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CAN CLOSURE

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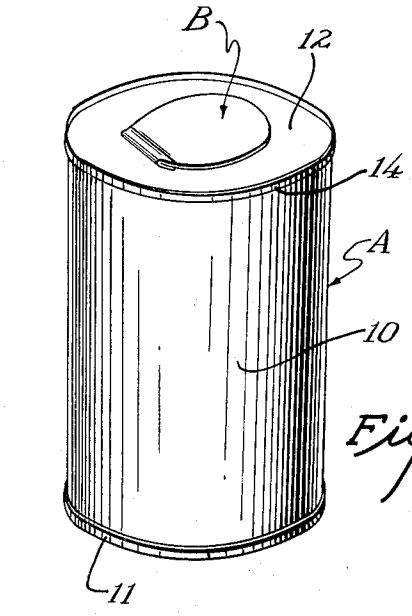


Fig. 1

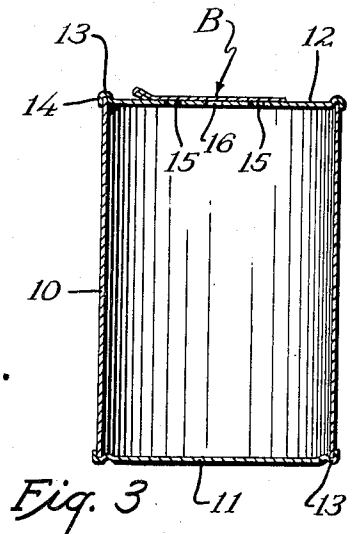


Fig. 3

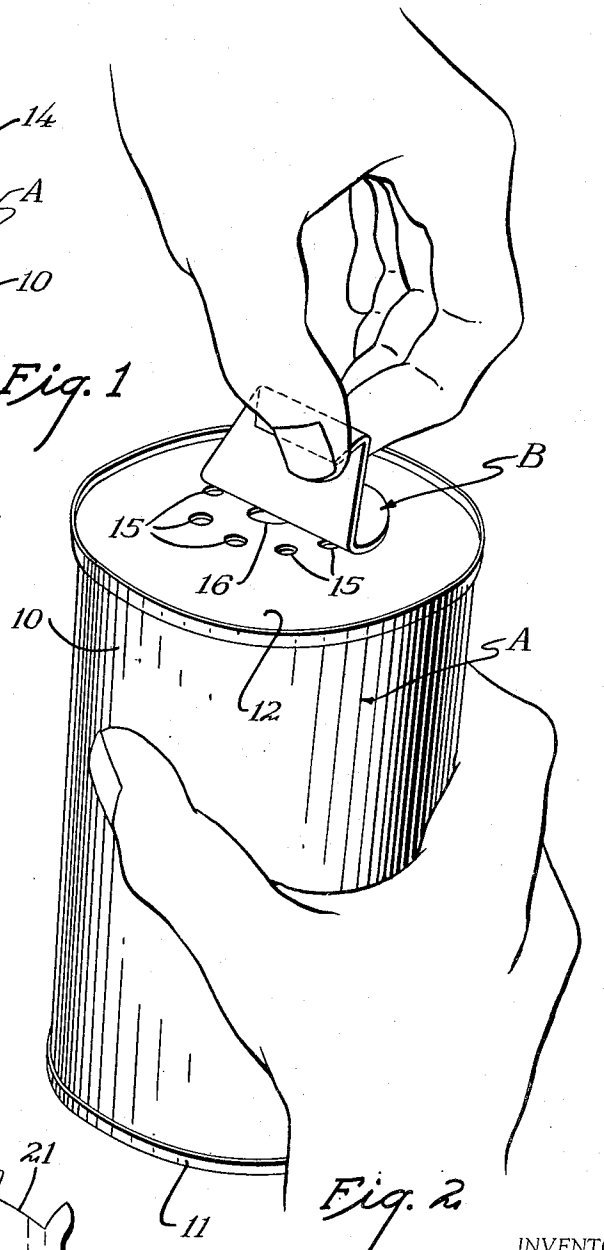


Fig. 2

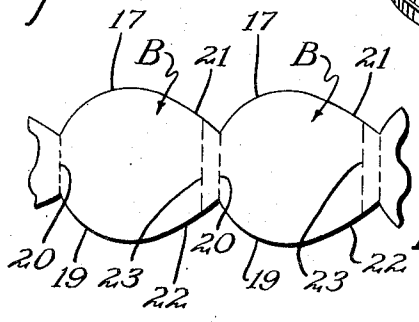


Fig. 4

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CAN CLOSURE

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2 Claims. (Cl. 222—544)

This invention relates to an improvement in can closures and deals particularly with a can structure suitable for use in containing scouring powder or similar material.

Numerous items are packaged in tubular cans, or similar containers, having metallic ends. These ends are often provided with a series of angularly spaced ears integral with the can end and bendable from the plane of the can and to angular relation relative thereto. These ears may be produced by defining cut lines on the can ends extending partially through the can end body, or preferably may be formed by punching the ears out of the plane of the can end and then pressing these ears back into the plane of the can end to close the opening through the can end during storage and transportation. When the cans of the product reach the consumer, one or more of the ears are punched out of the plane of the can end to permit the contents of the can to be readily dispensed.

A feature of the present invention resides in the provision of a tab preferably coated with a pressure sensitive adhesive and which normally covers one or more openings in the end of the can. As a result the can ends may be formed by actually punching holes in the can end and then these holes may be normally maintained in closed position by covering the holes with the tab coated with pressure sensitive adhesive.

A feature of the present invention resides in the fact that the tab employed to normally cover the dispensing opening or openings in the can may be printed with suitable indicia. This arrangement permits the tab to be used as a coupon if desired for return to the manufacturer. Some difficulty is experienced, particularly when paper bodied cans are employed, in providing a separable label portion which may be returned to the manufacturer for a premium or similar gift. The removable tab has the advantage of adhering to a return letter or post card as evidence of the purchase of the goods.

A feature of the present invention lies in the simplicity with which the tabs may be manufactured and used. In preferred form the tabs are die cut from an elongated strip of pressure sensitive tape or the like and the tabs are arranged in a continuous band. The individual tabs are then separated by cutting or tearing the material between adjacent tabs, preferably an edge of each tab is folded back upon itself to underlie the pressure sensitive surface of one portion of the tape to simplify the removal of the tab. This inwardly folded tab portion does not adhere to the can end and thus forms an edge flap which may be engaged by the fingers for removing or partially removing the tab.

These and other objects and novel features of my invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of my specification:

Figure 1 is a perspective view of a can showing the tab attached thereto.

Figure 2 is a perspective view of a can showing the tab thereon partially removed.

Figure 3 is a sectional view through the can showing the tab in place.

Figure 4 is a diagrammatic view of a pair of tabs showing the manner in which a series of tabs may be formed.

The can A may be of any suitable or desirable form and may be provided with side walls **10** of metal, spirally wound paper board, fiber or any other suitable material. The ends of the side wall are normally closed by a bottom closure **11** and a top closure **12**. These closures may be of any desired shape or form, but in the disclosure the ends are shown as having marginal grooves **13** which accommodate the ends of the side walls **10**. A marginal flange **14** outwardly of each groove **13** is crimped against the can body to hold the can ends in place.

The upper can end **12** is shown as having a series of angularly spaced apertures **15** therethrough. The can end is also shown as having an enlarged central aperture **16**. It is normally not necessary to employ both the angularly spaced apertures **15** and the center aperture **16** and either the angularly spaced apertures **15** may be omitted or the central aperture **16** may be omitted.

A tab B is detachably connected to the can end **12**. The tab B is shown as being of substantially tear drop shape each tab having opposed rounded edges **17** and **19** connected by a chord **20**. The chord **20** may be produced by a perforated line connecting the rounded edges **17** and **19**, or may be a cut line between these parts. In the continuous form of the tabs illustrated in Figure 4 of the drawings, the line **20** is indicated as a perforated line or weakened line of separation along which the individual tabs may be separated.

The curved lines **17** and **19** blend into substantially straight portions **21** and **22** which may curve along a relatively large radius. A line of fold **23** is indicated across each tab parallel to the line of separation **20**. In actual practice it is often not necessary to score the material forming the tab as this material bends readily enough so that it may be readily folded either mechanically or manually.

After each tab B has been severed from the remaining tabs of the strip the end of the tab between the fold line **23** and the line of separation **20** is folded to underlie the adhesive coated surface of the tab, the adhesive on the surface of the folded area adhering to the adhesive surface adjacent to the folded tab. Thus the undersurface of the folded portion of the tab is not adhesively coated and will not adhere to the surface of the can. The tab B is next applied to the upper end **12** of the can so as to cover all of the openings **15** or **16**, or both types of openings.

This form of tab has certain definite advantages. In the first place the taper of the folded clip on the tab permits the undersurface of the tab at each end of the folded portion to adhere to the can. As a result the folded edge of the tab is held in close proximity to the can body, preventing the accidental removal of the tab. The adhesive area at each end of the folded tab portion holds the folded tab portion below the level of the beaded or grooved edge of the can top and therefore out of contact with any flat surface overlying the can or upon which the can may be inverted. At the same time the folded tab portion permits the tab to be readily grasped between the thumb and forefinger for the removal of the tab.

The use of the tab is believed obvious from the previous description. The pressure sensitive surface on the tape permits the tab to be resealed over the openings if desired. They also permit a portion of the apertures to be uncovered without uncovering all of the apertures. Furthermore, if desired the powdery contents of the can may be directed against the loosened portion of the tab

if desired, this powdery material being engaged by the adhesive to render the adhesive useless to reseal the tab. Thus the tab may either be used for resealing purposes or may be definitely kept from resealing if this is preferred.

In accordance with the patent statutes, I have described the principles of construction and operation of my can closure and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. As an article of sale and subsequent handling by a domestic consumer, a container of conventional cleanser scouring powder for domestic use having in combination with a normally uncovered and exposed metal top provided with a plurality of grouped apertures therein for singly and collectively spilling out the scouring powder contents of said container, a removable and reuseable flexible covering having a pressure sensitive adhesive coating thereon secured in independently sealed and resealing relationship over each of said apertures, said covering consisting of a prefabricated section of pressure sensitive adhesive tape having a coating of pressure sensitive adhesive material on one surface thereof in sealed relationship about each of said apertures in said metal top, and an integral portion of the marginal edge of said tape covering folded to underly said covering with the coating of pressure sensitive adhesive thereon adhering in face to face relationship forming a lifting tab, said lifting tab portion having areas along opposite sides thereof of pressure sensitive adhesive coating strips afforded by said first mentioned coating sealing said lifting tab portion along the opposite sides thereof to said metal top in integral spaced relationship to said flexible covering which is in independently opening and reclosing relationship over each of said apertures.

2. As an article of sale for domestic kitchen use, a container of conventional powdered scouring cleanser composition having in combination with a normally uncovered and exposed metal top provided with a plurality of angularly grouped prefabricated apertures therein for singly and collectively spilling out the conventional powdered scouring cleanser, a removable and reuseable flexible covering having a pressure sensitive adhesive coating thereon with the said pressure sensitive adhesive in sealed

down relationship of said metal top covering and respectively sealing each of said apertures, said covering having an integral tab portion with opposite converging sides in replaceably sealed down relationship with said metal top for lifting said flexible sealed down covering from about said apertures to independently open and reclose an adjacent aperture and any adjacent number and all of said apertures, said flexible covering consisting of a prefabricated shaped section of pressure sensitive adhesive tape consisting of a flexible backing with said pressure sensitive adhesive coating thereon and said integral tab being a relatively tapering pull-tab side of said flexible covering in sealed down relationship covering said apertures and also having a tab sealing pressure sensitive adhesive coating thereon including the areas along the said opposite converging sides thereof, said covering and said tab being shaped with the tab to overlie in sealed spaced relationship therewith a section of the metal top not provided with the plurality of apertures and to leave the balance of the adjacent metal which is not provided with apertures normally exposed to atmospheric conditions, and the said prefabricated pull-tab side on said covering being in sealed-down relationship against the said metal top co-jointly with said sealed down aperture covering and sealing each of said apertures, whereby said pressure sensitive adhesive coating forms replaceable seals about each aperture for independent opening and reclosing of any desired number thereof and seals along the edges of said tab holding the same in sealed-down and resealing relationship against said metal top to prevent the accidental opening of said apertures and spilling of cleanser scouring powder from under said tab side.

References Cited in the file of this patent

UNITED STATES PATENTS

307,506	Tomson	Nov. 4, 1884
506,982	Diamond	Oct. 17, 1893
2,170,147	Lane	Aug. 22, 1939
2,175,430	Diamond	Oct. 10, 1939
2,500,549	Ketay	Mar. 14, 1950
2,589,168	Vassar	Mar. 11, 1952

FOREIGN PATENTS

12,043	Sweden	Mar. 2, 1896
393,199	Great Britain	June 1, 1933