

J. DUNFEE.

WRAPPER.

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1,025,457.

Patented May 7, 1912.

FIG. 1

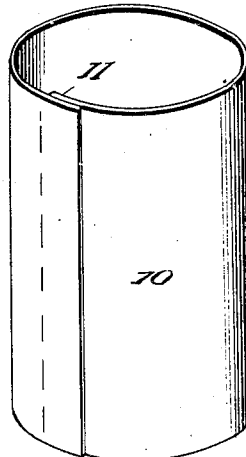
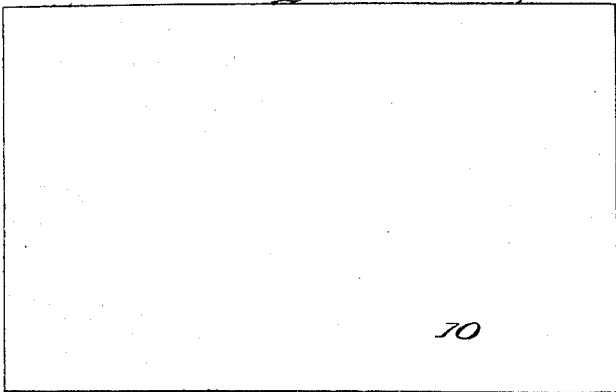


FIG. 3

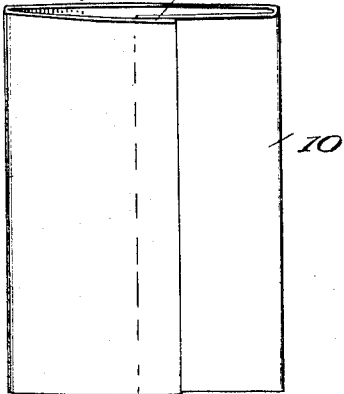


FIG. 4

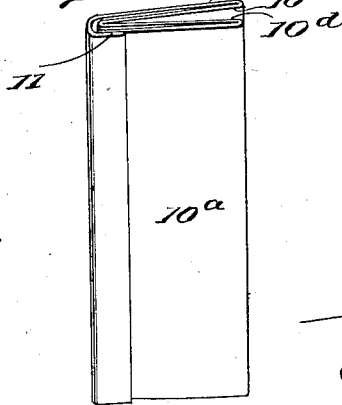


FIG. 2

FIG. 5

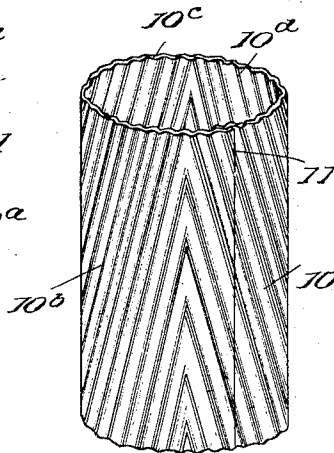
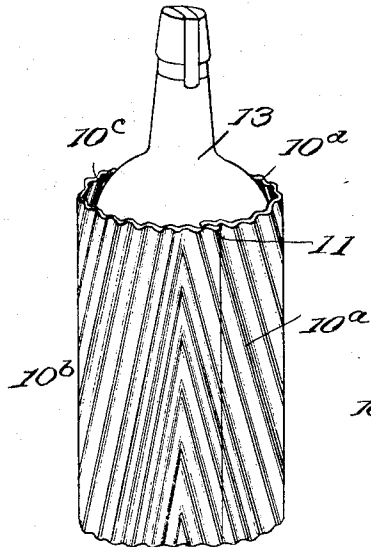
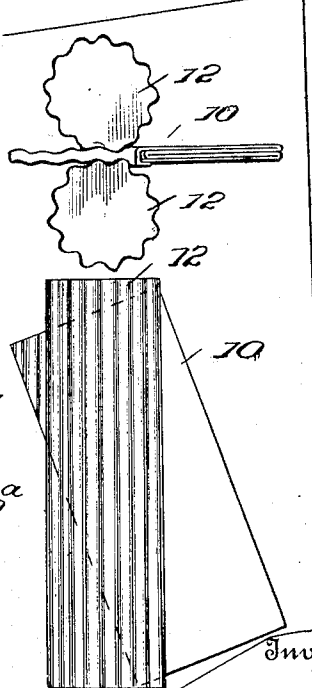


FIG. 6

FIG. 7

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JESSE DUNFEE, OF COSHOCTON, OHIO.

WRAPPER.

1,025,457.

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To all whom it may concern:

Be it known that I, JESSE DUNFEE, a citizen of the United States, residing at Coshocton, in the county of Coshocton and State of Ohio, have invented certain new and useful Improvements in Wrappers, of which the following is a specification.

This invention relates to wrappers for fragile articles and more particularly to an improved method of forming the same.

The object of the invention is to produce a wrapper which, when positioned in quantities in proximity to one another, will not interfit, but will be held apart so as to provide an efficient protector for the article housed thereby.

The method consists in forming a hollow wrapper with diagonal corrugations or crimps in the sides thereof so that when two or more of the wrappers are brought together, the corrugations or crimps thereof will intersect and thus be prevented from intermeshing.

The method further consists in folding a blank and crimping the folded blank to form corrugations in the plies thereof extending at an angle to the edge of the adjacent fold.

For a full understanding of the invention reference is to be had to the following description and accompanying drawing in which:—

Figure 1 is a plan view of the blank from which the wrapper is formed. Fig. 2 is a view of the blank when curved into cylindrical form. Fig. 3 is a view of the blank flattened. Fig. 4 is a view of the same when folded. Fig. 5 discloses the manner in which the blank is passed through the corrugated rollers. Fig. 6 is a perspective view of the complete wrapper. Fig. 7 is a similar view disclosing a bottle as applied to the same.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawing by the same reference characters.

Referring to the drawing the numeral 10 designates a blank which is formed from strawboard, paper, cardboard, or the like, and which is rectangular in form as is disclosed to advantage in Fig. 1. The blank 10 is rolled into cylindrical form, as is disclosed in Fig. 2, having the free ends thereof overlapped as at 11. The overlapping

ends 11 are held together by an adhesive substance, or the like.

In forming the wrapper from the blank, after the blank has been rolled into a cylinder, as is disclosed in Fig. 2, the blank is flattened, as shown in Fig. 3, when it is doubled or folded upon itself longitudinally as shown in Fig. 4. When the blank is folded as disclosed in Fig. 4 it forms four thicknesses or plies 10^a, 10^b, 10^c and 10^d, which are superimposed and constitute the sides of the wrapper when completed.

In Fig. 5 is disclosed a pair of corrugating rollers 12 which are fluted longitudinally and arranged to intermesh. The blank, when folded to provide four thicknesses or plies as is disclosed in Fig. 4, is passed between the rollers 12 at an angle of from thirty to sixty degrees to the longitudinal axis of the rollers so as to provide a series of diagonal corrugations in the four sides of the wrapper. After the blank has passed through the corrugated rollers 12 it is unfolded to assume the cylindrical form which is disclosed in Fig. 6. It will be noted that the plies 10^a and 10^b have corrugations running at substantially opposite angles and that the corrugations meet at the common marginal edge or line of fold of the sides. In a like manner it will be noted that the plies 10^a and 10^d are corrugated oppositely and have their corrugations running in an opposite direction to their respective adjacent plies 10^b and 10^c.

From Fig. 7 it will be observed that the improved wrapper 10 is positioned about the fragile article, such as a bottle 13, in the usual manner. It will be noted that in this method of forming the wrapper that it is necessary to pass the blank between the corrugating rollers 12 but once to effect the crimping of the four sides of the wrapper and to dispose the corrugations thereof in opposite angles.

By providing a wrapper with a number of sides having corrugations lying in different angles to one another, the wrapper when disclosed between a number of like wrappers, can be easily placed to dispose the corrugations of the adjacent wrappers in cross relation so as not to intermesh. By forming the wrapper with a number of the faces which are oppositely corrugated it is necessary but to turn the wrapper through a

slight angle to dispose the adjacent corrugations in crossed relation.

Having thus described the invention what is claimed as new is:—

5 1. The method of forming hollow corrugated wrappers, which consists in folding a blank to produce a plurality of superposed plies all of the same width, and crimping the folded blank to form oppositely inclined corrugations in the plies thereof intersecting at the folds in said blank. 40

2. The method of forming hollow corrugated wrappers, which consists in folding a blank to form a plurality of superposed plies of equal width and overlapping each other for the entire distance between the folds in the blank, and crimping the folded blank to produce oppositely inclined corrugations extending the entire width of the several plies, with the corrugations of the plies intersecting at the folds in the blank. 45

3. The method of forming hollow corrugated wrappers, which consists in folding a blank to produce a plurality of overlapping superposed plies of equal width, and passing the folded blank between corrugated rollers with one longitudinal edge of the blank arranged at an angle to the length of the corrugations on the rollers to produce oppositely inclined corrugations in the different plies, extending the entire width thereof and intersecting at the adjacent folds in said blank. 50

4. The method of forming hollow corrugated wrappers, which consists in folding a blank to produce a plurality of superposed 55

overlapping plies all of the same width, introducing one corner of the folded blank between a pair of corrugated rollers, and subsequently passing the entire blank between said rollers to form oppositely inclined corrugations in the different plies extending the entire width thereof, and intersecting at the junction of said plies. 40

5. The method of forming hollow corrugated wrappers, which consists in folding a blank upon itself and then doubling the blank to form four plies of equal width, and finally passing the doubled blank obliquely between crimping rollers to form oppositely inclined corrugations in the different plies of the blank, with the corrugations in one ply intersecting the corrugations of an adjacent ply at the junction thereof. 45

6. The method of forming hollow corrugated wrappers, which consists in taking a flat blank and bending the same to form a tubular body, flattening the tubular body to produce two plies, doubling the flattened blank upon itself to produce four plies, passing one corner of the folded blank between a pair of corrugated rollers, and subsequently passing the entire blank between said rollers to form oppositely inclined corrugations on the different plies of said blank. 50

In testimony whereof, I affix my signature in presence of two witnesses.

JESSE DUNFEE. [L. S.] 55

Witnesses:

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