

Jan. 25, 1938.

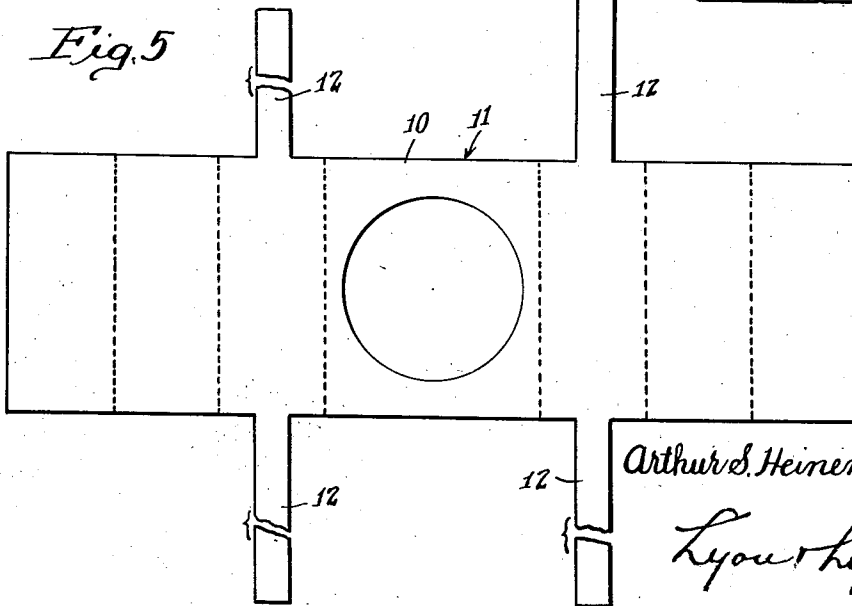
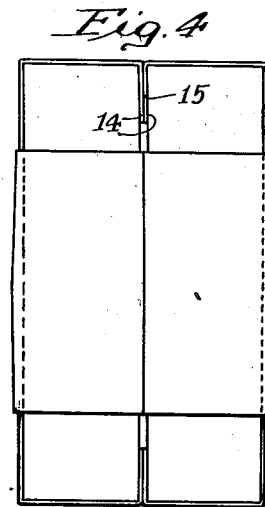
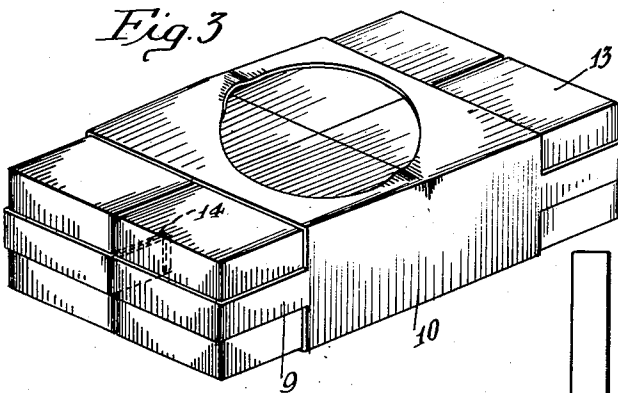
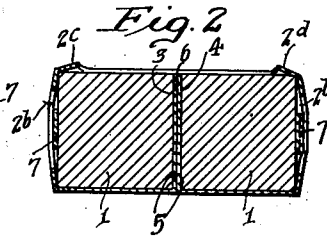
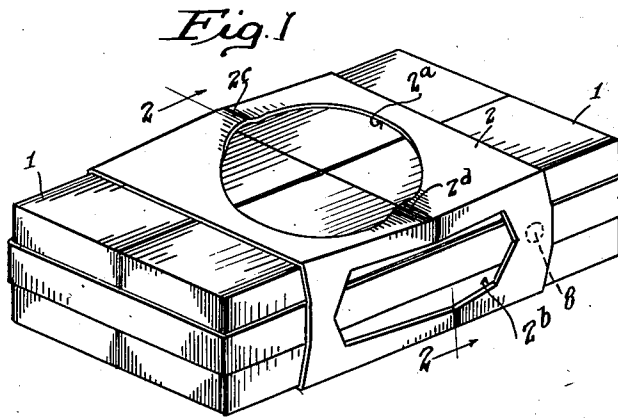
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2,106,276

MULTIPLE ARTICLE PACKAGE AND METHOD

Original Filed June 1, 1934

2 Sheets-Sheet 1



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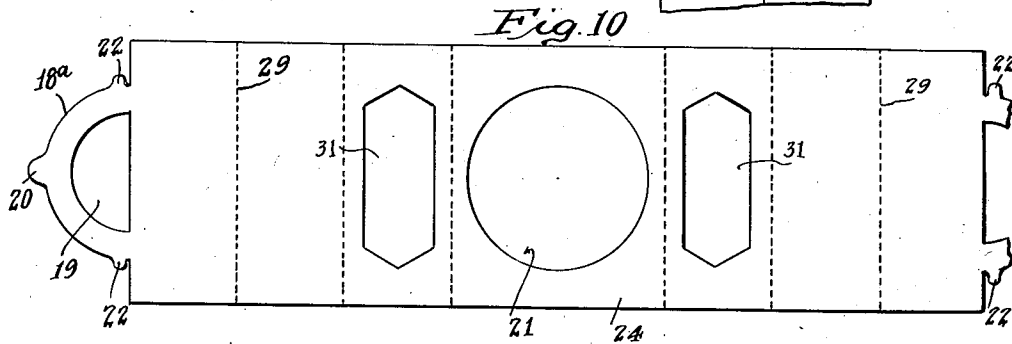
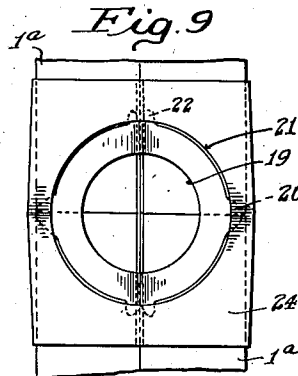
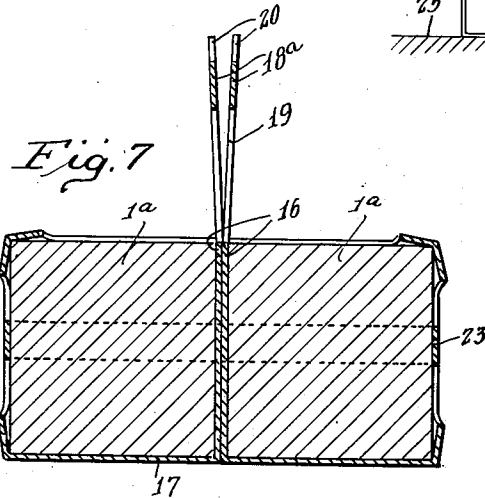
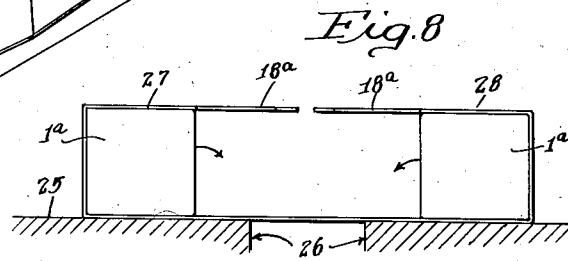
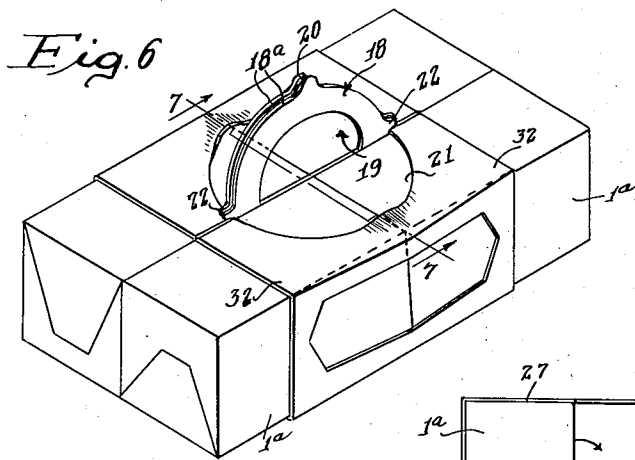
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MULTIPLE ARTICLE PACKAGE AND METHOD

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Application June 1, 1934, Serial No. 728,472
Renewed June 23, 1937

17 Claims. (Cl. 206-65)

This invention relates to the packaging of small flat-sided articles, for example, articles of cube, or block form, and though the invention may be employed for forming a package of any articles of this general shape, the invention is expected to have its greatest utility in forming packages of butter or other food products that are handled in large quantities, but which must be readily removable from the package.

One of the objects of the invention is to provide a package of simple form, containing a plurality of articles securely held together for convenient handling as a package, and formed in such a way as to secure the articles firmly in place, though permitting their ready removal one by one from the package by the consumer.

A further object of the invention is to provide a simple method for applying the wrapper of such a package in such a way as to develop tension in the wrapper automatically as the package is formed.

A further object of the invention is to provide means for developing the maximum tension in the wrapper toward the ends of the same.

A further object of the invention is to provide a package carrying a plurality of articles bound together securely, but with the ends of the articles exposed to view for convenient removal.

Further objects of the invention will appear hereinafter.

As regards the package itself, the invention consists in the novel parts and combination of parts set forth herein, all of which contribute to produce an efficient package.

As regards the method, the invention consists in the novel steps and combinations of steps described herein, all of which contribute to produce an efficient method for making a package.

A preferred embodiment of the invention is described in the following specification, while the broad scope of the invention is pointed out in the appended claims.

In the drawings:—

Fig. 1 is a perspective of a package embodying my invention.

Fig. 2 is a cross-section through this package, taken on the line 2—2 of Fig. 1.

Fig. 3 is a perspective of a package illustrating a slight modification of the package illustrated in Fig. 1.

Fig. 4 is a bottom plan of the package illustrated in Fig. 3.

Fig. 5 is a plan of a blank of the wrapper illustrated in Fig. 3, certain parts being broken away.

Fig. 6 is a perspective illustrating a modified

embodiment in which a portion of the wrapper forms a handle for the package.

Fig. 7 is a vertical cross-section on the line 7—7 of Fig. 6, but showing only the wrapper in section. This view also illustrates a binder not shown in Fig. 6.

Fig. 8 is an end elevation and partial section illustrating the method I prefer to employ in forming the package.

Fig. 9 is a plan of the package illustrated in Fig. 6, but with the ends of the wrapper that form the handle, folded down onto the upper face of the package; in this view the outer ends of the package are broken away.

Fig. 10 is a plan of the blank for forming the wrapper having the characteristics illustrated in Fig. 6, certain parts being broken away.

In practicing my method of wrapping a package, I provide a substantially rectangular wrapper and lay it upon a flat support such as a table. I then lay one, or more of the articles juxtaposed on each end of the wrapper. I then envelop the articles by rolling them toward each other on the table to apply the wrapper on all faces of the article. The wrapping is started at a point on the wrapper so that when the articles come together, the ends of the wrapper will be pressed between the abutting faces of the articles. As these faces come together, tension is automatically developed in the wrapper.

In this way a package is formed having a tensioned wrapper, the ends of which are held and secured at the central plane of the package and between juxtaposed faces of the articles.

Referring more particularly to the parts, and especially to Figs. 1 and 2, the package comprises a plurality of flat-sided rigid articles 1, preferably of cube form, which may be four in number as illustrated. These articles are nested together to form a large cube or block that is encircled by a wrapper 2, of paper or other suitable material.

In forming the package, half of the articles, for example two articles, are placed end to end, and laid on each end of the wrapper lying on a table (see Fig. 8), and the articles are then wrapped by rolling them toward each other until two faces 3 and 4 abut forcibly together, pinching the ends of the wrapper between the same. In starting the wrapping, the articles at one side are located at such a distance from the others on the other side, that there is insufficient material between them to permit the faces 3 and 4 to come easily together; that is to say, a slight amount of force is necessary at the end of the wrapping to swing these

faces together. This automatically places the wrapper in tension. Just before these faces are abutted together, means is provided for securing the ends 5 of the wrapper. For this purpose a strong adhesive such as glue 6, should be applied between the ends 5. The package should be held in its wrapped state until the glue dries, to insure that the tension will be maintained in the wrapper. The location for the articles in starting the wrap, should be indicated by transverse score lines.

It is preferable to provide means for relieving the tension near the middle plane of the wrapper, because this will give a desirable increase of tension at the ends of the wrapper, and the wrapper is preferably short enough to leave the ends of the articles projecting from it.

In order to relieve the tension as suggested, the wrapper may be provided with one or more openings such as the openings 2a and 2b.

The tension in the ends of the wrapper may be sufficient to cause a slight puckering or bulging of the material of the wrapper as indicated at 2c and 2d.

If it is desired to form a more secure package than that described above, I may provide a binder 7 that extends around the articles in a plane transverse to the plane in which the wrapper encircles the articles. This binder is preferably a band of paper or light cardboard, with overlapped ends secured together, and if desired, it may be fastened, or stuck, to the wrapper by applying glue at a spot 8, (see Fig. 2).

In Fig. 3, I illustrate an embodiment of the invention in which the binder 9 is made integral with the wrapper 10, and made from a blank 11 having the characteristics illustrated in Fig. 5. This blank has long integral laterally projecting tongues 12 that are folded around the end faces of articles 13, to form the binder, the ends 14 of the tongues being tucked into the crack between the adjacent walls of the articles, as indicated in Figs. 3 and 4. If desired, an adhesive may be applied at the abutting faces 15 of the ends of the binder, (see Fig. 4).

Figs. 6, 7 and 9 illustrate an embodiment of the invention in which the ends 16 of the wrapper 17 have extensions 18a that project up past the upper face of the package to form a supporting handle 18, and these extensions 18a may be formed with large aligning openings 19 to enable the package to be carried on one's finger or hung upon a hook.

The extensions 18a may each have a small tongue 20 at its outer end to be tucked under the edge of the upper opening 21 of the wrapper. This enables the extensions 18a to be held folded down flat on top of the package, as illustrated in Fig. 9. And small side ears 22 may be provided on the extensions 18a, located near the inner edge of the extensions 18a, and which normally are tucked under the edge of the opening 19. After the handle extensions 18a are pulled up from the top of the package, these ears 22 will operate to hold these extensions in a substantially upright position.

It will be evident that in the multiple package as illustrated in Fig. 1, that is to say, a package in which the heads of two abutting articles are aligned with each other at about the middle of the package, these heads considerably reinforce the package at this point, and this enables a considerable tension to be developed in the wrapper without collapsing the side walls of the boxes or articles that are secured by the wrapper.

The package illustrated in Fig. 7 may be provided with a binder 23 if desired, to perform the functions of the binder 7 illustrated in Fig. 1.

Fig. 8 illustrates how the articles 1a are wrapped. The wrapper blank 24 is laid flat upon a table top 25. One or more of the articles 1a are laid at each end of the blank in a parallel relation and rolled inwardly toward the middle of the wrapper to encircle them with the wrapper, as indicated by the arrows in Fig. 8. In this way the articles come together to form a bundle of block forms. As the wrapping proceeds beyond the stage of Fig. 8, if the wrapper has the extensions 18a, they will pass down through the opening 21 of the wrapper. If the wrapping is completed on the table, clearance must be provided for the extensions 18a, for example, by providing an opening 26 in the table; and as the faces 27 and 28 come together, tension is developed automatically in the wrapper. This tension is developed because the wrapping will be started on indicated lines 29, (see Fig. 10), that are located so near together that the material between them is somewhat scant for wrapping the articles as described.

The faces 27 and 28 may be glued together as described at 6 in Fig. 2.

The openings 21 and 31 relieve the tension in this wrapper as described in connection with Fig. 1. In this way the tension in the wrapper is concentrated at its end portions 32. The wrapper is preferably of a width that will bring these end portions 32 substantially in line with the middle portions of the wrapped articles in the package.

It is understood that the embodiment of the invention described herein, is only one of the many embodiments this invention may take, and I do not wish to be limited in the practice of the invention, nor in the claims, to the particular embodiment set forth.

I claim:

1. In a package, the combination of a plurality of juxtaposed rigid flat-sided articles, a wrapper tightly wrapped around the juxtaposed articles and maintaining the same in a fixed relation to each other, said wrapper being shorter than the articles so as to leave the ends of the articles exposed, said wrapper further having means for relieving the tension toward the middle portion thereof so that the pressure of the wrapper on the packages is concentrated at points adjacent the ends of the wrapper.

2. In a package, the combination of a plurality of juxtaposed rigid flat-sided articles, a wrapper tightly wrapped about the articles and maintaining the articles in a fixed relation to each other, said wrapper being shorter than the articles so as to leave the ends of the articles exposed, said wrapper having a relief opening through the same located substantially in the middle plane of the wrapper for relieving the tension in the middle part of the wrapper, whereby the pressure of the wrapper on the articles is concentrated at points adjacent the ends of the wrapper.

3. In a package, the combination of a plurality of juxtaposed rigid flat-sided articles, a wrapper tightly wrapped around the juxtaposed articles and maintaining the same in a fixed relation to each other, said wrapper being shorter than the articles so as to leave the ends of the articles exposed, said wrapper having relief openings formed therethrough on adjacent sides of the package for relieving the tension in the wrapper toward the middle portion of the wrapper, whereby the pressure of the wrapper on the packages

is concentrated at points adjacent the ends of the wrapper.

4. A package including a plurality of juxtaposed articles, each article having at least one flat side, the flat sides of the articles being juxtaposed to each other, a tensioned wrapper encircling the articles, the ends of the wrapper being juxtaposed between adjacent walls of the articles, and means for securing said ends together at a point on the sides of said adjacent walls, to secure the articles in a fixed relation to each other.

5. A package including a plurality of juxtaposed articles, having at least one flat side, said articles having their flat sides juxtaposed, a wrapper encircling the articles and binding the same so that the wrapper is in tension, the ends of the wrapper being juxtaposed between adjacent walls of the articles, means for securing said ends together at a point on the sides of said adjacent walls, to secure the articles in a fixed relation to each other, and a binder encircling the articles in a plane transverse to the plane in which the wrapper encircles the articles, and retaining the articles.

6. A package including a plurality of juxtaposed articles, having at least one flat side, a tensioned wrapper encircling the same, the ends of the wrapper being juxtaposed between adjacent walls of the articles, means for securing said ends together at a point on the sides of said adjacent walls, to secure the articles in place, and a binder encircling the articles in a plane transverse to the plane in which the wrapper encircles the articles, the ends of said binder extending between walls of the articles and secured between the same.

7. A package including a plurality of juxtaposed articles, having at least one flat side, a wrapper tightly encircling the articles, the ends of the wrapper being juxtaposed and clamped between adjacent flat sides of the articles, and means for securing said ends together at a point between said adjacent walls to secure the articles in a fixed relation to each other, said wrapper having relief openings therein located in two adjacent sides of the wrapper for relieving the tension adjacent its middle portion and thereby concentrating the tension adjacent the ends of the wrapper.

8. In a package, the combination of a plurality of juxtaposed flat-sided articles, a tensioned wrapper encircling the juxtaposed articles, said wrapper having means for relieving the tension toward the middle portion thereof whereby the pressure of the wrapper on the packages is concentrated at points adjacent the ends of the wrapper, and a binder encircling the articles in a plane transverse to the plane in which the wrapper encircles the articles and having its ends projecting into the space between the juxtaposed walls of adjacent articles.

9. A package including a plurality of juxtaposed articles of cube-form, a wrapper tightly encircling the same, the ends of the wrapper being juxtaposed between adjacent walls of the articles, and means for securing said ends together at a point between said adjacent walls, to secure the articles in a fixed relation to each other, the ends of said wrapper having extensions projecting through and beyond the articles to form a handle for supporting the package, the upper wall of said wrapper having a relatively wide opening therethrough to facilitate projecting the said extensions through the same, said extensions being normally folded down onto the face of the package and capable of being swung upwardly

from the face of the package to form a handle for carrying the package.

10. A package composed of a plurality of articles of cube-form juxtaposed together to form a block, a tight wrapper encircling the block of articles, means for securing the wrapper so that it is maintained in tension, said wrapper having a relief opening adjacent its middle portion operating to relieve the tension near the middle plane of the wrapper and concentrate the tension of the wrapper at the ends thereof.

11. A package composed of a substantially rectangular wrapper with two pairs of articles of cube-form wrapped into the wrapper from opposite ends of the same, so that the walls to which the ends of the wrapper are applied, abut against each other and are juxtaposed at the central plane of the wrapped package so as to develop tension in the wrapper, and means for securing the wrapper so placed about the articles.

12. The method of making a package of articles of cube-form, which consists in laying a substantially rectangular wrapper on a support, laying the articles respectively at a predetermined distance each side of the center of the wrapper on each end of the wrapper in a parallel position transverse to the longitudinal axis of the wrapper, applying the ends of the wrapper to the articles respectively, rolling the articles toward each other to apply the wrapper to all faces of the articles and to bring the ends of the wrapper juxtaposed together at the central plane of the package and thereby developing tension in the wrapper, and securing the wrapper so that the said tension is maintained.

13. The method of making a package from four articles of cube-form, which consists in laying a substantially rectangular wrapper on a support, laying a pair of the articles end to end respectively at a predetermined distance from the center of the wrapper so that the articles are all in a parallel relation, and extending transversely to the wrapper, applying the end of each wrapper to its corresponding pair, rolling and wrapping the said pairs toward each other so as to apply the wrapper on all side faces of the pairs and so that the ends of the wrapper become juxtaposed against each other at the central plane of the package with the wrapper in tension, and securing the wrapper to maintain said tension.

14. The method of making a package from four articles of cube-form, which consists in laying a substantially rectangular wrapper on a support, laying a pair of the articles end to end respectively at a predetermined distance from the center of the wrapper so that the articles are all in a parallel relation, and extending transversely to the wrapper, applying the end of each wrapper to its corresponding pair, rolling and wrapping the said pairs toward each other so as to apply the wrapper on all side faces of the pairs and so that the ends of the wrapper become juxtaposed against each other at the central plane of the package with the wrapper in tension, securing the wrapper to maintain said tension, and forming openings in the wrapper near its middle plane to relieve the tension in that plane and concentrate the said tension toward the ends of the wrapper.

15. In a package composed of juxtaposed flat-sided articles, a paper wrapper tightly wrapped about the articles and securing the same in a bundle, said wrapper having openings near its middle plane operating to concentrate the tension in the wrapper adjacent the ends thereof, the

tension in said wrapper operating to maintain the articles in a fixed relation to each other.

16. A package of cube-form articles juxtaposed to form a block of cube-form, a wrapper encircling the articles in a plane transverse to longitudinal axes of the articles, and maintaining the articles in a fixed relation, the ends of said block being exposed to view and projecting beyond the ends of the wrapper, the ends of said wrapper being located about at the middle of two of the articles.

17. A package including a plurality of juxtaposed articles including articles with end walls, and with said end walls abutting near the middle

of the package, each article having at least one flat side, the flat sides of the articles being juxtaposed to each other, a tensioned wrapper encircling the articles, the ends of the wrapper being juxtaposed between adjacent walls of the articles, and means for securing said ends together at a point on the sides of said adjacent walls, to secure the articles in a fixed relation to each other, said abutting end walls at the middle of the package operating to give rigidity to the middle of the package for maintaining the tension in the wrapper.

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