PACKAGING METHOD AND MEANS
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This invention relates to an improved method of packaging goods, and to packaging means for carrying the invention into practical effect.

The principal object of the invention is to provide an improved packaging method and means whereby a multiplicity of goods of widely varying nature may be packaged in a neat effective and expeditious manner.

Another object of the invention is to provide improvements in packaging, employing means adapted to be brought to use in a bulk form, as distinct from known packaging means employing separate enclosures, such as bags, cartons, boxes and the like.

Other objects, features and advantages of the invention will be made apparent hereinafter.

According to the invention, tubular wrapping material, such as paper or sail reinforced laminated paper, in flattened form is wound into a roll which is rotatably supported allowing the free end of the material to be drawn off the roll in desired lengths, the said desired length of material being unwound from the roll and the article, material or goods to be packaged and are inserted in the drawn off length of packaging material which is severed from the roll, one or both ends of the length being sealed off either before or after the length is severed from the roll, whereby the article, material or goods are or are packaged in a neat, effective and expeditious manner.

The packaging medium comprises a roll of tubular flattened material, such as Kraft paper or any other suitable material, preferably wound into a roll about a hollow core adapted to be rotatably accommodated on a suitable support.

In one form of the invention, the packaging medium is in the form of a plain, flattened tube, while in a modified form, the packaging medium comprises a flattened tube of at least two thicknesses formed by concentric tubes secured together, for instance adhesively in a number of lines extending longitudinally of the packaging medium.

In a further modified form of the invention the flattened tubular medium is pleated or gusseted on two opposite sides, so that when removed from the roll and expanded, a severed length of the packaging medium assumes a shape square or oblong in cross-section.

Lines of printing or of adhesively applied continuous, printed tape may be applied to the packaging medium.

Lengths of the packaging medium parted from the roll may be secured or sealed by staples, adhesive tape, or where made from thermoplastic film, heat sealing means may be employed, as may any other suitable sealing or securing means.

The packaging medium comprising two or more tubular thicknesses one side another and joined in a number of longitudinal lines, can be opened out to provide a number of separate co-extensive compartments, each adapted to receive a separate item to be packaged.

A clear understanding of the invention may be obtained from a consideration of the accompanying diagrammatic drawings.

FIGURE 1 is a diagrammatic presentation of a roll of packaging material and mounting means therefor.

FIGURE 2 is a side sectional elevation showing one form of section parted from the roll and open to contain goods.

FIGURE 3 is a section through a multi-layer packaging medium, showing as an example, four points of adhesion between adjacent layers.

FIGURE 4 is a section through the construction of FIGURE 3 when flattened.

FIGURE 5 is a section showing the construction of FIGURES 3 and 4, when opened out to form separate compartments.

FIGURE 6 is a section showing a pleated or gusseted tubular packaging medium.

FIGURE 7 is a section showing the pleated or gusseted tubular medium opened out to form a square or oblong package.

Referring to the drawings, the reference 8 indicates the flattened tubular packaging medium drawn off the roll 9 which is shown rotatably mounted in a suitable support 10, a guillotine or the like severing blade being indicated at 11, which may or may not be provided.

FIGURE 2 illustrates a side section of the packaging medium, opened out to receive an article, material or goods, one and being shown secured or sealed.

FIGURES 3, 4 and 5 illustrate a packaging medium comprising at least two concentric layers of material, indicated by the reference numerals 8c and 8d, adhesively secured together longitudinally at four points 12, 13, 14, and 15.

It is of course obvious that the layers may be secured together longitudinally in more or less places.

As shown in FIGURE 5 the multi-layer medium may be opened out to form separate compartments 16 which extend for the whole length of the medium and of any length severed from the roll.

In FIGURES 6 and 7 there is illustrated another form of packaging medium, wherein the tubular material 8 is provided with oppositely disposed pleats or gussets 17, which enable a severed length of the packaging material to be opened out to a square or oblong form.

In carrying out the method of the invention employing the packaging means herein described and illustrated, the free end of the tubular material is drawn off the roll to a desired length, the articles, material or goods to be packaged are inserted in the drawn off length of tubular material, which is severed from the roll, and the ends of the severed length are closed and/or sealed to enclose the packaged article, material or goods, in a neat, effective and expeditious manner.

I claim:

1. Fully-formed packaging means adapted to contain simultaneously a plurality of different goods and comprising flexible tubular material in flattened form wound into a roll adapted to be rotatably supported to pay out the flattened tubular material to receive the goods to be packaged in predetermined lengths of said tubular material, said flattened tubular material having at least two concentric plies defining at least two concentric tubes directly secured to each other along a plurality of lines extending longitudinally of the wound tubular material, whereby said tubular material is adapted to be opened into a plurality of separate co-extensive longitudinally-disposed compartments each adapted to receive goods to be packaged.

2. Fully-formed packaging means comprising flexible tubular material in flattened form wound into a roll adapted to be rotatably supported to pay out the flattened tubular material to receive the goods to be packaged in predetermined lengths of said tubular material, said flattened material having at least three plies in
concentric relationship with the inner plies defining within the space enclosed by the outermost ply, a plurality of longitudinally extending chambers of generally the same cross sectional area, said second ply being secured directly to the outermost ply, and said third ply being secured to the second ply along a plurality of lines extending longitudinally of the wound tubular material, whereby said tubular material is adapted to be opened into a plurality of separate coextensive longitudinally-disposed compartments each adapted to receive goods to be packaged.

References Cited in the file of this patent

UNITED STATES PATENTS

1,158,581 Swift Nov. 2, 1915
1,894,115 Murphy Jan. 10, 1933
2,133,122 Swain Oct. 11, 1938
2,450,995 Roos Nov. 18, 1947
2,639,566 Blessing May 26, 1953
2,759,648 Piazze Aug. 21, 1956

FOREIGN PATENTS

330,182 Italy Oct. 7, 1935