Jan. 19, 1937. R. S. DWIGHT 2,068,167

BATTING PACKAGE

Filed May 19, 1934

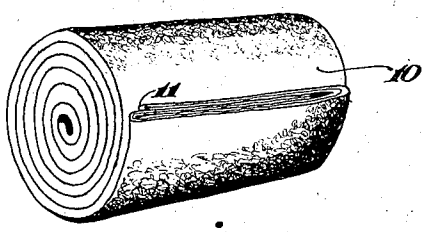


Fig. 1

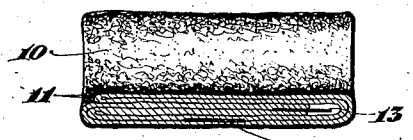


Fig. 3

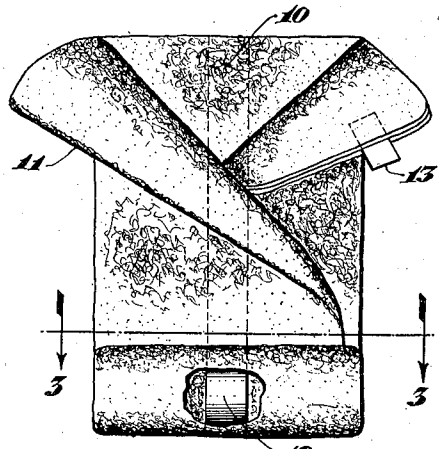


Fig. 2

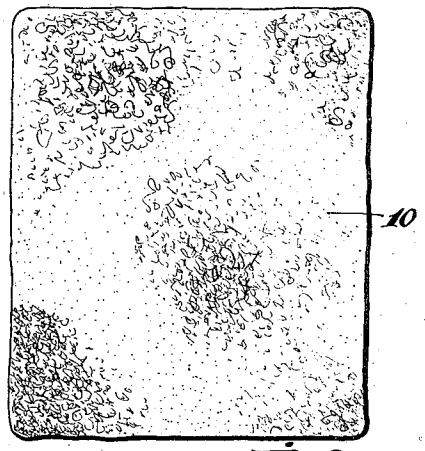


Fig. 8

Fig. 5

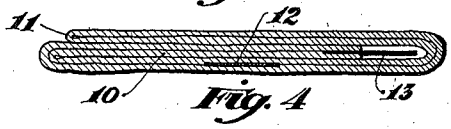


Fig. 4

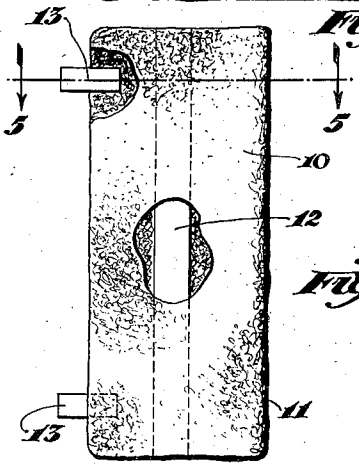
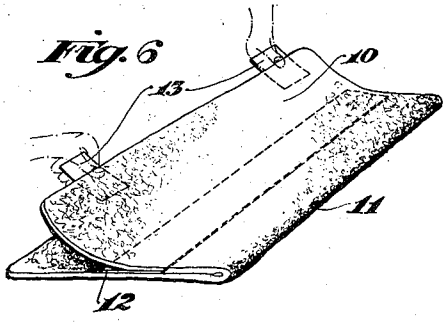


Fig. 7

Fig. 6



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BATTING PACKAGE

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3 Claims. (Cl. 206—46)

This invention relates to packaging cotton batting or like material and to a method of constituting such packages. The general type of package to which this invention is directed is one in which the batting of large sheet dimensions is folded and rolled into a bolt to compact the same.

Batting sheets of the type in question are largely sold to individuals, usually women of limited means, who utilize them as the foundation for quilts which they make in ther own homes. When sold, the batting sheet is ordinarily the exact size of a full sized quilt. If the batting is torn in unfolding it, or if a portion of one layer adheres to another, it is difficult if not impossible to make a satisfactory quilt, and there is considerable possibility that the whole sheet of batting will be rendered useless for the purpose intended.

Unglazed batting to which this invention is particularly directed has a very pronounced tendency to mat when the layers are folded one over another. At the same time, however, it is commercially necessary to fold, roll or otherwise compact the individual batting sheet in order that it may be enclosed in such manner as to obtain a package of size and shape convenient for handling by the retailers and individual purchasers.

There are, therefore, two aspects to the problem of packaging. In the first place, it is necessary to fold and roll the batting in such a way that there will never be any tearing or adherence when the package is opened and the batting unrolled and unfolded by an ordinarily careful person. In the second place, it is necessary to provide a package of sufficiently small size and conveniently shaped contour that it can be readily handled by an individual—an ordinary user.

The objects of my invention are to provide a method of folding large sheets of cotton batting to constitute a well formed conveniently sized package for merchandising, and to provide means whereby the layers or folds can be readily identified and separated.

Various other features and advantages will be more fully set forth in the description of the accompanying drawing forming part of the specification, in which:

Figure 1 is a perspective view of a finally prepared package or bolt.

Figure 2 is a plan view of an overlapped double layered sheet being rolled, the edges of the pad being spread apart to distinguish the method of overlapping.

Figure 3 is a cross sectional view taken on the line 3—3 showing the pad partially rolled.

Figure 4 is a cross sectional view showing the relation of the folded portions of a sheet prior to final rolling.

Figure 5 is a cross sectional view through a double layered initially folded sheet prior to overlapping.

Figure 6 is a perspective view showing the use of the finger tabs in separation of the layers.

Figure 7 is a plan view of the sheet after initial folding showing the position of the longitudinal strip and the finger tabs when used.

Figure 8 is a plan view of a sheet in its initial unfolded stage.

In practicing my invention a continuous sheet or length of cotton batting 10 is first folded equally upon itself to provide a two-ply structure, having a folded edge 11 and mating marginal raw edges, there being interposed between the layers thus produced a continuous separator strip of paper 12 or like material along a longitudinal line and preferably centrally of the width of the laps. The half width double layer is then lap folded from opposite sides substantially into thirds, as disclosed in Figure 4, the portion terminating in the folded edge 11 being superimposed over the portion terminating in the raw ends, thus housing or enclosing the raw edges, the lapped length having folded opposite edges.

The lapped double layered continuous sheet is now parted into desired lengths and the length largest in dimension is rolled or folded into a bolt as shown in Figures 1, 2, and 3.

The continuous web may, however, be of a mattable material, for instance, cotton batting as differentiated from glazed cotton batting. When, in packaging, a sheet of such loosely combined fibrous material is folded upon itself, the loosely associated fibers of the contacting layers tend to co-mingle and mat, the individual layers losing their identity at the interface. A distinct separation of the layers is also maintained along the margin of the lapped raw edges of the sheet, preferably by transversely extended tabs 13 of paper or like flexible material. The tabs 13 are preferably of a length to project inwardly from the edge of the folded sheet a distance to enable efficient separation of the adjacent layers and to extend outwardly from said edge for an accessible finger hold. The double folded sheet with the projecting tabs is

now overlapped or lap folded in substantially thirds as before disclosed with the folding edge 11 being the superimposed portion so that the projecting ends of the tabs are enclosed and protected against tearing or displacement when the sheet is rolled or folded into bolts.

The sheet may be folded in various styles, the size of sheet and width of package desired governing the number of folds. The essential characteristics, however, are in providing a separator tape or strip between the layers of the primary fold, preferably longitudinally of the fold and midway of the double width, and tabs extending transversely to the line of fold and between the meeting surfaces at the raw edges of the layers formed by folding. The tabs and tape form a definite demarcation for the adjoining surfaces of the layers for all of the coinciding raw edges. The layers mat more readily at the raw edges, making separation difficult.

It is very desirable to have the sheet of perfectly even thickness which is easily destroyed from any stretching pull exerted to separate the layers. Advantage is also obtained in the preferred manner of lap folding the double width, produced by the primary fold, by superimposing the fold with the longitudinal fold edge over the fold with the longitudinal raw edges and extending tabs, to enclose the same and offsetting the adjoining fold edges as shown for the left side in Figure 4 as a fold edge provides a definite line of demarcation of the layers, the offsetting making the same readily accessible for separation, and when rolled into a bolt only fold edges are exposed for the opposite ends of the bolt.

In unfolding the completed package prepared in accordance with this invention, there is never any occasion to grasp the raw edge of a single sheet unless there is already a tab or strip separation between that sheet and the one underlying it. To illustrate this, it might be noted that there are three distinct separations which must be accomplished before the unrolled sheet is completely unfolded. The first separation is accomplished by lifting the double folded edge 11, which can be readily grasped and consequently presents no particular problem. The second separation is accomplished by grasping the double raw edges enclosing the separator tabs. In the third separation which is by far the most difficult, it would ordinarily be necessary to grasp a free edge, but this action is very much facilitated by the separating tabs 13, which chart the line of demarcation between the layers and assist in starting the separation and in maintaining it accurately after it has been started. When the separation has reached the approximate center of the sheet, the paper strip 12 becomes of material assistance.

Having described my invention, I claim:

1. The method of packaging a sheet of cotton battling into a roll, said method comprising folding said batting sheet substantially in half to obtain a marginal folded edge and marginal raw edges, interposing a separator strip intermediate the layers so constituted, interposing a plurality of fingerhold separator tabs spaced at intervals between the layers of the over-fold sheet at the joining raw edges, then folding said raw edges enclosing said separator tabs toward said marginal folded edge, then folding said marginal folded edge over said raw edges and concealing them; then rolling the folded bundle upon itself to compact the same into a roll having only folded and not raw edges exposed.

2. The method of packaging unglazed sheet cotton batting approximately quilt size into a roll, said method comprising first folding said sheet upon itself, inserting a separator strip between the layers of the fold, inserting a plurality of fingerhold separator tabs between the raw edges resulting from the first fold, then folding the side containing said raw edges and fingerhold separator tabs toward the folded edge resulting from said first fold, then folding the side containing said folded edge over said raw edges, concealing the said raw edges, then coiling the folded bundle into a roll, whereby each layer of the batting will be separated from the next adjoining layer by a separator element or is separable therefrom by manipulation of a folded edge or double raw edges, thereby avoiding adherence of the layers and tearing of the sheet when it is being unfolded.

3. A package of cotton batting comprising a sheet of batting approximately quilt size folded upon itself substantially in half, then substantially in thirds with the raw edges resulting from the first fold disposed beneath and protected by the fold edge resulting from the first fold, said folded bundle being then coiled into a roll, a separator strip being located intermediate the layers constituted by the first fold and a plurality of separator tabs intermediate the raw edges resulting from the first fold.

RUSSELL S. DWIGHT.