May 16, 1933. T. W. SATTERTHWAITE 1,909,126

MERCHANDISE PACKAGING

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Fig. 1.

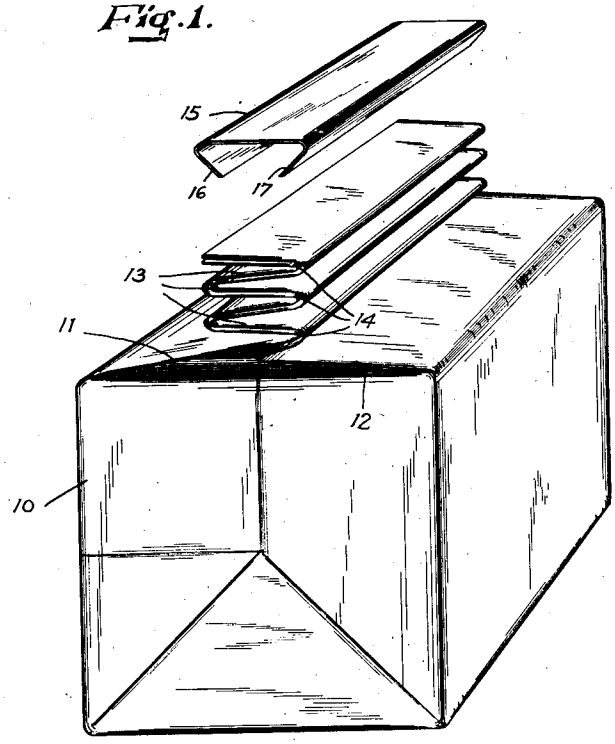
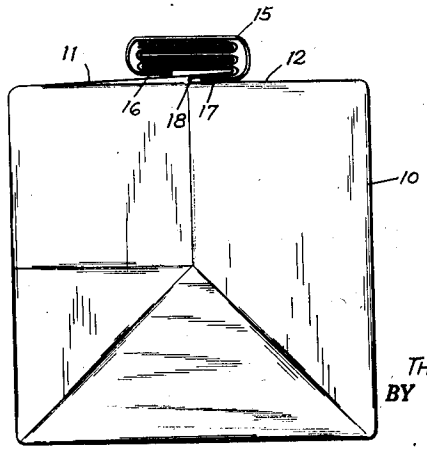


Fig. 2.



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Fig. 4.

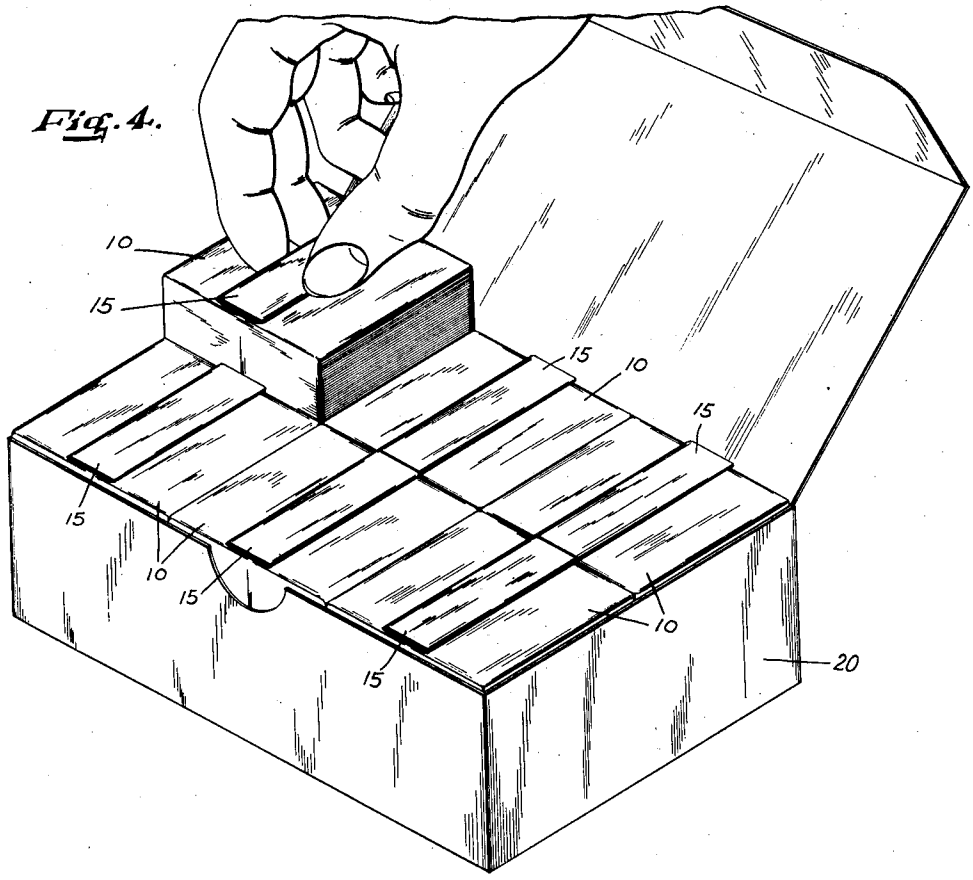
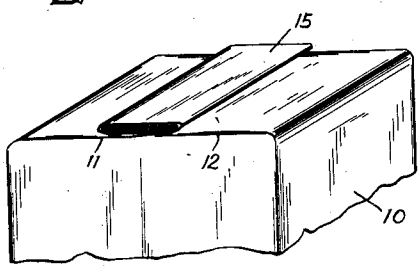


Fig. 3.



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UNITED STATES PATENT OFFICE

THOMAS W. SATTERTHWAITE, OF NEW YORK, N. Y., ASSIGNOR TO HAMILTON FISH BENJAMIN AND JAMES D. PELL, BOTH OF NEW YORK, N. Y., AND RICHARD ELY, OF SHORT HILLS, NEW JERSEY

MERCHANDISE PACKAGING

Application filed October 18, 1930. Serial No. 489,590.

This invention relates to improvements in merchandise containers and more particularly to improvements in containers for the distribution of coffee and similar commodities to consumers.

It is a general object of the invention to provide a package of the bag type which may be sealed so as to protect the contents thereof from atmospheric conditions and deterioration.

A further object of the invention is to provide a package of this type which has a minimum of free air space after the commodity has been packed and the container sealed.

Still another object of the invention is to provide a novel sealing means for a container of this type which also functions as a means for gripping the container to facilitate removal thereof from a package in which a plurality of the said containers have been packed.

Other objects of the invention will be in part pointed out in the following detailed description of a preferred embodiment of the invention and will be in part obvious as the description proceeds.

After a commodity has been placed in a container of the bag type, the extended surfaces of the bag are brought together and fluted or arranged in a plurality of accordian folds to close the same. The folds are then caused to be held together tightly along the lines of folds. This may be done in any suitable fashion as by gluing, but it is in accordance with the preferred embodiment of the invention to provide a clamp which extends longitudinally of the lines of fold and tightly grips a plurality of the folds in intimate relation, thereby forming an airtight seal.

A further feature of the invention resides in forming the fold next adjacent the contents of the container considerably smaller than the remaining folds and using a clamp which has a clamping surface extending substantially over the entire area of this smaller fold. A container sealed in this manner has practically no air space above the contents which remain intact over an extended period of time.

Still another feature of the invention resides in tightly packing a plurality of the containers provided with the novel sealing means into a larger package. The sealing means then function as a handle whereby any one of the containers may be removed while at the same time walls of the remaining containers still continue to hold the contents firmly, regardless of the amount of excess room then left in the larger package.

The invention accordingly comprises the features of construction combination of elements and arrangements of parts which will be exemplified in the construction hereinafter set forth and the scope of the application of which will be indicated in the claims.

For a more complete understanding of the nature and objects of the invention, reference is had to the following detailed description and to the accompanying drawings wherein

Fig. 1 is an exploded view illustrating a container embodying the features of the invention together with the sealing clamp.

Fig. 2 illustrates diagrammatically the container after the sealing clamp has been applied.

Fig. 3 illustrates the container with sealing clamp in position.

Fig. 4 illustrates in perspective a plurality of containers of the bag type packed in a larger container.

In the drawings wherein the same numerals indicate corresponding elements, a container 10 is shown, the body of which may be of the usual bag type and which is suitable for the distribution of commodities, such as coffee and the like. The bag or container may be made of any preferred material, such for example as paper, tin foil, cellophane or the like. As is customary with bags of this type, a desired amount of the commodity is placed therein for distribution leaving a considerable amount of the bag material extending above the contents which material is then folded to form a closure for the bag.

In accordance with this invention the extensions 11 and 12 of the bag are fluted forming a plurality of folds 13 to close the bag. As will be noted, the opposite sides of the bag

have lines of contact along the lines of fold 14 and when the folds are tightly compressed these lines of contact act as substantially air-tight seals. In order to maintain the seal, a clamp 15 is provided extending longitudinally of the folds and having inwardly extending edges 16 and 17. These edges are then bent toward the body of the clamp so as to tightly grip the folds as shown in Fig. 2.

Obviously, a seal of this type is very desirable as the sides of the bag are in close contact with each other along each line of fold. Any lines which will hold the sides of the bag in close contact along the lines of fold is considered within the purview of this invention and as a suggestion glue may be used for this purpose.

In packages of this type, it is desirable to have as little air space as possible above the contents and in order to accomplish this, the lower fold 18 next adjacent the contents of the bag is made considerably smaller than the other folds so that the inward extension 17 of the clip 15 extends substantially over the entire surface of this fold. This expedient draws the extensions of the bag 11 and 12 relatively closely and tightly against the upper surface of the contents so that substantially no empty space is left in the bag.

Fig. 2 shows the thickness of the folds slightly exaggerated. It will be appreciated that when the inwardly extending edges 16 and 17 have been tightly pressed against the body portion of the clip 15, substantially no room will be taken up thereby so that the packages may be readily packed for shipment. A container with the sealing clamp in position is shown in Fig. 3. In Fig. 4, a plurality of the containers 10 are shown tightly packed in a large package 20 for distribution. When thus packed, the clamp 15 serves as a handle to remove the smaller containers 10 from the larger package. Ordinarily the space left by the removal of one container would permit expansion of the contents, and better access of the free air in the container thereto. In accordance with this invention, this is prevented as the clamp holds the container in close contact with the contents under all circumstances.

This invention is very suitable for the distribution of commodities such as coffee, which deteriorate when exposed to the air.

It is proposed to pack a sufficient amount of coffee to make several cups, as for instance, four cups in each container. The consumer may then select the number of small containers which will make the desired number of cups of coffee, leaving the rest of the coffee in the large package sealed and protected from the air.

A seal of this type is both cheap and practical and particularly desirable especially in distributing the class of goods mentioned.

Since certain changes may be made in the above construction and different embodiments of the invention may be made without departing from the scope thereof, it is intended that all the matter contained in the above description and shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A merchandise container having extensions adapted to form a closure when fluted in an accordion fold and means for sealing said container comprising a clamp adapted to clasp tightly the folds of said extensions.

2. A merchandise container having extensions adapted to form a closure when fluted in zigzag relation and sealing means tightly engaging the folds of said zigzag fluted extensions.

3. A merchandise container having extensions adapted to form a closure for said container when fluted in zigzag relation, and sealing means tightly engaging the folds of said zigzag fluted extensions adjacent the lines of fold.

4. A merchandise container having extensions adapted to form a closure for said container when fluted in zigzag relation and sealing means tightly engaging a plurality of adjacent folds of said zigzag fluted extensions adjacent the lines of fold.

5. A merchandise container having extensions adapted to form a closure for said container when folded in zigzag relation and a clamp having means for tightly holding the folds of said zigzag folded extensions in intimate engagement.

6. A merchandise container having extensions adapted to form a cover therefor when fluted in zigzag relation and sealing means clamping the fold of said zigzag fluted extension next adjacent the contents of the container substantially over its entire surface.

7. A merchandise container having a cover comprising extensions of said container arranged in a plurality of zigzag folds and clamping means extending longitudinally along the lines of fold maintaining said folds in intimate contact.

8. The method of closing a package which comprises simultaneously folding adjacent marginal extensions in folds simulating accordion pleats and clipping the folds together along at least two lines of fold.

9. A package having its marginal extensions folded in a manner simulating accordion pleats in combination with a clip having a rebent portion adapted to grip the pleats thus formed along the lines of fold.

10. A package having its marginal extensions folded in a manner simulating accordion pleats in combination with a clip hav-

ing a rebent portion adapted to grip adjacent folds.

11. A package having its marginal extensions folded in a manner simulating accordion pleats in combination with a clip having rebent portions adapted to grip the folded edges of the accordion pleats thus formed.

12. A package having its marginal extensions folded in a manner simulating accordion pleats, the pleat next adjacent the package being smaller than the remaining pleats in combination with a clip having a rebent portion adapted to grip said smaller pleat substantially over its entire surface.

13. A package having its marginal extensions folded in a manner simulating accordion pleats in combination with a clip having rebent portions adapted to grip a plurality of such folds tightly together.

14. A package having its marginal extensions folded in a manner simulating accordion pleats in combination with a clip having rebent portions and a top portion of the said clip being adapted to confine all of said pleats within the confines of said rebent and top portions.

In testimony whereof I affix my signature.

THOMAS W. SATTERTHWAITE.