June 13, 1944. A. L. THEXTON 2,351,373

REVERSIBLE WINDOW SHADE

Filed Dec. 7, 1942

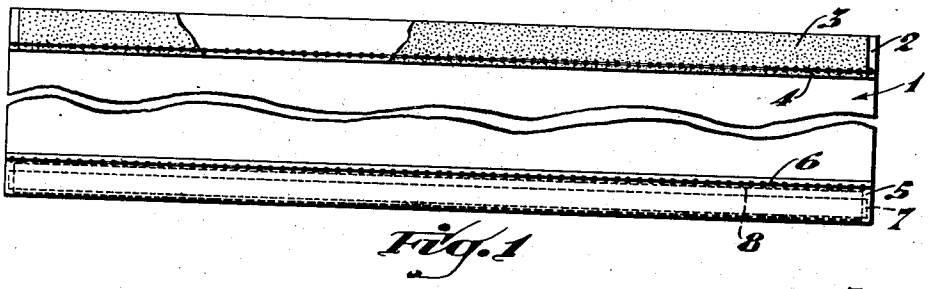


Fig. 1



Fig. 2

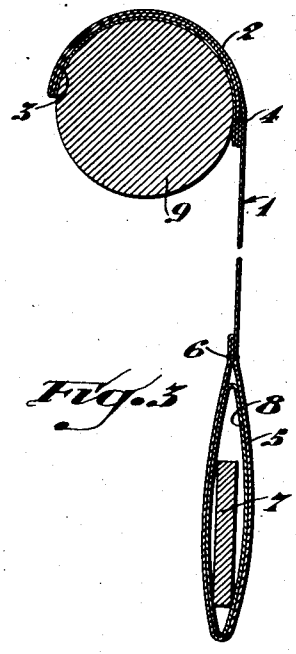


Fig. 3

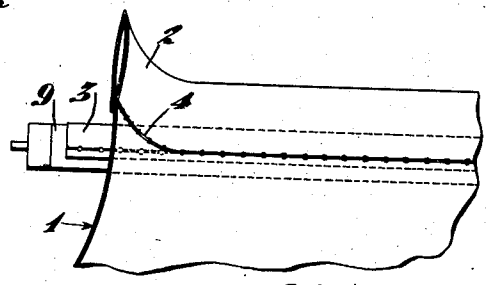


Fig. 4

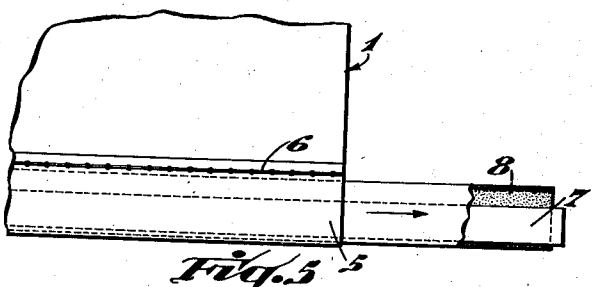


Fig. 5

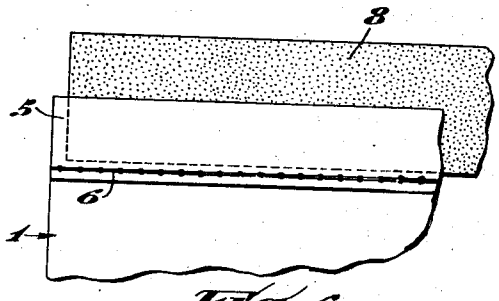


Fig. 6

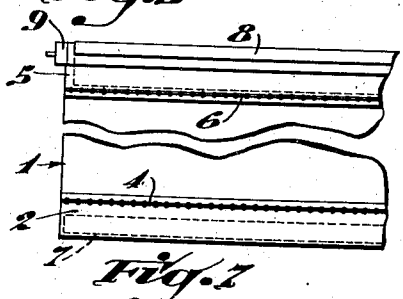


Fig. 7

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2,351,373

## REVERSIBLE WINDOW SHADE

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6 Claims. (Cl. 160—238)

This invention relates to window shades and is particularly concerned with a reversible shade, that is, a shade in which the ends may be reversed after a period of wear; the end which originally extended from the roller being attached thereto while the end which was originally attached to the roller becoming the extended end.

In order to accomplish the general purpose of the invention it is necessary to provide means for attaching an end of the shade to the roller initially in such a way that the shade end will not be marred or torn. Otherwise when the shade is reversed this end will present an unattractive and unsightly appearance. Also, it is necessary to provide means for fastening the originally extended end of the shade to the roller when the positioning of the shade has been reversed. Various means and methods have been suggested for accomplishing these purposes. One effective solution of the problem is disclosed in United States Patent No. 2,283,329 to Samuel J. Johnson issued May 19, 1942. The present invention may be considered as in the nature of an improvement in the structure of the aforesaid Johnson patent.

In the present invention the inventor has been particularly concerned with the problem of fastening the shade to the roller after the positioning of the shade has been reversed. In order that this operation may be performed quickly and effectively it is necessary that the means utilized to perform the attachment be in some way closely associated with the shade so that it will be ready at hand when needed.

The attachment means provided in the Johnson patent is an extended length of gummed tape which is associated with and attached to the end of the shade originally affixed to the roller by the stitch line which forms the hem. A second gummed tape strip separated from the first by the stitch line is used to fasten the shade to the roller in the first instance. An objection to this structure is that the attachment of a wide unused gummed tape strip adjacent the roller causes the shade to wind unevenly and become bunchy. Likewise the strip is unsightly when the shade is extended from the roller as is sometimes the case.

In the present invention I have provided what I believe to be a definitely superior disposition of the gummed tape strip which in the preferred embodiment is utilized to fasten the shade to the roller after the positioning of the shade has been reversed. I have found that this strip readily may be formed into a tube of smaller circumference than that of the interior pocket of the hem in which the stiffening slat is first inserted. This tube then may be inserted in the hem pocket between the sides of the pocket and the stiffening slat and retained there until its use is required.

Accordingly, one of the objects of the invention has been to provide a reversible window shade in which the means for fastening the shade to the roller both initially and after the positioning has been reversed are both directly associated with the shade in convenient locations.

Another object has been the provision of a reversible shade in which the means utilized to fasten the shade to the roller after the positioning has been reversed is associated with the shade at a point remote from the roller so that there will be no interference with the winding of the shade on the roller prior to the reversal operation.

Another object has been the provision of a reversible shade in which the gummed tape strip utilized to fasten the shade to the roller after reversal is associated with the hem pocket holding the stiffening slat in such a way that the gummed surfaces will not adhere to each other nor to the inner sides of the pocket prior to the use of the strip for attachment purposes.

Other and further objects and advantages will be apparent from the further and more detailed description of the invention when considered in conjunction with the drawing in which:

Figure 1 is a front elevation of an unrolled shade of the type of the invention with the central portion thereof cut away.

Figure 2 is a front elevation of a shade showing the initial attachment to the roller.

Figure 3 is a cross sectional view showing the assembly of shade and roller in attached position prior to the reversal of the shade.

Figure 4 is a front elevation of the assembly showing the step of separating the shade from the roller prior to reversal.

Figure 5 is a front elevation of the shade showing particularly the end of the shade initially extended and illustrating the step of removing the stiffening slat and gummed tape tube prior to the attachment of the shade in reversed position.

Figure 6 is another front elevation of the shade showing the upper end of the shade after reversal and illustrating the manner of attachment of the shade by the tube which in this view has been opened to form a strip.

Figure 7 is a similar view showing the shade in final position after reversal.

In Figure 1 a shade of the type of the invention is indicated generally as 1. This shade may be formed from fabric, paper or other conventional materials. A hem pocket for the reception of the stiffening slat has been formed at each end of the shade. In this view (Figure 1) the upper pocket is indicated at 2 and the stitch line by which it is formed at 4. The lower pocket is 5 and the corresponding stitch line 6. A strip of gummed tape 3 for fastening the shade to the roller initially may be integrally associated with the upper end of the shade and fastened thereto by the stitch line 4. A conventional stiffening slat outlined in dotted lines as 7 is positioned originally in the lower hem pocket while a tube 8 formed from gummed tape with the gummed side turned inwardly is inserted in the hem pocket enclosing the stiffening slat.

In Figure 2 the upper end of the shade has been fastened to a roller 9 by the moistening of the gum tape 3. As will be noted, the upper hem pocket 2 protrudes slightly but not sufficiently to interfere with the winding of the shade on the roller. As indicated in Figure 3, when the shade is wound this pocket becomes quite unobtrusive. Figure 3 also illustrates in cross section the positioning of the gummed tape tube 8 with respect to the stiffening slat 7 and the lower hem pocket 5. This tube may be a complete tube with the sides of the strip secured together or it may be simply a rectangular sheet folded lengthwise in generally tubular shape but with the side edges unsecured. The gummed surfaces are preferably turned inwardly because in this way they are positioned adjacent to the roughened wooden surfaces of the stiffening slat rather than the inner surfaces of the hem pocket. Since gummed paper surfaces do not readily adhere to roughened surfaces there should be no sticking of the inner surfaces of the tube to the stiffening slat under normal conditions even though the pocket enclosing the stiffening slat is frequently grasped manually when the shade is raised or lowered.

As shown in Figure 5 when it is desired to reverse the ends of the shade the tube 8 which contains the slat is removed from the pocket. If the tube has had its edges secured together it may be opened by cutting. Otherwise it is simply flattened out. Thereafter, as shown in Figures 6 and 7, the end of the shade originally extended is secured to the roller by means of the strip formed from the tube while, as shown in Figure 4, the strip initially used to secure the shade to the tube is torn away. If care is exercised this can be done without in any way marring the appearance of the hem pocket which was originally associated with the roller. The stiffening slat is then inserted in this hem pocket and the completely reversed shade assumes the position shown in Figure 7.

As will be apparent, a simple but effective improvement has been provided. The tube inside the hem pocket is entirely unobtrusive and does not interfere in any way with the utility of the shade. In fact, the tube has certain functional advantages in that it reenforces the hem pocket against tearing to a certain extent and also adds a degree of weight to the hem pocket which causes the shade to hang better or, alternatively, permits the use of a somewhat lighter slat. At the same time it is ready at hand and in position for use when the wear to the shade requires its reversal.

Having described my invention, I claim:

1. In a reversible window shade, a pocket for sustaining a stiffening slat formed at one end thereof and a tubular sheet member positioned within said pocket and augmenting the stiffness thereof, said tubular member being coated with adhesive on the inner surface thereof and being adapted for use in attaching the shade to a roller when it is desired to reverse the normal positioning of the shade on the roller.

2. In a reversible window shade, a hem pocket formed at one end thereof, a tubular sheet member positioned within said pocket, said tubular member being coated with adhesive on the inner surface thereof and a stiffening slat interposed between the sides of said tubular member and preventing contact between said sides.

3. In a reversible window shade a stitched hem forming a pocket at one end thereof, a gummed strip folded lengthwise in generally tubular shape positioned within said pocket with the gummed surfaces turned inwardly and a stiffening slat positioned within said fold, separating said gummed surfaces and preventing contact between them.

4. In a window shade, a shade portion, hems formed by stitching one at each end thereof for sustaining a stiffening slat regardless of which end of the shade is attached to the roller, an adhesive strip secured to the shade along one of the hem stitch lines for fastening that end of the shade to the roller and a second adhesive strip for fastening the other end of the shade to the roller, said second strip forming a tube positioned interiorly of its associated hem.

5. In a window shade, a shade portion, pockets for sustaining a stiffening slat one at each end thereof, an adhesive strip detachably secured to one end of the shade for securing that end of the shade to a roller and adhesive means for securing the other end of the shade to a roller, said means being removably positioned interior of the pocket at said other end.

6. In a reversible window shade having hem pockets formed one at each end thereof for the reception of a stiffening slat regardless of the positioning of the shade on the roller, each of said pockets being defined by a line of stitching, means for fastening one end of the shade to a roller, said means comprising an adhesively coated strip secured to the end of the shade by the stitch line defining the pocket and means for fastening the other end of the shade to the roller when the positioning of the shade has been reversed, said last named means comprising a second adhesive coated strip folded to form an elongated tube, said tube being positioned in the hem pocket at the extended margin of the shade prior to reversal and forming a reenforcing lining for said pocket, the adhesive coated side of the tube being disposed inwardly, and a stiffening slat disposed in the tube and preventing contact between the adhesive coated surfaces thereof.

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