adapted to wind spirally on the roll for the entire length thereof.

2. In a curtain-adjusting mechanism a shade-roller, downwardly-diverging cords depending from the center thereof, a curtain, a longitudinally-adjustable stick therefor and a removable clip on each end of said stick affording attachment for the cords.

3. In a shade-adjusting mechanism the combination with an automatically-acting shade-roller, of cords secured thereto intermediate the ends of the roller, a curtain supported on the ends of said cords at its top and adapted to roll therewith upon the roller, said cords winding in oppositely-turned spirals disposed along the length of the roller as the curtain is elevated and an extensible concave stick on the curtain about which and the roller the curtain winds.

4. A curtain-hanger embracing a stick, socket-pieces engaged on each end of the stick, cords secured in said socket-pieces and a curtain-roll to which said cords are connected out of a perpendicular alinement with the points of attachment with the stick.

5. In a device of the class described a curtain, an adjustable curtain-stick secured at

the top thereto and concave on one side of the same, cords attached to the ends of said stick, a curtain-roller to which said cords are attached out of perpendicular alinement with their attachment with the curtain-stick, said shade and roller being so adjusted relatively that the concave side of the stick fits upon the roller as the curtain is wound about the same.

6. A curtain-hanger comprising an extensible stick adapted for engagement with a curtain-roller and to support the curtain-cords attached thereto at points out of perpendicular alinement with their points of attachment on the roller whereby said cords wind spirally on said roller and removable sockets on said stick adapted to attach the cords thereto.

7. A curtain-hanger comprising an extensible metallic stick concave on one side thereof, an automatic curtain-roller, cords detachably engaged at the ends of the stick and engaged centrally on the roller whereby said cords wind in opposite spirals on the roller as the stick is raised said roller and stick being so related as to bring the concave side of the stick against the roll when rolled up.

8. A curtain-hanger comprising a curtain-roller, an extensible stick embracing interfitting transversely-concave parts slidably engaged together and supported on the roller to bring the concave side of the stick against the roll when rolled up and removable socket-pieces on the ends of said stick.

9. In a device of the class described an extensible curtain-stick embracing interfitting concave sections slidably engaged together, removable sockets on the outer ends of said sections, cords engaged therein, a curtain-roller to which said cords are attached intermediate the ends thereof, the stick being po-

sitioned for the concave side thereof to engage against the roller when the latter is rotated in one direction.

10. A curtain-stick for the purpose specified comprising interfitting sections concave on one side and slidably engaged together and detachable clips for attaching cords at the end thereof.

11. A device for the purpose specified embracing a metal curtain-stick concave in cross-section and constructed of a plurality of sections each interfitting the other, means engaging same slidably together and removable clips attached at the ends of said stick.

12. In a device of the class described a curtain-stick embracing concave duplicate sections each interfitting the other, a detachable clip on the outer end of each section, integral clips on the inner end of each of said sections adapted to engage the other section, a roller, a cord engaged at its ends on each of said detachable clips and extending obliquely to the central part of said roller and means attaching said cords to the roller.

13. In a device for the purpose specified, an extensible curtain-stick comprising concave duplicate sections each interfitting the other, means on the inner end of each section adapted to engage the other, removable sockets on the outer ends of said sections and cords detachably engaged thereto and adapted for engagement on and intermediate the ends of the roller.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

JOHN J. DENNIS.

Witnesses:

W. W. WITHEBURY,
WM. C. SMITH.