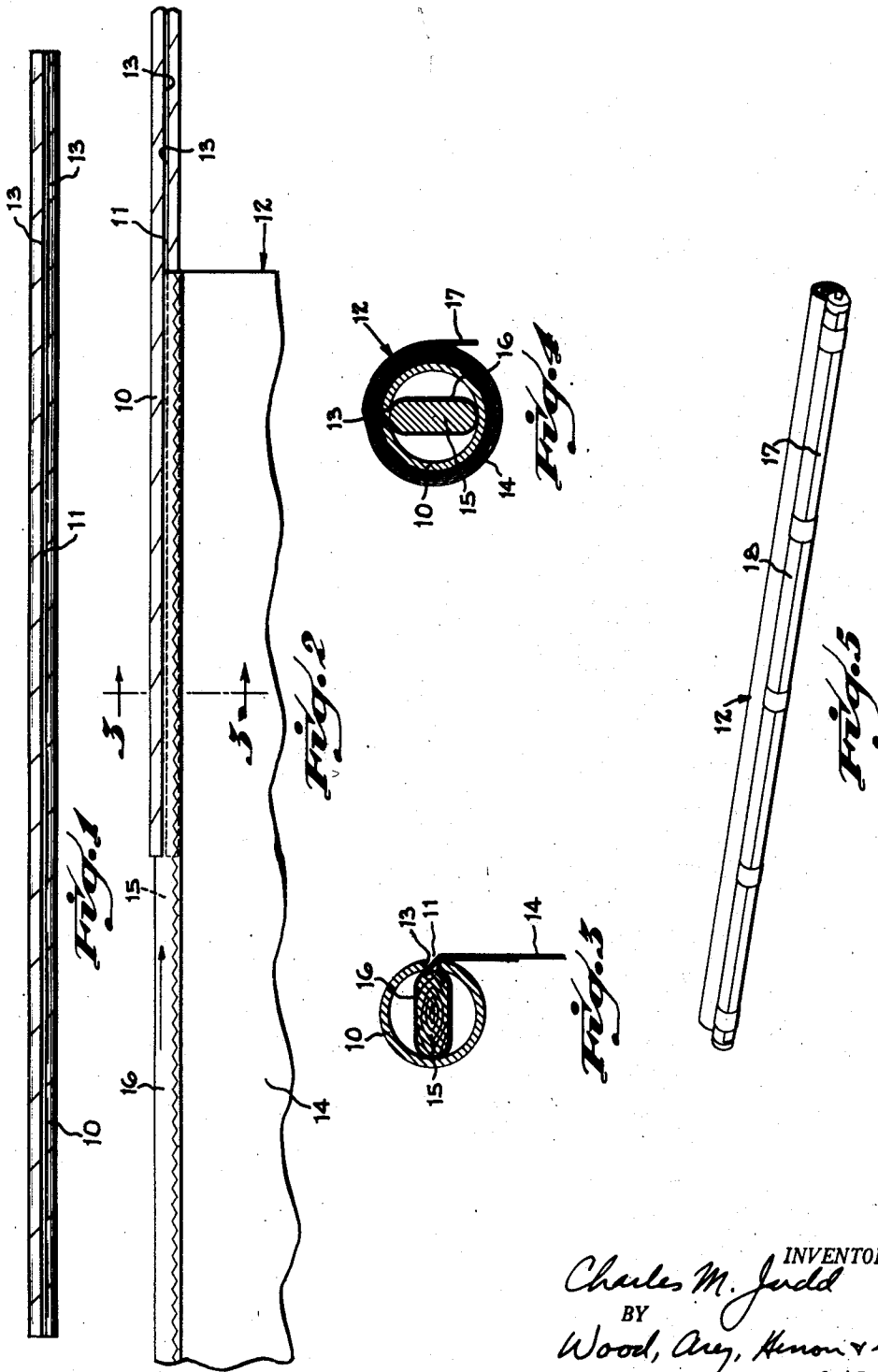


Sept. 29, 1953

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PACKAGING WINDOW SHADES
Filed Sept. 8, 1950

2,653,710



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2,653,710

PACKAGING WINDOW SHADES

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Application September 8, 1950, Serial No. 183,693

1 Claim. (Cl. 206—59)

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This relates to the packaging of window shades and is particularly directed to a novel method of packaging replacement shades so that they will remain free from wrinkles, creases and undesirable undulations.

An object of the present invention is to provide a package for replacement shades which is simple and very inexpensive.

It is further the object of this invention to provide a package for window shades which will prevent the shade from being dented or undulated in such a manner that it would have an uneven appearance when hung upon a window frame.

In general, window shades of the type to be packaged in the manner of this invention are formed of a length of sheet material which is folded over and sewn along the bottom edge to form a pocket which extends transversely of the length of shade material at one end thereof. A thin wooden or fibre stiffening strip is inserted into this pocket in order to give the bottom edge of the shade more rigidity so that the shade will hang straight and flat. The top end of the length of shade material is secured over a shade roller, around which it is wound when the shade is raised. It is the roller, with its spring mechanism, that usually represents the greater part of the cost of the shade assembly. Therefore, the shade material, along with a prefabricated lower edge stiffener, is frequently sold as a replacement unit for shades which have worn out, it being the usual practice to use the old roller again and merely fasten the new shade over it.

In recent years, window shades fabricated of plastic composition sheet material, such as vinyl resin, have become popular on account of their durability, pleasing appearance and low cost. However, plastic sheet materials possess an undesirable characteristic which tends to limit their utility in this field, in that they have a pronounced tendency to set if they are dented, bent or warped. This means that if the shade material is creased, or folded over any sort of an irregular form, the sheet itself will retain conforming creases or undulations which are almost impossible to remove. When such fold marks and undulations exist, the shade is not attractive in appearance, and does not hang properly when it is installed upon a window frame.

In the past it has been customary to merely roll replacement shade material upon itself, around the stiffening rod, and then to place a paper wrapper around the outer periphery of the rolled material. When cloth or paper are used as the shade material, this method proves

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fairly satisfactory. However, when a plastic shade is rolled over a thin stiffening strip, each convolution of the sheet becomes set or dented to conform to the shape of the strip, and when the shade is unrolled, it has a very unsightly undulated appearance and cannot be hung properly.

Another method which has been employed in packaging shade replacements is to roll the shade over a tube with the pocket and stiffening strip forming the outermost convolution. There are, however, two difficulties inherent in this method of packaging. In the first place, the outer convolutions of the shade, the most likely to be soiled, are formed from the lower portion of the shade which is the portion most visible in use. Secondly, it is difficult to align the shade upon the tube so that it can be rolled properly to form a cylinder, and even when the shade is properly rolled, the pressure of the stiffening strip against the rolled shade forms a series of dents across the shade.

The present invention in seeking to avoid these difficulties, has as one object the provision of a container which automatically aligns the shade so that it may be properly rolled upon it.

It is an additional object of this invention to provide a package from which the shade may be readily transferred onto a roller, the container providing a means to help align the shade and roller properly.

These and additional objects and advantages of the invention will become apparent from a further consideration of the specifications in conjunction with the drawings in which:

Figure 1 represents an elevational view of the container showing the longitudinal slot.

Figure 2 is a view similar to Figure 1 showing a window shade partially inserted into the container.

Figure 3 is a cross-sectional view taken along line 3—3 of Figure 2, showing the shade partially inserted.

Figure 4 is a cross-sectional view similar to Figure 3 but showing a shade completely wound about the container.

Figure 5 is a perspective view showing a method by which the shade may be aligned over a roller as it is removed from the container.

The container consists simply of a hollow tube 10 provided with a slot 11 which extends longitudinally along its entire length. The tube 10 may be constructed from cardboard, paper or any similar material which is sufficiently stiff to maintain its form so as to permit the shade 12 to be smoothly rolled around the tube. As

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shown, the length of the tube 10 is approximately equal to the width of the shade but if desired, the tube can be made longer so as to protect the edges of the shade from scuffing or crimping. After forming, the tube is slit longitudinally along a line parallel to the tube axis. Due to the resiliency of the cardboard there is a tendency for the two edges 13—13 of the slot to separate slightly from each other thus forming a space through which the shade material 14 can be readily passed but small enough to prohibit the passage of the stiffening strip 15. In place of first forming a tube and then slitting it, a strip of cardboard or paper may be curled longitudinally into tube configuration, but it is desirable, if this is the case, to provide a tube of circular or regular contour in cross-section.

To package a shade in a container of this type, the pocket 16 containing the stiffening strip 15 is inserted into the tube 10 and the balance of the shade 12 allowed to extend outwardly through the slot 11. The shade may then if necessary be gently pulled outwardly to cause the stiffening strip 15 to come into contact with the edges 13—13 of the longitudinal slot 11, and thus align the strip 15 with the axis of the tube 10 and thereby position the shade so that it will roll evenly over the tube, each successive convolution falling exactly over the one preceding it. Finally, the outermost convolution 17 is secured to prevent the rolled sheet from unrolling, as by the application of a paper wrapper or band. An outer protective covering, not shown, such as a cardboard box may be provided to prevent any soilage of the shade.

It will be noted that when a shade is packaged in this manner there are no folds or creases and the rolling is done over a smooth surface. Thus no marks or undulations are formed in the shade which would affect its appearance when it is removed from the package.

Furthermore, the lower portion of the shade, which is the most visible, is placed upon the interior of the roll and is thus least likely to become soiled or defaced.

Finally, it is apparent that the shade may be readily removed from the container, by simply unrolling it whenever it is desired to do so. By placing the rolled shade 12 longitudinally adjacent the roller 18 to which it is to be fastened, the roller axis is aligned in parallelism with the axis of the tube 10, and hence, by merely fastening the outer convolution 17 of the shade 12 to the roller 18 when the tube 10 and roller 18 are so positioned, the shade will be automatically aligned upon the roller in such a manner that it will hang in a true vertical plane, without bias.

While this invention has been described particularly with respect to the packaging of replacement shades having stiffening strips pre-

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inserted in the pockets thereof, replacement shades without stiffening strips may be packaged in the same manner as those with stiffening strips since the overfold of material forming the pocket creates enough of a bulge that the pocket once inserted into the tube will be constrained by the edges of the slot. Hence, the replacement shade material alone may be sold with the stiffening strip pocket formed but without a stiffening strip inserted therein. In such event, the householders reuse the stiffening slot from the old shade which is being replaced.

Furthermore, while this invention has been described particularly with respect to the concept of packaging plastic shades, it will be understood that it is also useful for packaging shades formed of other materials and many other similar products as well.

Having described my invention, I claim:

20 A packaged window shade comprising an elongated rigid fibrous tube having two ends, a central recess and a narrow longitudinal slot therein, said slot extending lengthwise of said tube from one end of the tube to the other end of the tube, a window shade including a length of window shade material having a pocket formed at one end thereof, a stiffening strip inserted in said pocket, the opposite end of said shade material being adapted for secureance to a shade roller, 25 said pocket being disposed within said tube and the balance of said shade material extending through said slot, said slot being wider than the thickness of said shade and narrower than the width of said stiffening strip whereby said slot is 30 effective to constrain said pocket against lateral escape from said tube, the portion of said shade material disposed exteriorly of said tube being wound in successive convolutions about the tube whereby the free end constitutes the outermost convolution and is thereby accessible for direct 40 attachment to a shade roller without unwinding the balance of the length of material until attachment is completed.

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