Nov. 2, 1965 T. H. NEAL, JR., ETAL 3,215,334

PACKAGE OPENER

Filed Nov. 14, 1963 2 Sheets-Sheet 1

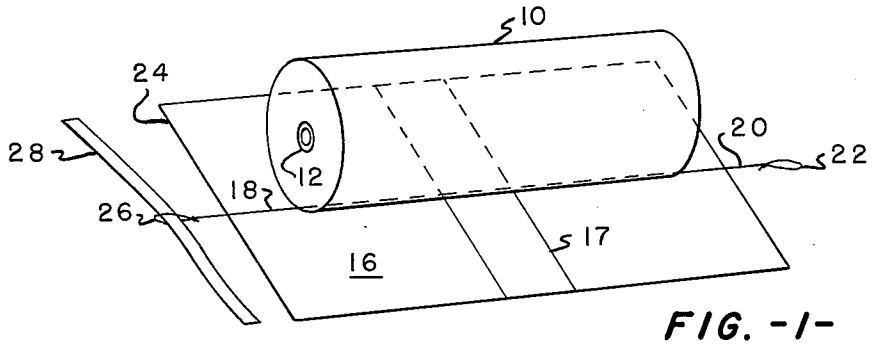


FIG. -1-

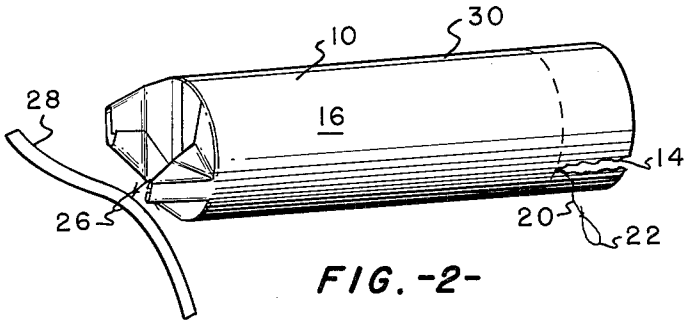


FIG. -2-

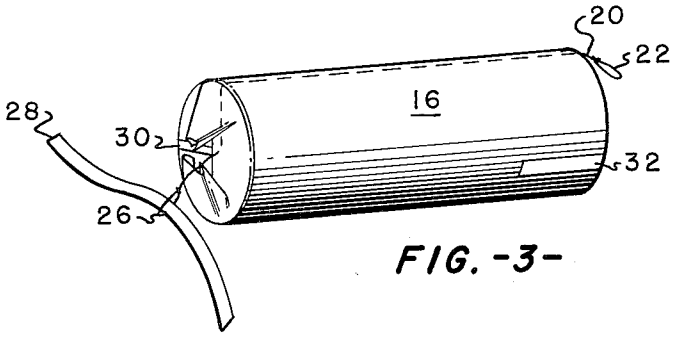


FIG. -3-

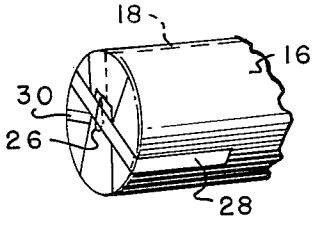


FIG. -4-

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PACKAGE OPENER

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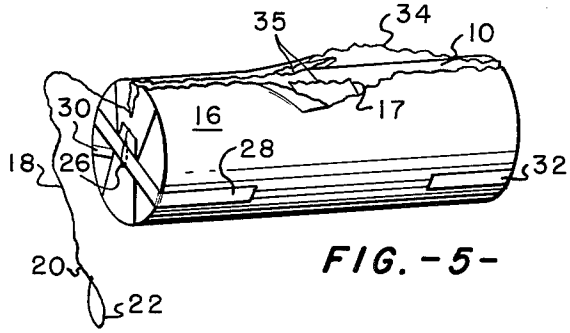


FIG. -5-

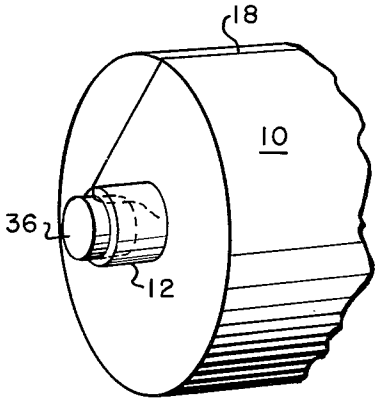


FIG. -6-

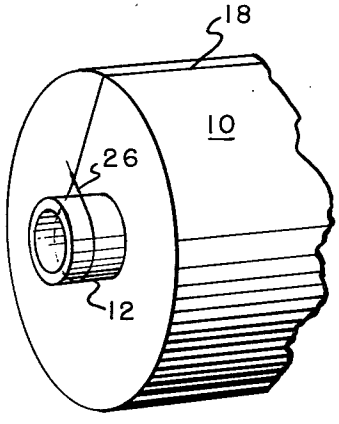


FIG. -7-

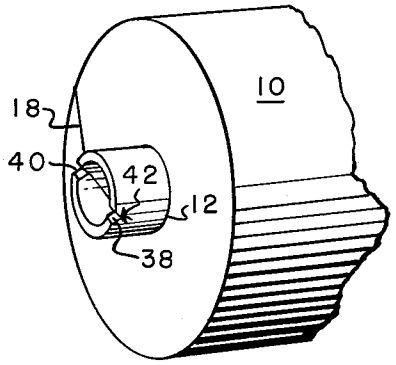


FIG. -8-

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3,215,334

PACKAGE OPENER

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1 Claim. (Cl. 229—51)

This invention relates generally to the packaging of cylindrical shaped objects and more particularly to a readily openable roll of packaged fabric.

In the textile industry, fabric is normally shipped from the mills to the consumer in elongated cylindrical rolls. To protect the roll of fabric it is necessary to wrap the roll in a heavy paper or the like and seal same so that damage and soilage to the fabric is maintained at a minimum. It has been found that when the fabric roll is properly wrapped and sealed that the consumer has to spend considerable time and effort in removing the outer paper wrapping before the fabric enclosed therein can be used. Furthermore it has been found on numerous occasions that the fabric contained within the wrapping was soiled or damaged indicating that the fabric roll had been opened and rewrapped by some unauthorized personnel prior to the receipt of the fabric by the consumer and after shipment by the manufacturer. In cases such as this the manufacturer has to stand the loss or replace the fabric roll since it is almost impossible for the manufacturer to prove that the fabric roll was not wrapped in this damaged or soiled condition and that the package had not been rewrapped.

Therefore, it is an object of this invention to provide a wrapped fabric roll which can be readily opened with a minimum effort.

Another object of this invention is to provide a wrapped fabric roll which incorporates a quick opening cord member within the package.

A still further object of the invention is to provide a wrapped fabric roll in which a cord or like member is sealed between the fabric and the wrapping and has an end projecting therefrom which will readily sever the paper wrapping to expose the fabric when it is ready for use.

A fourth object of the invention is to provide a wrapped fabric roll which will indicate whether the fabric roll has been rewrapped after the initial wrapping.

Other objects and advantages of the invention will be clearly apparent as the specification proceeds to describe the invention with reference to the accompanying drawings, in which:

FIGURE 1 is a perspective view of the fabric roll and wrapping paper before the roll is wrapped;

FIGURE 2 is a perspective view of the fabric roll wrapped prior to sealing of the ends;

FIGURE 3 is a perspective view of the wrapped fabric roll prior to sealing of one end;

FIGURE 4 is a partial perspective view of the end of the fabric roll shown unsealed in FIGURES 2 and 3;

FIGURE 5 is a perspective view of the wrapped fabric roll after the rip cord has severed the wrapping; and

FIGURES 6–8 are partial perspective views of modified methods of securing the end of the rip cord to the inner tubular fabric support member.

Looking now to FIGURES 1–5, the preferred form of the invention is shown with the reference numeral **10** designating an elongated roll of fabric rolled onto a hollow tubular support member **12** of cardboard or like material. In FIGURES 1–5 the support member **12** is shown flush with the ends of the fabric roll. The preferred embodiment of FIGURES 1–5 and that of FIGURE 6 can be employed when the tubular member **12** is flush with the fabric roll **10** or when the tubular member **12** projects out one end or the other or both of the fabric roll **10**. The embodiments of FIGURES 7 and 8 require that the tubular member **12** project out of at least one end of the fabric roll.

The first step of wrapping the fabric roll **10** is shown in FIGURE 1. The fabric roll is located on the wrapping paper **16** with the indicating strip **17** and the rip cord **18** located between the roll **10** and the wrapping paper. Rip cord **18** of rope, twine, or other suitable material projects outside of both ends of the wrapping paper **16**. Preferably portion **20** of rip cord **18** will have a loop formed thereon for grasping purposes. The other end of rip cord projecting beyond the edge **24** of the wrapping paper **16** will also be formed in a loop **26**. Within the loop **26** is a strip of sealing tape **28** of suitable material.

Looking now to FIGURE 2 it can be seen that the wrapping paper is folded around the fabric roll **10** and the overlapping longitudinal edge is sealed by a sealing strip **30** of any suitable material. Wrapping paper **16** is torn along the longitudinal axis of the fabric roll **10** to a point substantially even with the roll of fabric to provide an opening **14** to allow the rip cord **18** to project outwardly from the package so that the loop **22** can be readily grasped. As shown in FIGURE 3 the paper overlapping the right hand end is then folded in any suitable manner and the folds are secured in position by sealing strip **32** leaving the loop **22** projecting out of the package. The left hand end is also folded leaving the loop **26** projecting therefrom.

To complete the wrapping, the tape **28** within the loop **26** (FIGURE 4) is placed across the folds of the left hand end thereby sealing the left hand of the package and securing the end of the rip cord **18** to the package. The slack in the rip cord **18** is taken up by merely pulling on the loop **22** in a direction away from the left hand of the package. If desired the loop **22** can be temporarily taped or attached to the package so that it does not become entangled during shipment.

Indicating strip **17** is also of paper or other suitable material which can be readily severed. Printed or marked on indicating strip is a design or code which can not be re-aligned or re-constructed once the indicating strip **17** has been severed. Indicating strip **17** is located in such a position between the wrapping paper and the rip cord **18** such that the indicating strip **17** will be severed whenever the wrapping paper **16** is severed. It is necessary that the indicating strip be so located that upon severance of the wrapping paper **16** the indicating strip will also be severed. The particular shape, size, and type of indicating paper does not form part of this invention. Furthermore, the indicating paper **17** can be secured in position in any suitable manner. In the preferred form of the invention the indicating paper **17** will be rolled up with the wrapping paper **16** and thereby held in position when the wrapping paper **16** is sealed.

Once the indicating strip **17** has been severed it would be difficult for anyone to replace or re-align such strip since it is proposed to place thereon a design or code which will not lend itself for re-alignment or duplication. In this manner, the manufacturer and/or the customer can tell whether the fabric roll has been rewrapped after the initial wrapping by the manufacturer.

To open the package, as shown in FIGURE 5, the consumer grasps the loop **22** of the rip cord **18** and pulls it toward the loop **26** which is secured to the package thereby slitting the paper wrap **16** on the package along a line **34** and the indicator strip on a line **35** to expose the fabric roll underneath.

FIGURES 6–8 show modified ways to secure one end of the rip cord **18** in order to properly slit the paper wrapping. In FIGURES 6–8 the paper wrapping and indicat-

ing strip **17** has been omitted for the sake of clarity since the secured one end of the rip cord will be within the paper wrapping.

As pointed out hereinbefore the modification shown in FIGURE 6 does not necessarily require the tubular member **12** to project out beyond the fabric roll **10** but the modification of FIGURES 7 and 8 do require at least one end to project out beyond the fabric roll **10**. In the modification of FIGURE 6 the end of the rip cord **18** is secured to the tubular member **12** by inserting the loose end into the tube and inserting a plug member **36** of any material into the end of the tube **12** to secure the rip cord therein. The plug member **36** can assume most any shape as long as it secures the rip cord in the tube **12**.

In the modification of FIGURE 7 the loop **26** is telescoped over one end of the tube **12** and pulled tight.

In FIGURE 8 two notches **38** and **40** are cut into the tube, the end of the cord **18** is knotted and the rip cord is placed in the notches and pulled tight so that the knot will engage the tube member **12**. If desired, a single notch can be used and the knot **42** will then be pulled tight against the inner surface of the tube **12**.

The modification of FIGURES 6–8 are merely illustrative since it is within the scope of the invention for the rip cord to be placed within the tube member **12** and sealed thereto by glue, tape, or other types of mechanical fasteners such as staples, etc.

The herein disclosed wrapped fabric roll has many obvious advantages. The fabric is tightly and securely wrapped so that it will not be damaged during shipment but at the same time is readily accessible to the consumer by the use of the rip cord. Further, the installation of the rip cord is simple in design and can be accomplished with a minimum of time and effort. Furthermore, the novel inclusion of the indicating strip provides a securely wrapped package which can not be opened and rewrapped without the knowledge of the consumer and/or manufacturer.

Although we have described in detail the preferred embodiments of our invention, we contemplate that many changes may be made without departing from the scope or spirit of our invention, and we desire to be limited only by the claim.

That which is claimed is:

A wrapped package comprising: a support member, a roll of material wound on said support member, said support member being substantially flush with the ends of the material wound thereon, a wrapping means wrapped around said material to prevent damage thereto, a rip cord located between said material and wrapping means, said rip cord having two ends with one of said ends projecting out of one end of said package, the other end of said rip cord projecting outwardly of the other end of said package and being formed into a loop, said wrapping means being folded on the ends of said package, and securing means including a sealing tape in said loop and attached to said package over said folds to seal said folds and to secure said loop to said package whereby said rip cord will tear said wrapping means when said one end of said rip cord is pulled toward said other end.

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