June 19, 1928.

1,673,956

A. B. STEWART

MERCHANDISE PACKAGE

Filed June 15, 1927

Fig. 1.

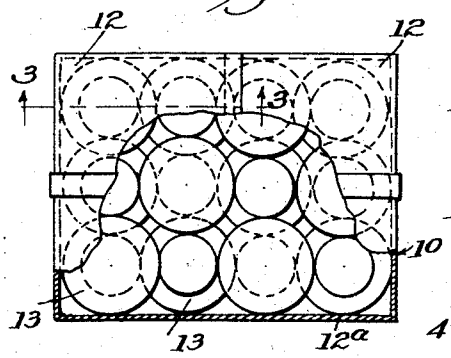


Fig. 2.

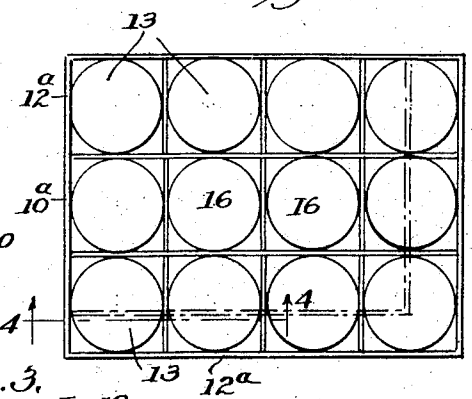


Fig. 3.

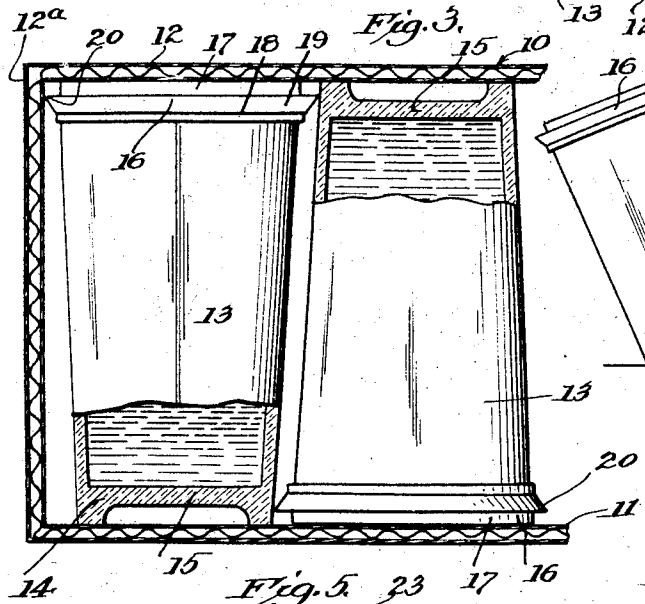


Fig. 4.

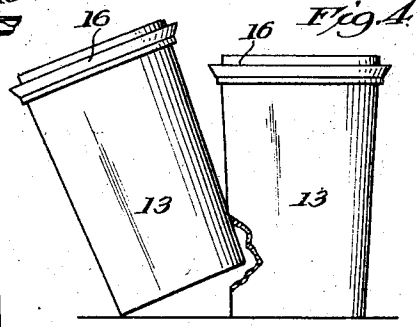


Fig. 5.

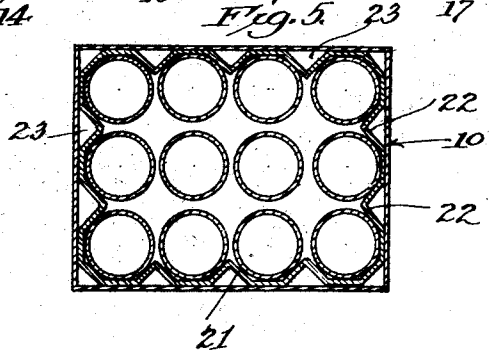
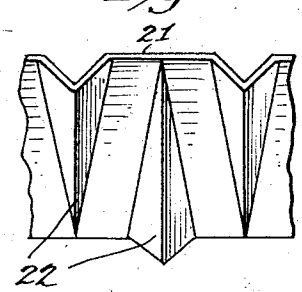


Fig. 6.



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UNITED STATES PATENT OFFICE.

ALEXANDER BARNES STEWART, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO THE ALEXANDER B. STEWART ORGANIZATION, OF LOS ANGELES, CALIFORNIA, A CORPORATION OF DELAWARE.

MERCHANDISE PACKAGE.

Application filed June 15, 1927. Serial No. 199,001.

This invention relates to merchandise packages, and has for its primary object the provision of means that will permit of the packing of a large number of fragile inner containers within an outer container of very minimum proportions so that a large number of the packages can be stored or arranged for transit within a greatly restricted area, as compared to what has been possible heretofore, and whereby, through a new and novel scheme of nesting the inner containers relatively and within the outer container, the more delicate portions of the respective inner containers are held out of contact with each other, while the stronger or strain-resisting portions of the said respective inner containers are in mutual contact where they will take up or absorb all serious jars and strains that are thrust upon them.

A further object of the invention is to provide a merchandise package embodying novel inner containers peculiarly nested with respect to each other within an outer container, the latter having certain of its walls in mutual contact with parts of said inner containers so as to additionally secure the same against breakage in transit.

Other objects and advantages will more clearly appear as the description proceeds.

In the accompanying drawings,

Figure 1 is a diagrammatic plan view of the package showing the inner containers arranged in their intended order within the outer container;

Figure 2 is a view similar to Figure 1 indicating by relative comparison the increase in area required when packing the inner containers according to known ways;

Figure 3 is a vertical section on line 3—3 of Figure 1;

Figure 4 is a vertical section on line 4—4 of Figure 2, showing the canted condition of one of the inner containers;

Figure 5 is a view similar to Figure 3 illustrating a slightly modified form of the invention; and

Figure 6 is a perspective view of a portion of the corrugated lining employed in connection with said modified form of the invention.

Specific reference is invited to Figures 1 and 3 of the drawings, wherein I show an outer container 10 having a bottom 11, top closure flaps 12—12 and vertical connecting walls 13. Said container is preferably constructed of corrugated paper board of well known form. It will be observed that the said bottom 11 and said flaps 12—12 are in relative parallelism, and the purpose of this arrangement will present itself as the description goes forward.

Mounted within the outer container are identical inner containers 13, each consisting of a glass or fragile body which is tapered in its length, so that the large end occupies a position that may be described as the normal top of the body. The sides of the body are straight and at the small end of the body they merge into a bottom wall 14 through a portion or joinder 15 whose thickness is greater than any other portion of said body, giving to the body at the normal base thereof an annular reinforcement.

At the large end of each inner container is a cap or closure 16, the same formed of metal and provided with an offset crown 17 and a crimped skirt 18. The skirt is annular and same has angular portions 19—19 which mutually define at the vertex a relatively sharp ridge 20. At this point, it should be observed that the length of each of said inner containers is equal to the distance bounded by a line drawn from the inner face of the bottom 11 to the inner faces of the flaps 12. In this manner, the flaps 12 and said bottom 11 come snugly and flatwise against the tops and the bottoms, respectively, of said inner containers. The flaps are of the type that can be held securely closed by an adhesive tape or the like, not shown.

The outer container 10 can be of any selected size according to the number of inner containers to be mounted therein. An outer container that will accommodate two dozen of the inner containers is desirable. On reference to Figure 1 of the drawings, it is observed that the inner containers are disposed in transverse rows, each made up of four of said containers, and on further reference to said Figure 1 taken in connection with an

observation of the showing, Figure 3, it is seen that the positions of the normal bottoms of the alternate containers are inverse to the order of the alternate normal tops of the remaining containers of the same row and that this relative order of the containers is also true with respect to the longitudinal or long rows (Figure 1). Due to this peculiar method of arranging or nesting the inner containers within said outer container, and the fact that the containers are relatively co-extensive, it follows (Figure 3) that the sharp ridges 20 of the respective inner containers bear laterally against the thick walled joinder portions 15 medially thereof. In this manner, I am able to hold the more delicate side walls of the container bodies in spaced apart parallel relation where one wall cannot be thrust against another when the package is handled in transit. It will be further observed that the parallel bottom wall 11 and said top flaps 12 come flatwise against the joinders 15 and the said crowns 17. In this manner, all side and end play of the inner containers is prevented and any thrust against the respective container is taken up and arrested by the co-acting ridges 19 and said joinders 15. No protecting strips or cells are necessary for the inner containers and yet, and by virtue of the construction and arrangement herein shown and described, I am able to subject the package to the most violent shocks and jars without fear of breaking said containers, while at the same time allowing for a packing of a very large number of the containers within an outer straight walled container.

In Figure 5 and 6, the outer container is provided with a corrugated inner facing material 21 having flared filler flutes 22 that come into the correspondingly shaped spaces 23 between the extreme end rows of inner container and the extreme longitudinal rows of said container. This form can be resorted to when use is made of long length inner containers. In the form shown in Figures 1 and 2, the inner containers are of short length and the filler material mentioned in the modified form of the invention is not always necessary.

One very decided advantage of my invention over well known packages can be readily appreciated on reference to Figures 2 and 4 of the drawings. In Figure 2 the normal tops of the inner containers are in the same general plane and in consequence thereof a large space is required wherein to accommodate same. When arranged in this manner, and provided the containers are not mounted within individual cells, a canting of one container causes it to be thrust against an adjacent container with such force and impact as to cause breakage thereof, as indicated in Figure 4.

I claim as my invention:

A merchandise package comprising an outer container, and a plurality of identical inner containers, the inner containers each consisting of a straight tapered body open at its large end and provided at its small end with a bottom joined to the body walls by a portion whose thickness is greater than the thickness of any other part of the body, and a closure at the large end of each inner container, the closure having a peripheral ridge extending in a radial direction from said large end, the inner containers arranged, respectively, in transverse and longitudinal rows with the alternate containers positioned with their small ends up and in position with respect to the inversely positioned large ends of the adjacent containers so that the ridges of the closures thereof come in direct lateral contact with the thick joinders of the small ends of said alternate containers, to maintain the body walls of all of said containers in parallel spaced relation and to permit the end thrusts and shocks to be transmitted along parallel lines through the closures and bottoms, respectively, of said containers, the walls of the outer container arranged in close contact with the said inner containers.

ALEXANDER BARNES STEWART.