Sept. 8, 1942. H. M. SUTTON 2,295,137

WINDOW SHADE OR DRAPE

Filed March 3, 1941

Fig. 1.

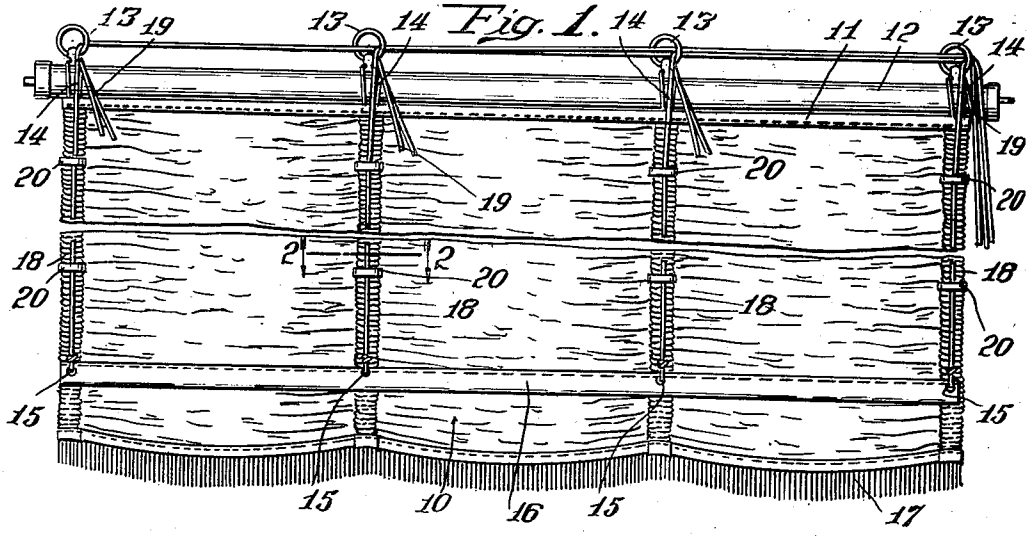


Fig. 2.

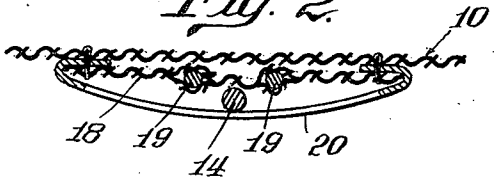


Fig. 3.

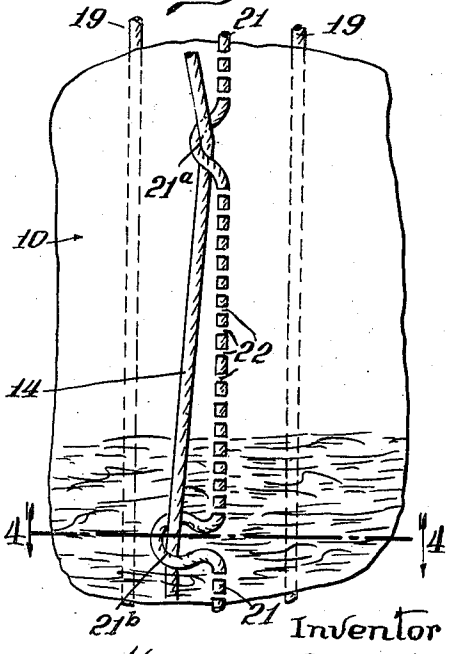
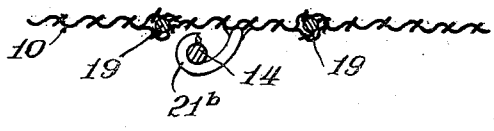


Fig. 4.



Inventor

Homer M. Sutton

By Gerry Heidemann

Attorney

Patented Sept. 8, 1942 2,295,137

UNITED STATES PATENT OFFICE

2,295,137

WINDOW SHADE OR DRAPE

Homer M. Sutton, Chicago, Ill.

Application March 3, 1941, Serial No. 381,488

3 Claims. (Cl. 156—10)

My invention relates to shades or drapes, for windows and the like, made of textile material and involving means, preferably in the nature of cords, intimately associated with the shade material or fabric whereby the material or fabric may be selectively shirred by the user, thus affording flexibility in the festooning or puffing effect in keeping with the desires of each individual user, without the use of mechanical or other extraneous devices.

The invention has for its object the provision of shirring means or cords so associated with the shade or drape forming material that the puffs in the shade may be straightened or smoothed out along the shirring cords and the material restored to its original form to permit it to be laundered and ironed flat and then rehung and again shirred to provide the desired puffing effect.

The invention also involves suitable pull cords for adjusting the drape or shade to suit the fancy of the user, namely pull cords detachably secured at their lower ends to a suitable part of the shade and arranged coincident with the shirring points or shirring cords and maintained in position by suitable loops intimately associated with the shade material; the control or pull cords passing upwardly parallel with and adjacent to the focal shirring point and preferably through guide rings secured to the top rail of the shade.

The invention has for its object the provision of an adjustable shade, drape or blind adapted to variations in festooning or puffing effects and which at the same time is economical in manufacture.

The foregoing objects and advantages as well as other advantages inherent in the invention will all be more readily comprehended from the detailed description of the drawing wherein:

Figure 1 illustrates my improved shade in elevation, with an intermediate portion broken away.

Figure 2 is a detail sectional view taken on the line 2—2 of Figure 1.

Figure 3 illustrates a section of a shade embodying a modified form of arranging the cords; the figure showing a portion of the shade in elevation.

Figure 4 is a cross-section taken on the line 4—4 of Figure 3.

My invention relates to the construction of what may be termed puff shades or drapes which may be drawn or raised and lowered by means of suitable pull cords; the invention involving a suitable number of cords spaced crosswise of the shade or blind and intimately and at the same time yieldingly associated with the woven material, whereby the material may be shifted lengthwise of the cords and the desired shirring effected; the shirring cords either being woven directly into the shade material or into the fabric of suitable bands arranged lengthwise and sewed to the shade material in substantially parallel relation at preselected distances apart across the shade.

In the exemplification of the invention illustrated in Figure 1, the shade 10 consists of suitable textile or woven material of desired width and cut to length somewhat greater than the vertical dimensions of the opening or window for which the shade is intended; the upper end of the material being preferably provided with a hem at 11 to receive a top rod or top rail as shown at 12; and the top of the shade preferably provided with suitable rings or eye-screws 13 which screw into the top rail and are spaced apart in keeping with the location of the pull or control cords 14 whose lower ends are removably secured, as for example, to eyelets at 15 which are inserted through the lower hem 16 which is sewed to the shade at a distance removed from the bottom of the shade to provide a pocket adapted to receive a metal or suitable rod which serves as a weight and may also serve as an anchorage for the lower ends of the respective controller pull cords 14. In order to enhance the artistic appearance and afford a proper finish, the bottom of the shade is shown provided with fringe as at 17.

In the exemplification Figure 1, one side of the shade, at predetermined distances apart, transversely of the shade, is shown provided with suitable bands 18 extending from the top rail receiving hem 11 to the bottom of the shade and securely sewed along the longitudinal edges to the shade fabric or material 10.

These bands, which consist of a suitable fabric or textile material, as for example material similar to the shade, have cords woven therein, extending lengthwise of the bands adjacent opposite edges thereof (see Figure 2) and with their upper ends extending beyond the bands as shown at 19 to permit the cords to be grasped when the shade is to be shirred. The cords 19, which extend parallel with the warp of the fabric, are so woven into the fabric as to be in frictional contact with the woof threads of the fabric while at the same time permitting relative movement between the woof threads and the cords in order that the bands and the main shade cloth or material may be puckered or gathered to provide the

desired puffing or shirring, which is accomplished by grasping the free or exposed ends of the shirring cords 19 and gathering the cloth lengthwise of the cords to provide the desired puffing in keeping with the wishes to the user; the upper free ends of the shirring cords 19, after the shirring has been accomplished, being preferably secured to the respective rings 13 in order to maintain the shirred condition of the shade and the free ends of the cords may then be concealed as for example in the upper hem 11 of the shade.

In view of the fact that the bands 18 are securely sewed to the main shade material, it is evident that the puckering of the bands will cause a similar condition in the shade material; it also being understood that all of the shirring cords must be held against movement so that the respective sections of the shade may be similarly shirred.

With my improved construction, the use of metal or mechanical devices for effecting the shirring is obviated and consequently the possibility of producing rust stains on the shade material as a result of the metal devices becoming rusted is eliminated and a considerable latitude in shirring effects provided.

It is apparent that my improved shade may be easily renovated or laundered and ironed flat by simply untying the lower ends of the pull cord 14, removing the top and the bottom rods and the cord guide elements or rings 13, untying the upper ends of the shirring cords 19 and smoothing out the shirring.

The pull cords 14 are preferably arranged at points coincident with the shirring cords and I therefore provide the respective bands 18 with a suitable number of pull cord receiving guide loops 20 disposed transversely of the bands and composed of short pieces of narrow material whose ends are sewed to the bands so as to permit the pull cords 14 to pass through the loops 20 as shown more clearly in Figure 2. The pull or control cords 14 are of length sufficient to extend through the guide rings at the top of the shade and toward one side so they may hang down at the side of the shade within easy reach; the free ends of the cords being preferably grouped and secured together in order that uniform pulling action on all cords and sections of the shade may be obtained.

In Figures 3 and 4, I show a modification wherein the shade material 10 is shown with the shirring cords 19 woven warp-wise into the shade material, namely with some of the woof threads arranged on each side of the cords 19 and therefore permitting relative movement between the cords and the fabric. The shirring cords 19 are of length greater than the normal length of the shade material and the lower ends of the cords are immovably secured in the fabric while the upper ends of the cords extend beyond the shade material or fabric to permit the exposed ends to be held against movement, for example by tying them to the rings or screw-eyes on the shade supporting rod at the top of the shade, as shown in Figure 1; the curtain or shade material then being puffed or selectively shirred in keeping with the wishes of the user. The shirring cords 19, in order to provide the proper effect, are preferably arranged in pairs with the cords of each pair arranged a suitable distance apart and the pairs spaced apart crosswisely of the shade at predetermined distances apart, as indicated in Figure 1, wherein the shade is shown with four pairs of shirring cords which are preferably arranged equal distances apart.

In addition to weaving the shirring cords directly into the shade fabric, the modification of Figures 3 and 4 also involves the arrangement of a guide cord 21 extending from top to bottom of the shade and intimately secured to the shade at slight distance apart by passing or weaving a few of the woof threads across the guide cord 21 as shown at 22, except at prearranged intervals of say three and a half or four inches apart where the guide cord 21 is allowed to "float" across the woof threads so as to be free or unattached, as shown at 21a, adjacent the top of the figure.

The guide cords, which are preferably arranged intermediate the shirring cords of each pair, are intended to be immovably woven or secured to the fabric and extend from top to bottom of the shade, extending parallel with the shirring cords throughout their lengths from top to bottom when the shade is in unpuffed or unshirred condition. As is apparent, when the shade is shirred, the free "floating" portions 21a of the guide cords 21 will loop outwardly as shown at 21b and thus provide a number of loops, spaced apart lengthwisely, to receive the pull cords, one of which is shown at 14 whereby the pull cords are held parallel with the focal shirring points of the shade.

With the guide cords intimately associated with the shade material as described, the need for applying or sewing on separate guide loops or rings to receive the pull cords is eliminated and a complete unitary structure provided.

When desired, the shade may be removed from the supporting pole or rod after untying the upper ends of the shirring cords, untying the lower ends of the pull cords and removing the pull cords, the fabric may then be pulled out lengthwisely of the shirring cords into flat or normal condition for laundering and ironing.

With puffed or shirred shades as heretofore made this is impossible because of the permanent nature of the shirring. After the shade has been renovated the upper end is again secured to the top rail or rod, the upper exposed ends of the shirring cords held or secured to the shade securing fasteners and the shade material shifted lengthwise of the shirring cords to provide the degree of shirring desired by the user. The pull cords may then be secured at their lower ends to the lower shade rod and passed upwardly either through the loops 20 in the form shown in Figure 1, or through the free floating portions 21a of the guide cords 21, as shown in Figure 3, and the pull cords at the top of the shade passed through suitable guides and across the top of the shade toward one side where they all may be grasped for raising or lowering the shade.

I have shown what are believed to be the best exemplifications of the invention and have described the same in terms employed for purposes of description and not as terms of limitation, as modifications may be made without, however, departing from the spirit of my invention as defined in the appended claims.

What I claim is:

1. In a shade of the character described composed of textile material; a cord woven lengthwisely into the material upon which the material may be selectively shirred lengthwisely of the cord and held in shirred condition; and a cord woven into the material with portions of the cord at preselected distances apart "floated"

across the threads of the material to provide pull cord guiding loops when the material is shirred.

2. In a shade of the character described composed of textile material cords arranged in spaced apart pairs woven into the material upon which the material may be selectively shirred, and a cord woven into the material intermediate a pair of the first mentioned cords and disposed substantially parallel therewith with portions of said last mentioned cord at preselected distances apart "floated" across the transversely extending threads of the material to provide pull-cord receiving loops when the material is shirred.

3. In a shade of the character described composed of textile material, a cord woven into the material upon which the material may be selectively shirred, and a cord woven into the material adjacent the first mentioned cord with portions of said cord at preselected distances apart "floated" across the transversely extending threads of the material to provide loops when the material is shirred lengthwise of the first mentioned cord.

HOMER M. SUTTON.