United States Patent

Esposito

[15] **3,677,438**

[45] **July 18, 1972**

[54] **DISPENSING LINER AND PAD FOR UTENSILS**

[72] Inventor: **Joseph Alexander Esposito,** 1113 Hollen Road, Baltimore, Md. 21239

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[52] **U.S. Cl.**.....**221/63,** 221/307
[51] **Int. Cl.**.....**B65h 1/00**
[58] **Field of Search**.....221/63, 307, 33, 303, 47; 220/65; 229/1.5 B, 3.5 MF

[56] **References Cited**

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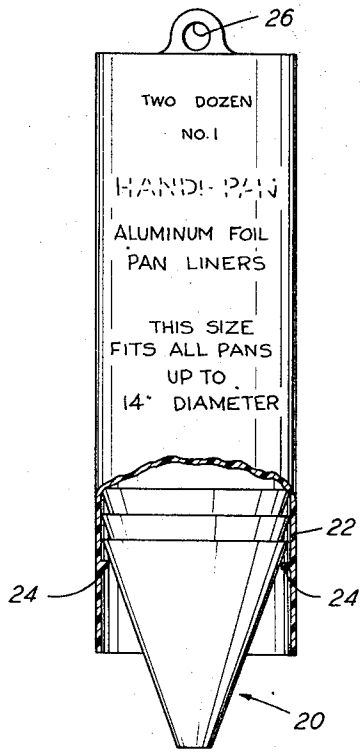
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Primary Examiner—Robert B. Reeves
Assistant Examiner—James M. Slattey
Attorney—John F. McClellan, Sr.

[57] **ABSTRACT**

A tube-dispensable combination expanding pan-liner and hot-pad for pans and the like, comprising a metal foil disc having the periphery folded inward, the disc folded inward over the inwardly folded periphery about a diameter of the disc to semi-disc configuration, and the semi-disc rolled into a coiled funnel configuration approximating the overall shape of a conical drinking cup, and dispensable in the same manner as a conical drinking cup from a tubular dispenser having an internal constriction.

4 Claims, 7 Drawing Figures



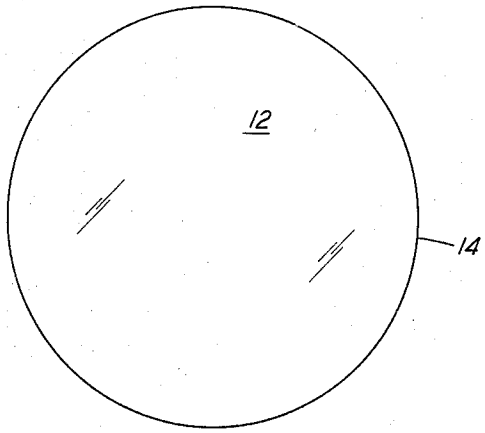


FIG. 1

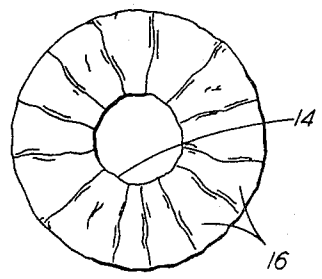


FIG. 2

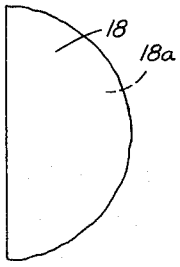


FIG. 3

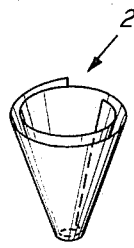


FIG. 4

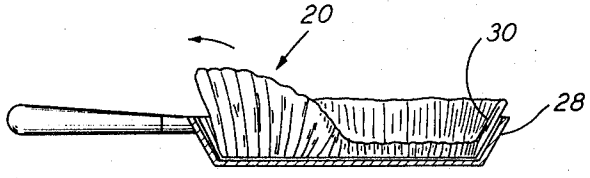


FIG. 6

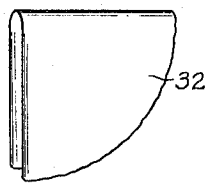


FIG. 7

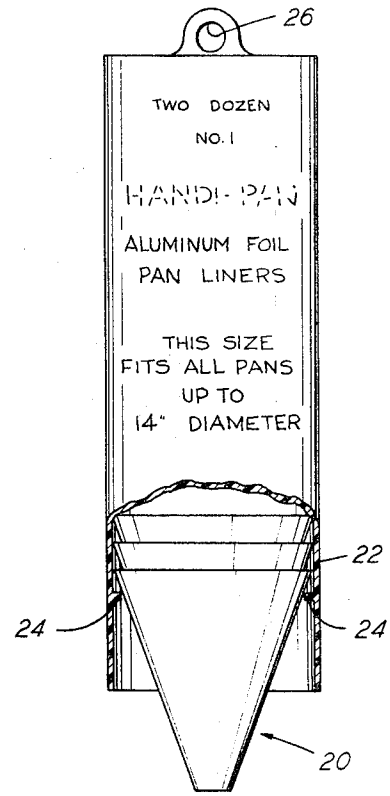


FIG. 5

INVENTOR
JOSEPH A. ESPOSITO
BY John F. McClellan Sr.
ATTORNEY

DISPENSING LINER AND PAD FOR UTENSILS

This invention relates generally to cooking utensils, and particularly to pan-liners, hotpads, and the like.

Single-use pan-liners of light gauge metal have been known and used for many years, both in the semi-rigid "pie-pan" configuration and in the custom-fit, malleable metal foil configuration. Pan sizes vary greatly, and this and extra cost have limited household use of the semi-rigid lining devices. Although the labor saving advantages of malleable metal-foil pan-liners far outweigh the trivial cost involved, and although most housewives would like to use such liners, their difficulty in fashioning the liners retards the potentially enormous household market.

For several reasons it would be impractical to use liners marketed as large flat foil discs (discs because most pans are circular). Packaging the discs so that they could be quickly and neatly separated for use one at a time, preferably with one hand, and that hand often covered with flour or other cooking material, presents a problem. Handling the separated disc of foil, and reducing the size by folding and molding the foil inside a pan, invites puncturing and tearing, and housewives know this, once having individually cut and fit foil to a pan. Most housewives also have found that even a pinhole in the liner resulting from folding can leak grease or other fluid onto the hot, dry pan beneath, causing smoke, odor, and difficulty in subsequent pan cleaning, defeating the purpose of the liner.

It is apparent that a new approach in malleable pan liner design and dispensing is required to overcome these marketing and use disadvantages.

An allied problem encountered by housewives in maneuvering hot containers is that of finding hotpads at the moment need, on which to set the containers to prevent scorching countertops and table surfaces. No completely satisfactory, handily dispensed one-use hotpads have become available on the market.

It is an object of the present invention, therefore, to provide malleable liners for pans and the like which are compactly stored ready for use and which are dispensed individually in a convenient manner by conventional dispensers of a type already on the market, the use of which is well understood by the buying public.

Another object of this invention is to provide malleable liners as described which are deployed by a simple unfolding within the container, increasing instead of reducing the size of the liner to fit the container.

A further object of this invention is to provide liners as described which are folded substantially without sharp corners to prevent pinholes which occur at sharp corner folds.

And a further object of this invention is to provide liners as described which store and ship compactly nested, but which unfold to fit pans within a wide range of sizes.

Yet further objects of this invention are to provide liners as described which are bright and attractive on display and in use, and which at one stage of unfolding will serve as efficient hotpads which are also bright and attractive in appearance.

I accomplish these and other objects of my invention in a typical embodiment comprising a disc of malleable aluminum foil reduced in diameter by peripheral inward folding and prepared for storage and dispensing, in the manner of conical-cup storage and dispensing from a tubular container, by diametral folding followed by coiling the folded piece into funnel shape.

The above and other objects and advantages of my invention will become more readily understood from examination of the following description, including the drawings in which:

FIGS. 1, 2 and 3 are plan views showing successive stages of folding sheet material;

FIG. 4 is a perspective of a device made according to my invention;

FIG. 5 is a side elevation partly broken away to illustrate storage, display and dispensing;

FIG. 6 is a side elevation, in section, of a liner being deployed in a pan; and

FIG. 7 shows a folding variation in similar manner to FIGS. 1-3.

Now taking up the drawings in detail, FIG. 1 shows an aluminum foil disc **12** of any convenient size, ready for conversion into the finished form of my invention. For pans up to 14 inches in diameter the disc is preferably at least 18 inches in diameter, to provide required depth, and is of freezer-weight (0.002 inch thick) foil, for durability.

FIG. 2 shows the next step in production, in which the peripheral edge **14** is folded inward, or returned, with sufficient soft pleating **16** to take up the excess. For very small pan liners, the FIG. 3 returned edge will be found unnecessary.

FIG. 3 indicates the step succeeding the FIG. 2 stages, diametral folding-over of one half **18** of the piece onto the other half **18*a***, in preparation for rolling it into funnel shape. If a returned periphery is used, the fold is made in a direction placing it inside the fold.

FIG. 4 shows the finished product **20**, a pan-liner in a conically coiled funnel shape, ready for use, or for packaging for shipment, marketing, or dispensing. The returned periphery (or the outer edge of the disc in sizes not requiring the extra diameter) comprises the large end of the funnel.

FIG. 5 shows that the method and apparatus for packaging this invention for dispensing is identical with the method and apparatus used with conical drinking-cups and the like. Tubular dispenser **22**, shown partly broken away at the lower end, has constrictive internal lugs **24** which contact the top of the lowest pan liner **20** and retain it, thus retaining all the pan liners nested together above it.

Hanger **26** provides a means of attaching the top of the dispenser **22** to a wall in a convenient location, as, for example, near the kitchen stove in the home. Since the pan-liner when unfolded to the configuration of FIG. 2 makes a sizeable and efficient hotpad, locating the dispenser near where food is heated serves an obvious double purpose.

FIG. 6 indicates the novel manner in which the liner **20** of this invention is unfolded and deployed in a pan **28**. The liner is "expanded" from the center of the pan to fit the edges as indicated by the arrow, reducing the chance of puncture and makin the task of lining the pan much easier and quicker, and taking the guess work out of matching sizes. Excess material can be folded toward the interior as at **30**. There is no unnecessary motion in the unfolding since the exterior of the conical shape once laid in the pan against the bottom is never again lifted from contact with the bottom until the liner is discarded.

FIG. 7 shows an optional step in going from the FIG. 3 configuration to the FIG. 4 configuration. As indicated, the half-disc of FIG. 3 can be softly folded over the diametral fold about a radius to form a quarter disc, as in FIG. 7, in which **32** indicates one of the quarters, before being rolled into the funnel shape of FIG. 4. This reduces the amount of unwinding necessary to deploy the funnel into pan conforming shape.

It can be seen that various sizes of pan liners can be packaged to fit any given dispenser, only the angle of the cone being affected by change in radial size of the FIG. 3 configuration. It can be seen also that other heat resistant foils can be used in place of the aluminum foil described.

Obviously many modifications and variations of the present invention are possible in light of the above teachings. It is, therefore, to be understood that within the scope of the appended claims the invention may be practiced otherwise than as specifically described.

I claim:

1. The combination of a tube dispenser and a tube-dispensable expanding pan-liner comprising: an unfoldable metal foil disc having a diametral fold incorporated in a coiled-funnel configuration having both ends open, with said diametral fold portion forming the edge at the small end of the coiled-funnel configuration and the edges of the metal disc other than the diametral fold portion forming the edge at the large end of the coiled-funnel configuration; said coiled-funnel configuration large end engaging a constriction within said tube dispenser and being held therein by the springlike resiliency of the coil to deter passage of the pan-liner through said tube dispenser, and the interior of said coiled-funnel configuration being open

to permit nesting storage of a plurality of said pan-liners above it within said tube dispenser.

2. A tube dispenser and tube-dispensable expanding pan-liner as recited in claim 1, wherein the metal foil disc has an unfoldable returned periphery, permitting deployment of the pan-liner to a larger diameter.

3. A tube dispenser and tube-dispensable pan-liner as recited in claim 2, wherein the returned periphery is unfoldable from the side of the disc which is within the diametral fold.

4. A tube dispenser and tube-dispensable pan-liner as recited in claim 3, wherein the returned periphery has pleats and comprises the large end of the coiled-funnel configuration.

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