WINDOW SHADE PULL OR OPERATOR

Frank A. Hoffman, 10 Victor J. Evans Co.

INVENTOR.

ATTORNEYS
The present invention relates to window shades and the like, and more particularly to a window shade pull or operator therefor.

One object of the invention is to provide a window shade pull or hand grip which can be conveniently and quickly affixed to a conventional window shade without necessitating the use of screws or other fastening elements.

Another object is to provide a hand grip or pull for window shades which is attached to the drop stick of the shade in such a manner as to clamp the shade and drop stick together in the area of the window pull so that unnecessary strain will be eliminated.

Another object is to provide a window shade pull having a laterally extending finger engaging portion which is roughened and/or corrugated to insure a firm and tight grip on the window pull when the same is grasped by the operator to raise or lower the window shade.

Another object is to provide a window shade pull which is formed of sheet metal and is provided with a U-shaped clamping portion adapted to be interlockingly pressed in position without necessitating removal of the drop stick or otherwise changing the relation of the window shade structure.

Another object is to provide a window shade pull and hand grip of the above type in which the strains and stresses on the shade structure are distributed over a wide area to thereby eliminate breakage of the drop stick and tearing of the window shade.

Other objects and advantages of the invention will become apparent during the course of the following description of the accompanying drawings wherein—

Figure 1 is a front elevational view of the window shade pull showing a fragmentary portion of the drop end of a window shade to illustrate the manner in which the pull is applied to said shade.

Figure 2 is a vertical cross-sectional view taken on line 2—2 of Figure 1 looking in the direction of the arrows and showing the general sectional shape of the window shade pull.

Figure 3 is a rear elevational view of the window shade pull illustrating the curtain and drop stick engaging prongs to securely clamp and anchor the window shade pull in position.

Figure 4 is a perspective view of the window shade pull illustrating the knurled finger engaging portion of the fingerpiece.

Figure 5 is a perspective view of a slightly modified form of the invention showing the finger grip surface depressed to provide a friction finger engaging surface.

Figure 6 is a perspective view of another slightly modified form of the invention showing the fingerpiece corrugated to form frictional finger engaging surfaces and tassel cord attached to the window pull to enhance the appearance.

Figure 7 is a perspective view of a still further modified form of the invention illustrating the finger engaging surface of the window shade pull curved to enable the same to be easily grasped between the fingers.

In the drawing, and more in detail, there is shown in Figures 1 to 4 inclusive, a preferred embodiment of the invention and for the purpose of convenience of illustration, a window shade generally designated 6 is shown having a hem 16 at the lower end formed by a row of stitching 17 for receiving a conventional drop stick 8 (Figure 2). The window shade pull likewise generally designated 10 comprises a body portion 11 of U-shaped cross-section to provide relatively short and long flanges or wall portions 12 and 13 respectively. The flanges 12 and 13 diverge outwardly from their base portion and are adapted to be bent to conform to the cross-sectional shape of the drop stick 8 during installation.

Turned on the relatively short flange 12 adjacent each end edge is a penetrating prong 14 which is adapted to pierce the curtain shade hem 6 and drop stick 8 when the window shade pull is installed as shown in Figures 1 and 2. The other flange 13 is angularly bent as at 15 to form a laterally extending finger engaging portion 16. As shown in Figures 1 and 2 the finger engaging portion projects laterally from the central portion of the window shade hem and is arranged to extend inwardly from the window to enable the same to be easily grasped when it is desired to raise or lower the window shade.

In order to prevent the fingers from slipping when manipulating the window shade, the upper and lower surfaces 17 of the finger engaging portion 16 are knurled or otherwise machined to provide frictional finger engaging surfaces.

When it is desired to install the window shade pull, the wall or flange portions 12 and 13 are slipped in position in straddling relation with the drop end and stick of the window shade. After said flanges are in their proper position, they are forced together by the use of pliers or the like to force the penetrating prongs 14 through the window shade hem so that they will be securely embedded and anchored in the window shade drop stick. If desired, a tassel cord can be attached to the window pull to enhance the ap-
3 pearance of the window shade. Thus, it will be seen that the straight wall portions or flanges 12 and 13 form clamping jaws which embrace the drop end and stick of the curtain so that said penetrating prongs 14 will interlockingly engage said drop stick 8.

In the modification shown in Figure 5, the body portion of the window shade pull 11a is of U-shaped cross-section as before and the relatively short and long straight wall portions 12a and 13a are provided with penetrating prongs 14a and a finger engaging pull flange 16a. The central portion of the pull flange 16a is depressed as at 20a to provide a round finger engaging gripping surface. The window shade pull shown in Figure 5 is applied to the drop end and stick of a conventional window shade in substantially the same manner as pointed out and described in connection with the form of the invention illustrated in Figures 1 to 4 inclusive.

In the slightly modified form of the invention shown in Figure 6, the body portion 11b is similar to that shown in Figures 1 to 5 inclusive, and includes short and long straight wall portions or flanges 12b and 13b provided respectively with penetrating prongs 14b and finger engaging portions 16b. The finger engaging portion 16b is ribbed or corrugated as at 21b to form upper and lower finger engaging frictional surfaces.

In the modification shown in Figure 7, the body or clamping portion 11c is of U-shaped section to provide short and long straight wall or flange portions 12c and 13c. The short straight wall or flange portion 12c being provided as before with penetrating prongs 14c and the other straight wall portion 13c being angularly bent as at 15c to form a finger engaging pull 16c. The finger engaging extension 16c is accurately curved in cross-section to form convex and concave finger engaging surfaces 23c and 24c respectively which can be easily and conveniently grasped between the fingers when the window shade is being manipulated to lower or raise the same.

The window shade pulls shown in Figures 6 and 7 are installed on the drop end of a window shade by clamping the same in position by compressing the straight wall portions or flanges into tight clamping engagement with the curtain and drop stick so that the penetrating prongs pierce the drop stick and become securely anchored therein.

It is to be understood, that the forms of the invention herewith shown and described are to be taken as preferred embodiments of the invention and that various changes in the shape, size and arrangement can be resorted to without departing from the spirit of the invention or the scope of the subjoined claim.

I claim:

A pull clip for window shades comprising a body portion U-shape in cross section having an inner wall and an outer wall with the lower edges of the walls connected by a base section, with a finger gripping flange extended at a right angle from the upper edge of the outer wall and with inwardly extended gripping prongs on the upper edge of the inner wall, the upper edge of the said outer wall upon which the said finger gripping flange is positioned extended upwardly above the upper edge of the inner wall whereby leverage is provided to urge the prongs into the material of a window shade stick upon which the clip is positioned when force is applied to the said finger gripping flange.

FRANK A. HOFFMAN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>723,899</td>
<td>Moyer</td>
<td>Mar. 31, 1903</td>
</tr>
<tr>
<td>1,445,037</td>
<td>Poelte</td>
<td>Feb. 13, 1923</td>
</tr>
<tr>
<td>1,776,289</td>
<td>Lofgren</td>
<td>Sept. 23, 1930</td>
</tr>
<tr>
<td>2,222,336</td>
<td>Dormellof</td>
<td>Nov. 19, 1940</td>
</tr>
<tr>
<td>2,430,974</td>
<td>Crawford</td>
<td>Nov. 16, 1947</td>
</tr>
<tr>
<td>2,447,389</td>
<td>Borchers</td>
<td>Apr. 17, 1948</td>
</tr>
</tbody>
</table>