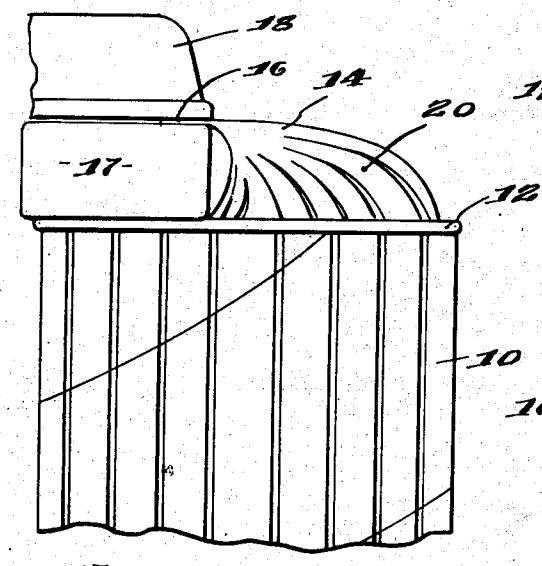
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METHOD OF SEALING PACKAGES

Filed July 2, 1940 2 Sheets-Sheet 1

Fig-2-



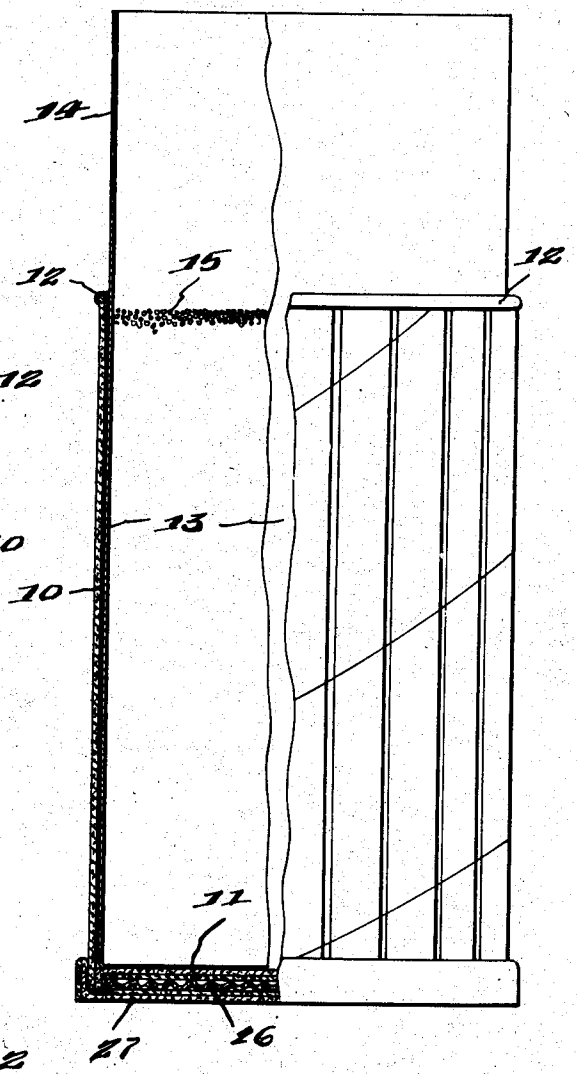


Fig-1-

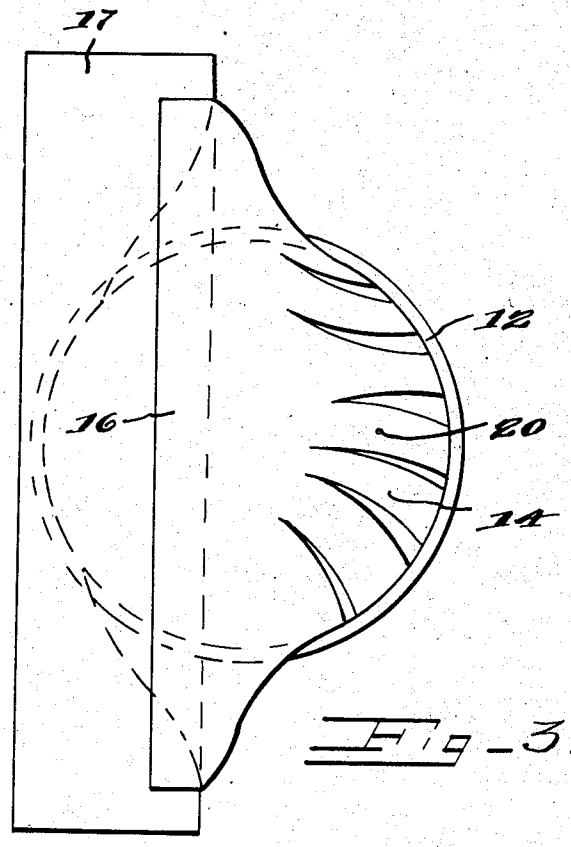


Fig-3-

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METHOD OF SEALING PACKAGES

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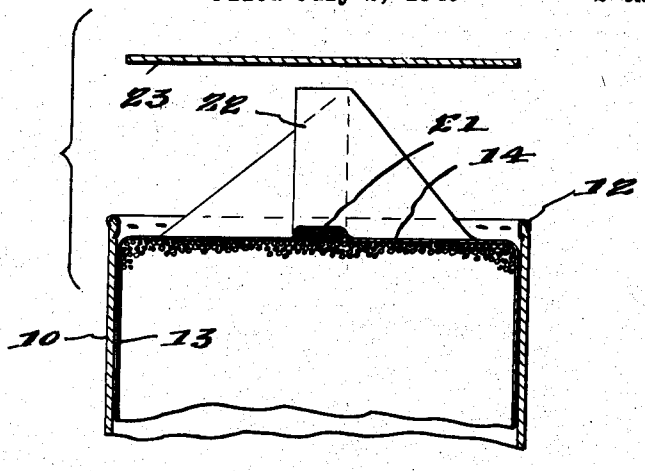


Fig-4-

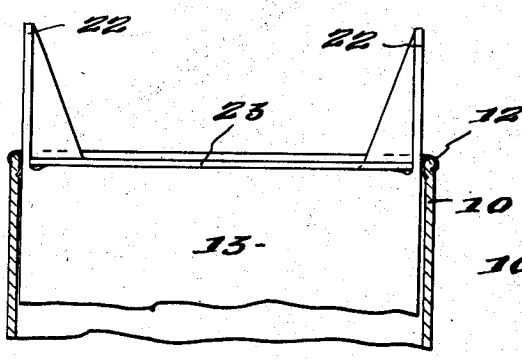


Fig-5-

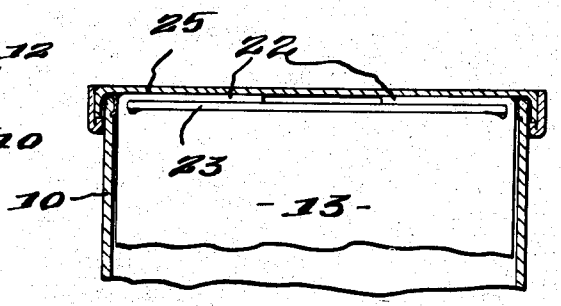


Fig-6-

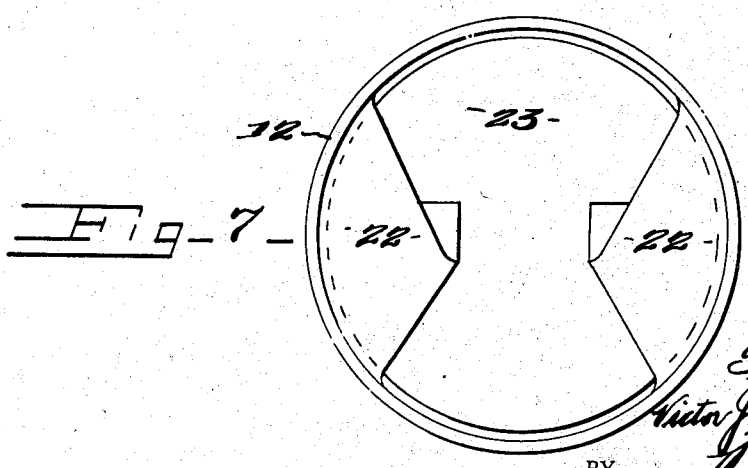


Fig-7-

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Patented Dec. 29, 1942 2,306,581

UNITED STATES PATENT OFFICE

2,306,581

METHOD OF SEALING PACKAGES

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Application July 2, 1940, Serial No. 343,594

2 Claims. (Cl. 93—6)

This invention relates to a package for food products and to a method of sealing the package. The package is intended particularly for use in connection with the sale of food products in bulk or relatively large quantities, as for example five gallons liquid measure, or thirty pounds dry measure. These packages are now being used extensively for the packaging of frozen fruits, beans, popcorn, coffee and granular products.

The invention has as an object a package of the type referred to suitable for both liquid and dry products and embodying a durable but particularly economical structure which may be hermetically sealed to afford complete protection to the contents of the package.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawings in which like characters designate corresponding parts in all the views.

Figure 1 is a side elevational view, partly in section, of a container embodying my invention illustrating the contents arranged in the liner bag, but the bag not being sealed.

Figure 2 is a fragmentary side elevational view of the top portion of the container illustrating the manner in which the bag is sealed.

Figure 3 is a top plan view of the arrangement shown in Figure 2.

Figure 4 is a vertical sectional view of the top portion of the container illustrating the bag in sealed condition and including the protective disk.

Figure 5 is a vertical sectional view of the top portion of the container with the upper portion of the bag shown in elevation and including the protective disk positioned on the top of the bag.

Figure 6 is a view, similar to Figure 5, illustrating the package completely sealed.

Figure 7 is a top plan view of the container with the slip cover of the casing removed.

The package consists of a relatively stiff outer casing including a cylindrical body **10** into one end of which is secured a bottom member **11**. The upper end of the body is provided with a metallic ring member **12** which serves to stiffen the upper portion of the casing and aids in securing a slip cover thereto. A bag **13** of thin sheet impervious material, such as "Pliofilm," is arranged in the casing. The bag is initially of appreciably greater length than that of the casing with the upper portion **14** of the bag extending upwardly beyond the top edge of the casing, see Figure 1. The bag **13** provides an impervious and liquid tight liner which may be hermetically sealed as hereinafter explained.

The bag **13** is filled, as indicated at **15**, Figure 1. Thereafter, the top edge of the bag is gathered or arranged in a flat formation **16** and is sealed. If the bag **13** is formed of heat sealing material, such as "Pliofilm," the flat formation **16** may be sealed by the application of heat. If the bag is formed of a material which is not of itself heat sealing, it may be sealed by the application of a proper adhesive. As illustrated in Figure 2, the flat formation **16** is arranged upon a platen or support **17** arranged across the top edge of the casing. The bag is sealed by means of a suitable heating iron **18**, as for example, a heated flat-iron.

The extending portion **14** of the sealed bag is provided with a small aperture **20** arranged somewhat in the vicinity of the top edge of the casing. The purpose of the aperture **20** is to permit the escape of air trapped in the extended portion of the bag, the air being expelled by folding the flat formation **16** a number of times upon itself forming a fold **21** extending transversely across the casing. Thereupon the vent aperture **20** is sealed in the same manner as the top of the bag, that is by the application of heat or adhesive. In heat sealing, it is only necessary to touch the aperture with a hot element such as a rod to seal off the vent due to the fact that the aperture need only be of small dimension. Due to the fact that the bag was initially of cylindrical form, the fold **21** is of appreciably greater length than the diameter of the casing and therefore the ends of the fold **21** terminate in ears or tabs **22**.

A protective disk **23** is positioned upon the top of the sealed and folded bag, as illustrated in Figures 5, 6 and 7, and thereafter the tabs **22** are folded inwardly overlying the top surface of the disk **23**, as indicated in Figures 6 and 7. Previous to the insertion of the disk **23**, the aperture **20** is effectively sealed, whereby the bag **13** forms a hermetically sealed container for the contents placed therein.

The package is completed by the application of a slip cover **25** to the upper end of the casing and if the contents in the container is of appreciable weight, the lower end of the casing may be reinforced by a disk **26** and a slip cover **27**.

What we claim is:

1. In the method of sealing a package consisting of a fibrous casing and a liner bag of impervious material arranged in the casing and provided with a small vent aperture in the upper portion of the bag; which method comprises ar-

ranging the open end of the bag in flat formation, sealing the top edge of the bag, expelling the air from the upper portion of the bag through said vent and subsequently sealing the same, folding the top sealed portion of the bag to position the flat formation adjacent the top of the contents, folding the ends of said flat formation inwardly and applying a slip cover to the top of the casing.

2. In the method of sealing a package consisting of a fibrous casing and a bag of impervious material arranged in the casing; which method comprises arranging the open end of the bag in flat formation, sealing the top edge of the bag, providing a vent aperture in the upper portion of the bag above the contents therein, folding the top sealed portion of the bag to position the flat formation adjacent the top of the contents, sealing said aperture, inserting a protective disk on the top of the bag, folding the ends of said flat formation over the top of said disk, and applying a slip cover to the top of the casing.

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