April 14, 1964 H. A. REILLY 3,128,904

CONTAINER AND READILY REMOVABLE LINERS THEREFOR

Filed Jan. 21, 1963

Fig. 1

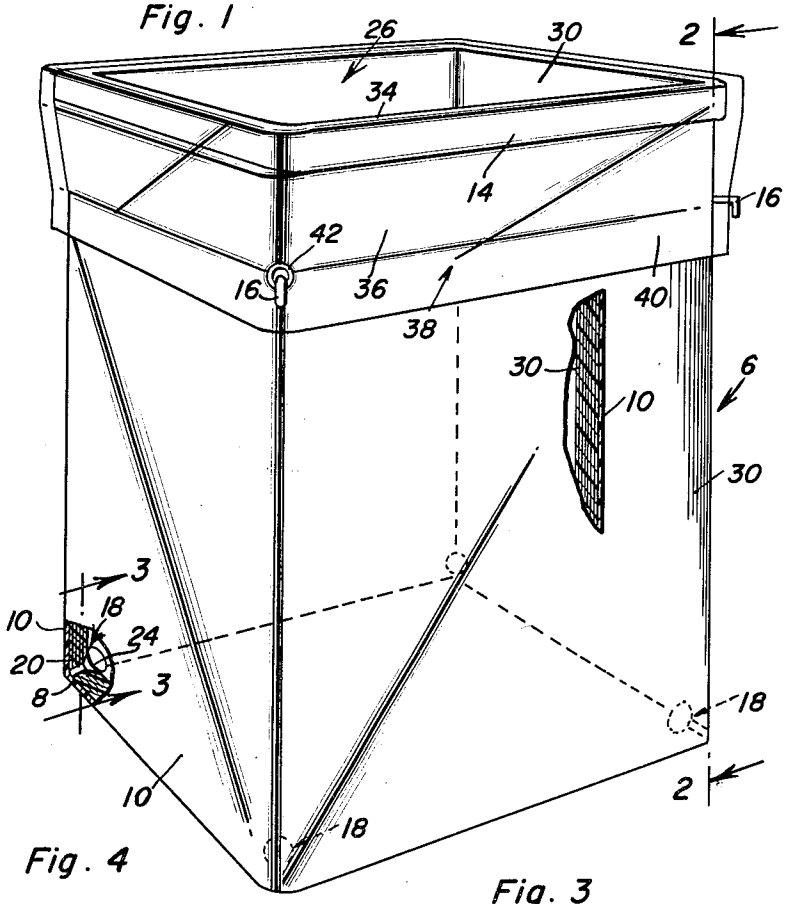


Fig. 2

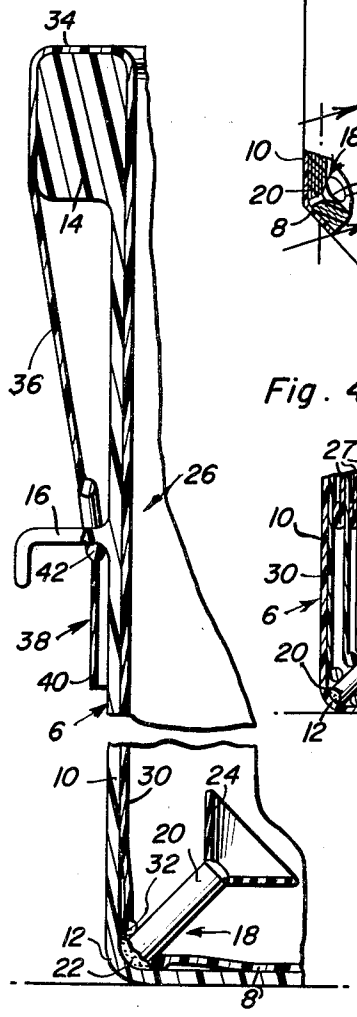


Fig. 4

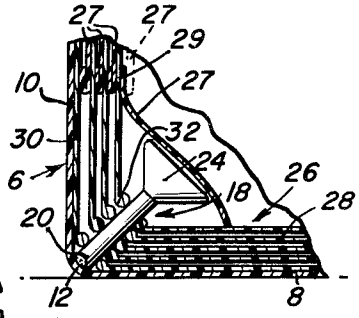
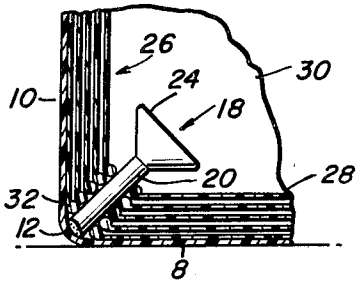


Fig. 3



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CONTAINER AND READILY REMOVABLE LINERS THEREFOR

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The present invention relates to a household-type container, a waste or trash basket for example, which is expressly constructed to accommodatingly receive, position, and retain a liner in the receptacle portion thereof, more particularly, a disposable or throwaway liner.

In order to simplify the instant presentation and insure a comprehensive understanding of the subject matter, the container will be treated as a waste and trash collecting basket or can which is constructed of lightweight but durable rubber-based plastic material. It is designed and adapted for long lasting service in the user's kitchen or elsewhere. The receptacle portion is constructed to accommodatingly receive and securely but removably position and retain one or more plastic or equivalent liners.

It is common everyday kitchen practice to use ordinary paper bags, specially made wax-coated bags and plastic bags in the receptacle portion of a trash can, basket or the like. In fact, it is customary to lift and remove the lining bag from the wastebasket after the bag has been loaded and then close the mouth of the bag and in a manner to provide a package which may be then conveniently disposed of by dumping it in the usual outdoor garbage or trash can, as the case may be. Specially designed liner bags for containers are not new, one typical type being covered in Gray's expired Patent 1,955,385 of April 17, 1934.

The above identified patent is mentioned merely to bring out the fact that in carrying out the principles of the present invention the liner or liners are such in depth as to effectually line the entire receptacle portion of the container. The upper or mouth portion can be folded outwardly and drawn down to provide a container encircling skirt or apron which may, if desired, be tautened and held against accidental displacement by appropriate retainers. It follows that in carrying out the principles of the present invention significant structural and functional distinctions and improvements are being relied upon as will be hereinafter revealed with appropriate particularity.

One improvement has to do with the container itself in that it is expressly designed and adapted for the temporary storage therein of a multiplicity of insertable and removable liners, for example, 100 more or less liners, each liner made of cellophane or equivalent material and said liners being detached and withdrawn one at a time with the refuse and other articles bagged therein for final disposition.

In carrying out a preferred embodiment of the invention the upper portions of the exterior surfaces of the walls of the container or basket are provided with outstanding holddown hooks. These hooks are employed to accommodate eyelets or openings on the downturned skirt-like portions of the liners so that the latter are not too easily or accidentally displaced.

The interior of the container is likewise specially constructed so that all four corner portions of the liners can be positively but releasably anchored in such a manner that the wall portions of the liners are efficiently spread and tautened whereby the liners of the overall batch or supply are maintained in an orderly arranged systematically usable condition.

Further, and as will be hereinafter appreciated by the reader, the instant concept relates not only to the container or basket by itself or the liners in combination

therewith but, in addition, to the liners in that each liner is expressly made to perform its duty in a reliable easy-to-understand manner.

It is also within the purview of this invention to provide headed anchoring devices in the respective corners of the basket, to provide the corners of the liners with apertures defining eyelets and, in addition, to provide each eyelet with a closing flap which functions, when the liner is withdrawn, to effectually cover and close the aperture in a manner to prevent the leakage of the wrapped refuse, particularly if it be such that it would otherwise leak or drip.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a view in perspective with portions broken away and shown in section of a combination container with liner means constructed in accordance with the invention;

FIGURE 2 is an exaggerated view with parts in section and elevation showing a corner portion of the container, a single liner, the view being taken on the plane of the section line 2—2 of FIG. 1 looking in the direction of the arrows; and

FIGURE 3 is a fragmentary view in section and elevation of one corner portion taken approximately on the plane of the section line 3—3 of FIGURE 1.

FIGURE 4 is likewise a fragmentary view in section and elevation which corresponds with FIGURE 3 except that each liner is provided at each corner portion with an anchor hole covering flap, this being a modified adaptation of the concept.

Taking up first the container, this component of the combination is denoted generally by the numeral **6**. Manifestly, this container will vary in shape, size and material in keeping with the manufacturing requirements of the manufacturer, intentions of wholesalers and retailers and usual needs of users. Assuming that the container will be primarily used in one's home it will take the form of a trash receiver, waste basket or the like. In the illustrated embodiment this container or basket comprises a flat horizontal bottom wall **8** and vertical or upstanding complemental side and end walls **10** joined by rounded junctional web portions **12**. The container is open at the top and the exterior portions of the upper walls are increased in cross-sectional thickness to provide a reinforcing bead or rim **14**. The intermediate portion of each vertical wall is provided with holddown means. More specifically this means comprises exterior hooks **16** located at the places indicated. Each hook is preferably integral with the wall which carries it. Experimental models have been constructed of rubber-based plastic material which lends itself to molding and is colorful and washable and consequently highly suitable for wastebacket use.

Continuing with the construction of the container it will be noted that on the interior of the receptacle portion, and more specifically at each corner, novel liner anchoring and retaining means is provided. More explicitly this means, designated as an entity by the numeral **18**, comprises a mushroom-type anchor which in turn embodies an oblique angled post or stem **20** the lower end of which is integrated at **22** with the corner portion **12**. The upper or inner end portion of the post or stem is provided with a flaring conical flexibly resilient head **24** which lends itself to practical and feasible use as illustrated, for example, in FIG. 3 in particular. This head **24** is collapsible and may be squeezed to reduce its size when installing a new supply of insertable and removable liners **26**. Perhaps it will be the practice of manufacturers and retailers to sell the

basket in combination with a stack or batch of liners already installed and consequently in readiness for use. Each liner is in effect like a bag and is highly flexible but tough and is made preferably of cellophane or an equivalent sheet plastic material. In actual practice some 100 (more or less) liner-bags of cellophane will be installed for use by the purchaser. Thereafter it would be appropriate to retain the container after all of the liners have been used up and to purchase a new supply which would no doubt be designated as refills. In any event, and noting a single liner 26, it will be evident that it has a bottom wall 28 which is spread on the interior of the bottom wall 8 and has upstanding vertical walls 30, appropriately reinforced anchoring eyelets 32 being provided at the juncture of the walls 28 and 30 and said eyelets being of a size that they may be fitted over the anchoring retainers 18 in the manner illustrated.

The upper portions of the walls are intended to be directed or folded outwardly at 34 to extend over the top edges of the bead or bead means 14. Then the surplus wall portions 36 are pulled or drawn down to provide an overhanging container encompassing skirt portion denoted generally by the numeral 38. Above the free edge 40 the skirt portion is provided with additional reinforced eyelets or openings 42 which are adapted to be releasably engaged over the holddown hooks 16.

By illustrating the construction, positioning, and use of a single liner 26 in FIG. 2 it is believed that the use of a batch of liners as illustrated in FIGS. 1 and 3 will be clear.

The basket or container 6, according to present contemplated plans, will constitute a permanent unit of the combination. An experimental model, which proved out to be reasonably successful is 24 inches high and 17 to 18 inches square in plan. The degree of the overhang of the exterior skirt-like portion 38 will vary, but for the present it was found desirable to drape or fold this mouth portion over the rim 14 as at 34 and then downwardly a few inches and to provide at each corner portion a reinforced eyelet 42 for attachment to and retention on the holddown hook 16 with which it is engaged. The anchoring mushroom-type retainers 18 are preferably of the shape and approximate size indicated and are located in diagonal or slanting positions at the respective corners. As stated, the eyes or openings 42 are marginally reinforced for ease and assurance of handling. With the construction and arrangement shown, one is not faced with the daily insertion and removal of a single bag or liner. By having a multiplicity of liners it will be evident that after one liner has been loaded, suitably bagged and disposed of, the next liner will then be ready for use.

It will be further evident from the disclosure that the user is permitted to remove the inserts or liners one by one and without having to remove the container from its customary position in the kitchen or elsewhere.

With reference now to the modification depicted in FIG. 4, it will be seen that container 6 is the same as already described and embodies a bottom wall 8 and vertical walls 10. The headed mushroom-shaped anchor 18 is as already described and consequently is characterized by the aforementioned oblique angled post or stem 20 secured in the corner portion 12 and provided at its upper end with the aforementioned flexibly resilient conical or equivalent head 24. The liners 26 are also provided at each corner with an anchoring eyelet 32. It would be within the purview of this invention to make these eyelets of elastic construction, in fact, sufficiently elastic that the eyelet would expand to clear the head 24 and after having been removed would be substantially self-closing or sealing to in this manner guard against leakage of the contents of the contents-packaging liner. An alternative solution of this corner sealing problem is that illustrated in FIG. 4 wherein it will be seen that each apertured corner portion of each liner is provided with a suitable thin flap 27 which has one edge secured by adhesive or otherwise to the cooperating vertical wall of the liner in the manner illustrated. In this adaptation the innermost liner would consequently be provided at its four corners not only with the eyelet 32 but with the attending guard flaps 27 and each flap could then be positioned over the head 24 in readiness to come into play after the corner has been detached from the retainer or anchor. In other words, when the four corner portions of the liner have been disconnected from their respective holddown anchors the flaps would then come into play, cover the eyelet and consequently provide a satisfactory leak preventing seal. It is believed that the flaps can be so balanced and made that by attaching the upper edge portions as at 29, the free edge portions would permit the flap to gravitate to a self-closing or sealing position. It will be seen in FIG. 4 that the several liners to the left of the innermost liner 26 are illustrated with their closing flaps swung up. Consequently, the out-of-use flaps ar sandwiched between the respective liners and are in readiness to come into play automatically as the innermost liner assumes the loadable position illustrated.

It is submitted that a careful consideration of the specification in conjunction with the views of the drawings will enable the reader to obtain a clear and comprehensive understanding of the invention, the attending features and advantages and the preferred manner of using the same. Therefore, a more extended description is thought to be unnecessary.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A waste and trash collector comprising an open-top container having a bottom wall and upstanding side and end walls defining a receptacle portion having individual corners, liner positioning and retaining means mounted on the interior of the receptacle portion and secured in the respective corners, and holddown hooks mounted on exterior upper portions of said upstanding walls, said positioning and retaining means consisting of inwardly and upwardly directed anchoring members for cooperating corner portions of insertable and removable liners.

2. The structure defined in claim 1 and in combination, at least one readily insertable and removable liner for protectively covering the interior surfaces of the walls of said container, said liner having a receptacle portion fitting telescopically within the receptacle portion of the container, said liner receptacle portion having lower corner portions provided with reinforced eyelets, said eyelets removably connectible with the anchoring members, and said liner being of a depth greater than the depth of the receptacle portion and having an upper open mouth portion the encompassing walls of which are directed downwardly to overhang exterior surfaces of the upper wall portions of said container, the overhanging portion providing a positioning and holding skirt portion and said skirt portion having eyelets which are releasably connectible with the holddown hooks.

3. A portable waste and trash collector for household use comprising a substantially rectangular open top container embodying a bottom wall provided around margins thereof with upstanding interconnected side and end walls, said walls defining a receptacle portion, upper exterior corner portions of said container being provided with outstanding hooks, interior lower corner portions being provided with flexibly resilient mushroom-type liner anchoring members.

4. The structure defined in claim 3 and in combination, an insertable liner having bottom, side and end walls in opposed relation to the corresponding walls of the container and provided at corner portions with reinforced eyelets engageable with said anchoring members, upper por-

tions of said liner being provided with eyelets for attachment to and retention on the aforementioned hooks.

5. The structure defined in claim 3 and in combination, an insertable liner having bottom, side and end walls in opposed relation to the corresponding walls of the container and provided at corner portions with reinforced eyelets engageable with said anchoring members, upper portions of said liner being provided with eyelets for attachment to and retention on the aforementioned hooks, and wherein the first-named eyelets have reinforced marginal edge portions which are elastic and substantially self-closing, whereby when the liner has been detached and removed the inherent elastic properties serve automatically to constrict the eyelet to the extent that it becomes substantially self-sealing to guard against leakage of the wrapped disposable contents.

6. The structure as defined in claim 3 and in combination, a plurality of nested insertable and individually removable liners, said liners having bottom, side and end walls in opposed relation to the corresponding walls of the

container and provided at corner portions with reinforced eyelets engageable with said anchoring members, upper portions of said liners being provided with eyelets for attachment to and retention on the aforementioned hooks in a manner so as to allow for the consecutive removal of individual liners beginning with the innermost liner.

7. The structure defined in claim 4 and in combination, each liner corner portion and the associated eyelet being provided with an interiorly arranged eyelet closing flap, said flap serving when in its usable position to substantially close the eyelet and thus seal the associated corner portion.

References Cited in the file of this patent

UNITED STATES PATENTS

1,955,385	Gray	Apr. 17, 1934
2,757,859	Holland	Aug. 7, 1956
2,796,309	Taylor	June 18, 1957
2,798,637	Wachter	July 9, 1957