Aug. 8, 1944. J. M. HOTHERSALL 2,355,074

CONTAINER CLOSURE

Filed Dec. 30, 1939

Fig 1

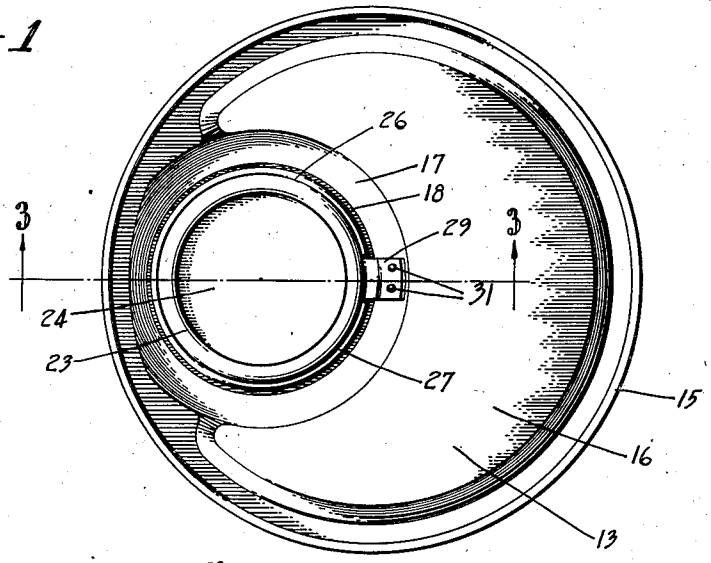


Fig 2

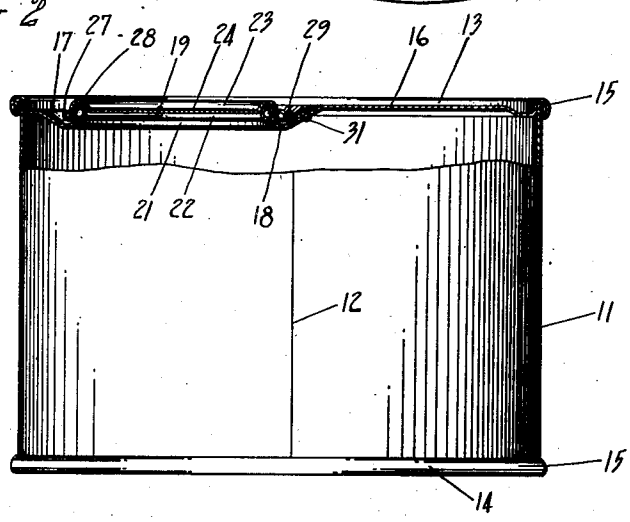
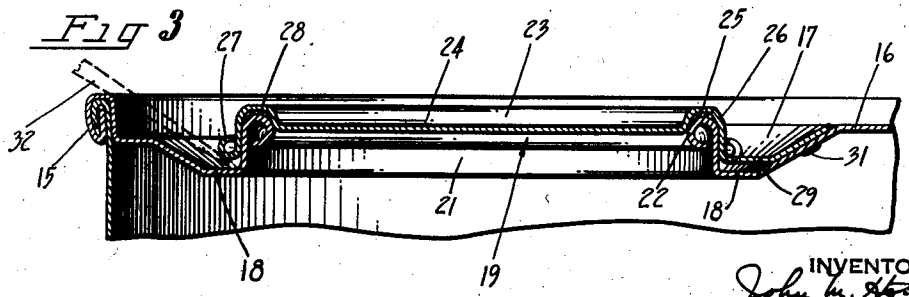


Fig 3



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CONTAINER CLOSURE

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1 Claim. (Cl. 220—31)

The present invention relates to an improvement in hermetic cans or containers and has particular reference to a drive fit friction closure container having a cover hingedly secured to a container end wall.

The invention contemplates a metal can or container suitable for vacuumizing and hermetic sealing of powdered and granular materials therein such as cocoa, coffee and the like, provided with a dispensing opening in its top end closed by a tightly fitted gasket lined cover which may be pried loose by the use of a blunt instrument and swung open on a flexible connection secured to the can end and thereafter the cover serves as a hinged captive reclosure.

An object of the present invention is the provision of a hermetic container for powdered and granular materials, wherein the container is provided with a top end member having a circular dispensing opening for easy removal of the contents by means of a spoon or the like, which opening is closed by a compound gasket lined, drive fit cover engaged with a vertical upturned wall surrounding the opening and arranged to swing into an open or closed position on a flexible tab or lug extending from the cover and attached to the can end as by spot welding.

Another object of the invention is the provision of such a can or container wherein one end has a dispensing opening closed by a hermetically sealed captive cover which is easy to pry open for the withdrawal of its contents without removal of an entire can wall, the various improved embodiments of such a can being confined within a single can end which may be secured to a simple, inexpensive type of can body by standard closing equipment already installed in the packer's plants.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawing, discloses a preferred embodiment thereof.

Referring to the drawing:

Figure 1 is a top plan view of a container embodying the present invention and illustrating its hinge cover in closed position;

Fig. 2 is a side elevation of the container shown in Fig. 1 having parts broken away and parts shown in section; and

Fig. 3 is an enlarged fragmentary view in vertical section of container parts shown in Fig. 1 as taken substantially along the section line 3—3 in said figure.

The container illustrated in the drawing is a preferred embodiment of the present invention. This container comprises a cylindrical body 11 closed at its ends by suitable top and bottom end members. Such a container body 11 is preferably made from a single sheet of metal formed into tubular shape with its contacting edges joined in the usual form of side seam joint 12 extending longitudinally along the body. Figure 2 of the drawing shows a top end member 13 and a bottom end member 14 secured to the cylindrical body 11 by the usual form of end seam joint 15.

The top end 13 is provided with a raised reenforcing panel portion 16 (Figs. 1 and 2) which is crescent shape in outline. An annular downwardly and inwardly sloping section or portion 17 located at the inside of the curve of the crescent in the panel 16 merges at its lower edge into an annular countersunk channel including a horizontal wall 18. A circular dispensing opening 19 (see also Fig. 3) is centrally disposed inwardly of the countersunk channel and is defined by an upstanding wall 21 terminating in an inwardly curled edge or bead 22.

Figs. 2 and 3 of the drawing show the countersunk wall 18 the raised panel 16 and the curled edge 22 all contained within the overall can height of the container. The dispensing opening 19 is closed by a drive fit cover 23 and the top of this cover when in closed position is below the outer edge or double seam 15 of the container. This construction permits stacking of containers one upon the other.

The cover 23 (Fig. 3) has a centrally disposed panel section 24 bounded by an annular channel section 25. A laterally bent wall 26 depends from the outside of the annular channel and provides frictional engagement with the vertical wall 21 of the can end 13 when the cover is applied for closing the can. The peripherial edge of the cover wall 26 is outwardly curled as at 27 (Figs. 2 and 3) to provide a smooth outer edge or bead.

The friction walls 21 and 26 of can end and cover are suitably sized to provide for the proper tight fit but in addition a gasket or compound lining 28 carried in the channel 25 provides for a hermetically sealed joint for such a friction closure.

A flexible connector or hinge tab 29 provides a captive feature for the cover 23 and is preferably formed as an integral part of the cover. Figs. 1 and 3 of the drawing illustrate such an integral connector or tab 29 as being extended laterally to closely engage the sloping panel wall 17. Tab

and can end are here shown as being secured together by spot welding, as at 31.

The cover 23 is preferably made, assembled and secured to the can end 13 in the can manufacturer's plant after which the complete end is shipped to the customer. Such can ends are then secured to a filled container as the ordinary end is secured by the double seam end joint 15. This hermetically seals the container.

The filled and closed container, provided with an end as heretofore described, can be opened easily by means of any blunt instrument used in or around the kitchen to gain access to the container contents. A suitable pry open instrument 32 is suggested by the dotted outline in Fig. 3 which shows the instrument being applied under the curled rim 27 of the cover. Upon being pried loose from its hermetically sealed joint, the cover 23 may be swung back on the flexible connector 29 to expose fully the container opening 19. Upon the return of the cover to its former sealed position, a satisfactory reclosure is obtained.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

A pry open hinge cover container, comprising a tubular body having a top end member secured thereto in a double seamed joint, said end member having an annular channel defined by a downwardly and inwardly sloping integral wall portion merging into a substantially horizontal wall part in turn merging into an upstanding friction wall terminating in an inwardly curled annular bead surrounding a dispensing opening in the end member, a substantially crescent shaped upstanding integral panel portion in said end member partially surrounding said dispensing opening for reenforcing and rigidifying the friction wall surrounding the opening, and a captive cover member for said opening having an integral tab fixedly secured within said end member channel to constitute a permanent hinge connection with said top end member, said cover having an annular channel defined by a central depressed panel part and an outer depending friction wall flange having an exterior drive fit friction engagement with the upstanding friction wall of said end member and terminating in an outwardly and upwardly curled bead disposed within said end member channel and spaced above the horizontal wall part thereof, whereby said cover may be released from closed position by inserting the end of a prying instrument into said end member channel beneath said cover bead, and a gasket sealing material disposed in said cover channel in engagement with said inwardly curled end member bead for hermetically sealing the dispensing opening when said cover is in closed drive fit position on said end member friction wall.

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