Aug. 24, 1965 E. P. BOULANGER 3,202,206

MEANS FOR ADJUSTING STANDARD WINDOW SHADE TO WINDOW OPENING

Filed May 24, 1963

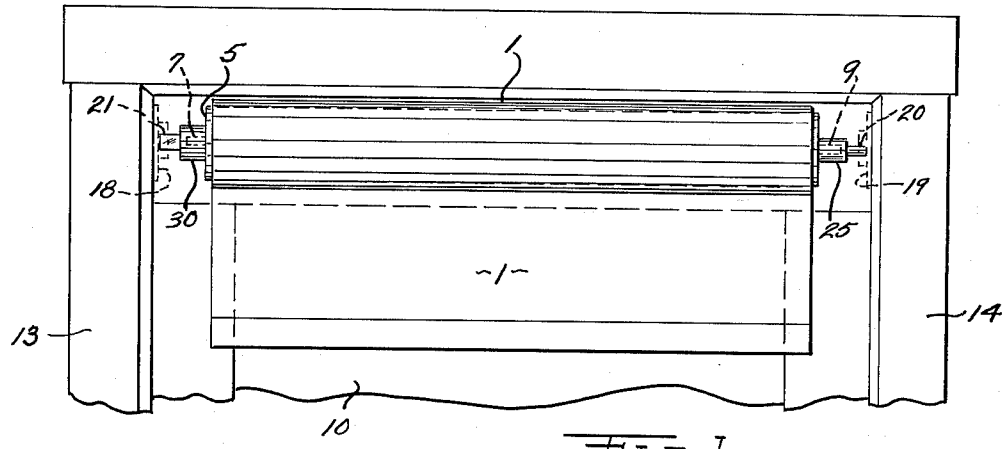


FIG. 1

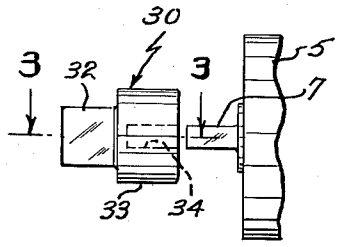


FIG. 2

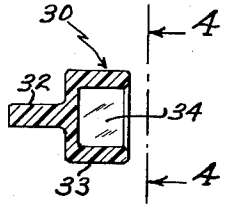


FIG. 3

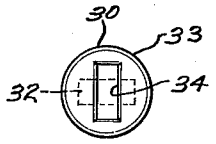


FIG. 4

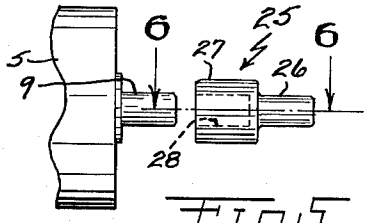


FIG. 5

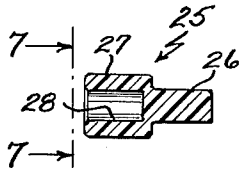


FIG. 6

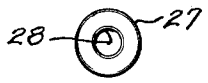


FIG. 7

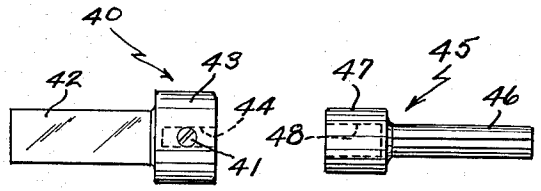


FIG. 8

FIG. 9

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MEANS FOR ADJUSTING STANDARD WINDOW SHADE TO WINDOW OPENING

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The present invention is directed to means for adjusting a standard window shade to a window opening without having to cut the shade.

Often the distance between side frames of a window is too great for a standard window shade. The present invention provides a means of using the shade without having to use a larger size of shade and cut the same down in order to fit the window opening, the shade having a spring actuated roller with a flattened pintle at one end and a round pintle at the other end.

Thus, it is an object of the present invention to provide a means of extending the length of a standard window shade roller to fit a window opening that is too large for said roller and yet too small for the roller of the next standard size.

It is an object of the present invention to provide a means for adjusting the width of a window roller so that its corresponding shade does not have to be cut in order to properly fit the shade to the window.

These and other objects will become apparent from the specification that follows, the appended claim and the drawings in which:

FIG. 1 is a fragmentary front elevational view of a window shade embodying the present invention supported in a window frame;

FIG. 2 is an enlarged fragmentary view of the left end of the shade roller and an adapter therefor according to the present invention;

FIG. 3 is a sectional view of the adapter taken on the line indicated at 3—3 in FIG. 2;

FIG. 4 is a sectional view taken on the line indicated at 4—4 in FIG. 3;

FIG. 5 is a fragmentary view of the right end of the shade roller shown in FIG. 1, the view being enlarged over that of FIG. 1 to illustrate the round pintle of the right end of the roller and an adapter therefor;

FIG. 6 is a sectional view taken on the line indicated at 6—6 in FIG. 5;

FIG. 7 is an elevational view taken on the line indicated at 7—7 in FIG. 6;

FIG. 8 is a side elevational view of another embodiment of an adapter for the left end of the shade roller, the adapter being made in accordance with the present invention; and

FIG. 9 is a side elevational view of another embodiment of the adapter for the right end of the shade roller.

The present invention provides a means of using a standard window shade for a window opening in spite of the disadvantage that the roller is too short for the opening between the window frames. A pair of spacer members adapted to fit on both ends of the shade and fit in corresponding window frame brackets is provided to quickly and easily mount said standard shade. It is understood that even though the roller may be shorter than the distance between the frames, the width of the shade is generally large enough to cover the glass portion of the window.

As seen in the drawings, a window shade 1 having a spring actuated roller 5 is provided, the roller having a flattened pintle 7 on one end and a round pintle 9 at the other end. The shade 1 is provided for window opening 10 having side frames 14 and 15 and mounting brackets 18 and 19, the mounting brackets 19 having a round

opening for receiving a round pintle of the shade roller and the bracket 18 having an opening 21 rectangular in cross section for receiving a flattened pintle.

When the shade is wide enough to cover the glass portion of the window but the roller is not quite long enough for mounting in the brackets 18 and 19 located in the side window frames, instead of using the next larger width of shade with its corresponding longer roller and trimming off the excess width of the larger shade, the length of the roller of a standard size shade can be quickly and easily increased to fit securely in the mounting brackets 18 and 19.

To extend the length of the roller on the right side conveniently as seen in FIGS. 1 and 5–7, an adapter 25 is provided that has a round pintle 26 at one end thereof for inserting into the round opening 20 of bracket 19. An enlarged generally round head section 27 is located at the other end of adapter 25, the walls of the section defining a round opening 28 adapted to receive the round pintle 9 of the roller.

Thus, by using the adapter 25 as a quick and strong spacer, the length of the roller can be effectively extended on the right end.

The length of the left end of the roller can also be quickly and conveniently lengthened. An adapter 30 is provided, the adapter having a flattened pintle 32 on one end for insertion into the slotted opening 21 of the bracket 18. The adapter 30 has an enlarged head 33 generally circular in cross-section and a slot 34 is provided therein for receiving securely the flattened pintle 7 of the left end of the roller.

As best seen in FIG. 4, the head 33 of adapter 30 is preferably circular in cross-section although the head may also be elliptical.

Also, as seen in FIGS. 2–4, a plane through the longitudinal axis of the slot 34 in the head of adapter 30 is preferably at right angles to a plane through longitudinal axis of the flattened pintle 32. However, although in certain applications where strength is not the only consideration, the above described plane of the slot 34 can also include the longitudinal axis of the flattened pintle 32.

As noted in FIG. 8 where another embodiment of the adapter for the left end of the roller is shown, an adapter 40 can be provided to extend the length of the roller on the left end. The adapter 40 has a flattened pintle 42 that is considerably longer, and preferably about twice as long, as the length of the pintle 32 of adapter 30. The adapter 40 is also provided with an enlarged partially hollow head section 43, the walls of which section define a slotted opening 44 of about the same size and shape of the slot 34 of adapter 30. To help secure the flattened pintle of the roller in the head section 43, fastening means such as a small set screw 41 is provided.

In a similar manner as best seen in FIG. 9, an adapter 45 may be used to extend the length of the right end of the roller when the roller length must be increased, say 1½ to 3 times as much as in the case of the use of adapter 35. Adapter 45 has a round pintle 46 similar to pintle 26 of adapter 35 except that the length of pintle 46 is, as shown in FIG. 9, approximately twice as long as the length of pintle 26. Adapter 45 also has a head 47 containing a round opening 48, the head and opening being of about the same dimensions as the head 27 and opening 28, respectively.

In accordance with the present invention, inexpensive, yet very strong and corrosion resistant extending adapters are provided to quickly and effectively increase the length of a shade roller and permit the use of a standard size of shade and roller, even when the window frame may not be of a standard size. Light, tough, quickly assembled adapters of a plastic material can be used in the present invention.

It is to be understood that in accordance with the patent statutes, the particular forms of the invention shown and described are presented for purposes of explanation and illustration and that various modifications of said product and procedure can be made without departing from the invention.

What is claimed is:

In a window shade assembly for mounting in a window frame comprising a shade having a spring actuated roller with a round pintle at one end and a flattened pintle at the opposite end, a first bracket mounted on one side of the window frame and having a generally round opening receiving a round pintle of a standard shade roller, a second bracket having a slotted opening mounted on the opposite side of said window frame receiving a flattened pintle of a standard shade roller, means inserted between the brackets and the roller ends for centering the roller and adjusting a standard size window shade to said window opening without having to cut the shade, said means comprising a first cylindrical adapter having a slot formed centrally therein opening at one end thereof, said slot conforming to and receiving the flattened pintle of the standard shade, a flattened pintle formed at the opposite end of said adapter removably inserted into the slotted opening in said second bracket, a second cylindrical adapter having a slot formed centrally therein and opening to one end thereof, said slot conforming to and receiving the round pintle on the opposite end of the shade, and a round pintle formed on the opposite end of said second adapter removably inserted into said first bracket effective to suspend said shade in said window frame.

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