

June 24, 1941.

J. F. PETERS

2,246,533

CONTAINER RECLOSURE

Filed Nov. 2, 1937

Fig 1

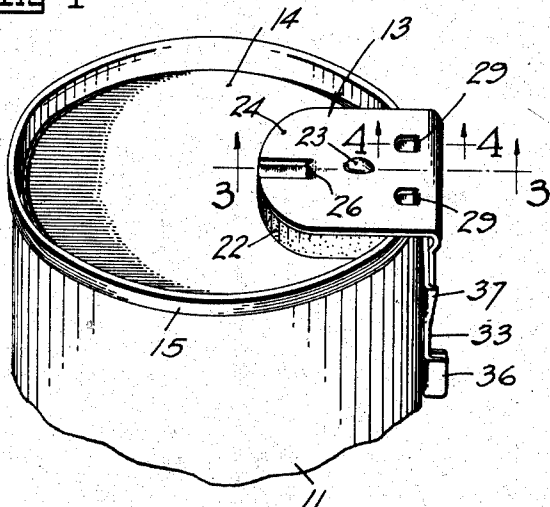


Fig 2

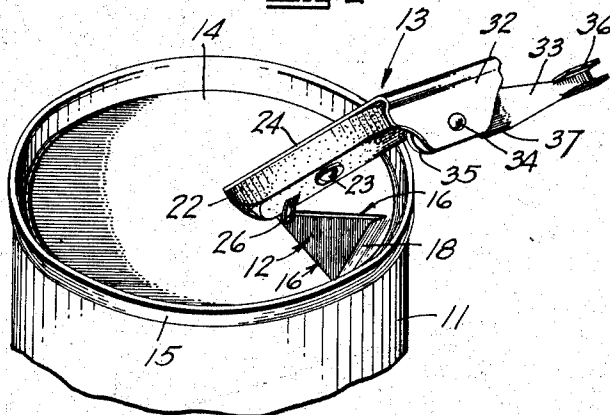


Fig 4

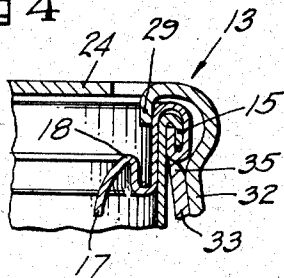


Fig 5

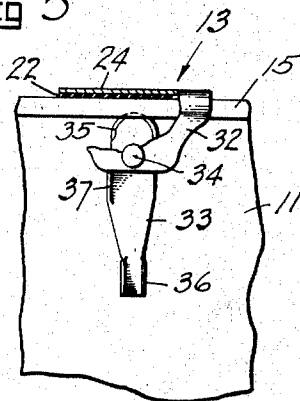
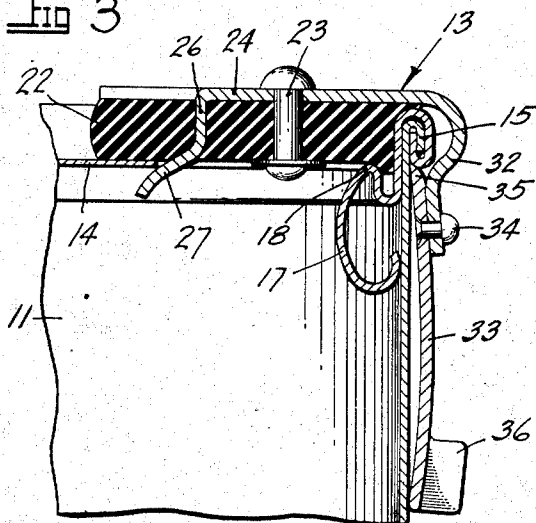


Fig 3



INVENTOR.
John F. Peters
BY *Doan W. Thompson*
Charles H. Crisp
ATTORNEYS

UNITED STATES PATENT OFFICE

2,246,533

CONTAINER RECLOSURE

John F. Peters, Leonia, N. J., assignor to American Can Company, New York, N. Y., a corporation of New Jersey

Application November 2, 1937, Serial No. 172,473

4 Claims. (Cl. 220-24)

The present invention relates to a container or can reclosure and has particular reference to a can rim locking reclosure member which is adapted by locking engagement on the rim of the can for temporarily sealing a dispensing opening such as one which is produced in the can by a cutting away of a portion thereof and accompanied by a turning inwardly of the cut away portion.

In recent years can opening devices have been developed for producing an irregular shaped dispensing opening in cans, especially those containing liquid, by cutting away a portion of the can wall and turning this cut away portion inwardly so that the opening will function for pouring or dispensing of the liquid from the can when the latter is held in a pouring position. Such a can opening device is disclosed in United States Patent 1,996,551, issued April 2, 1935, to De Witt F. Sampson and John M. Hothersall, on "Container opener."

The opening produced by such a device, being bounded by raw edges and one rolled back smooth edge, is difficult to satisfactorily reclose. However, it is desirable to temporarily and effectively close the opening when only a portion of the can contents is dispensed at one time for otherwise the remaining portion is left exposed to the effects of atmospheric conditions with deleterious results. The instant invention contemplates the provision of a simple, positive reclosure element for such an opened can.

An object, therefore, of the invention is the provision of a locking reclosure for sealing a dispensing opening of the type produced in a can by a cutting away of a portion of the can wall and by a turning inwardly of the cut away portion, such sealing reclosure being adapted for locking engagement on the rim of the can in a manner to clamp the reclosure in sealing position over the opening.

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 perspective view of the upper portion of a can showing attached a locking reclosure member embodying the instant invention;

Fig. 2 is a perspective view of the same upper portion of the can of Fig. 1 illustrating the open-

ing in the can and also showing the reclosure in partially applied position;

Fig. 3 is an enlarged sectional view partly broken away taken through the can with the locking reclosure member fully applied being a section substantially along the line 3-3 in Fig. 1;

Fig. 4 is an enlarged fragmentary sectional detail taken substantially along the line 4-4 in Fig. 1; and

Fig. 5 is an enlarged fragmentary elevation of the can and the fully applied reclosure, with parts broken away, and parts shown in section.

In order to disclose a preferred embodiment of the invention and its manner of use, the drawing illustrates a sheet metal can 11 having an irregular shaped dispensing opening 12. It is this type of opening that it is desirable to temporarily and hermetically seal and according to the invention this is best done by a locking two piece reclosure member broadly designated by the numeral 13. The opening 12 is shown as being made in a top end 14 of the can. This top is united to the can body in the usual manner as by a seam 15 which inherently provides a rim around the end of the can. Such an opening may be produced by any suitable instrumentality such as that shown in the Sampson-Hothersall patent hereinbefore mentioned.

Although the can opening 12 may have any desired shape, in the present instance it is triangular, having raw diverging and exposed edges 16 produced by the cutting away of a portion 17 of the can end. The cut-away portion 17 is bent inwardly during the cutting operation and this bending action leaves a smooth curled edge 18 along the base of the triangular opening.

The reclosure 13 includes an elastic pad 22 such as rubber or the like which is adapted to be clamped down tightly on the can top 14 over the dispensing opening 12 when the reclosure is in its re-sealing position. The elastic pad is secured by a rivet 23 to a stiff metal backing-up plate 24.

The plate 24 is formed with a depending tongue 26 which extends down through the elastic pad 22 and which projects into the can opening 12 (as best shown in Fig. 3) when the reclosure is applied to the can. The lower end of the tongue is curved as indicated at 27 and extends under the can top wall and acts as a wedge for clamping the pad tightly against the top of the can. The tongue also serves as a guide for properly placing the reclosure in its re-sealing position, this initial step being best shown in Fig. 2. In the present instance the tongue is inserted into the

opening 12 at the innermost vertex of the triangle.

The plate 24 is further formed with a pair of depending lugs 29 (see Figs. 1 and 4) which extend down adjacent the can seam or rim 15 on the inside of the rim when the reclosure is on the can. These lugs center the reclosure relative to the can and also tend to slide the plate 24 toward the center of the can thus wedging the tongue extension 27 into position. It is this wedging action which brings the inner face of the elastic pad into tight sealing engagement with the can end member.

Adjacent the lugs 29 the plate 24 is bent outwardly and downwardly in a bracket extension 32 projecting over the can rim 15 to depend adjacent the outside of the can. The bracket carries a cam lever 33 which is supported on a pivot pin rivet 34. The upper end of the cam lever is rounded and its marginal edge is beveled thus providing a cam surface 35. This cam surface engages under the can rim as best shown in Fig. 3 and thus draws the outer portion of the elastic pad 22 down tightly over the can opening 12 and locks the reclosure on the can rim when the lever is swung on its pivot pin rivet into locking position.

The lower end of the lever is bent into a U-shape as indicated at 36 and provides a convenient finger-hold for manually swinging the lever into locking position as above described. Intermediate the length of the cam lever, it is formed with a bent up stop member 37 which engages against the lower edge of the bracket 32 and stops further movement of the lever when the latter is shifted into its full clamping or locking position as in Figs. 1 and 5.

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:

1. A container reclosure device for resealing an opening which has been cut in a sheet metal container adjacent the rim thereof, said device comprising an elastic pad for engaging the container adjacent the area of said opening for hermetically sealing the same, a plate member secured to said elastic pad and including rigid means for engaging beneath the edge of said opening, said plate further including an angularly disposed bracket extension adapted to depend over the rim of the container, and means pivotally mounted on said bracket extension and adapted to be swung in a

plane substantially parallel to the longitudinal axis of the container into engagement beneath the container rim for drawing said pad inwardly and locking the same in sealing position over said opening.

2. A container reclosure member adapted to reseat an opening which has been cut in a sheet metal container, comprising a supporting plate, an elastic pad secured to said supporting plate, rigid means on said plate adapted to engage beneath the edge of said opening for locating said pad in sealing position relative to the opening in said container, said plate terminating at one end in a depending bracket extension, and a cam lever pivotally mounted on said bracket extension and including a cam surface adapted to engage beneath the rim of the container when the cam lever is manually swung in a plane substantially parallel to the longitudinal axis of the container for drawing inwardly upon and locking the reclosure member in place on the container.

3. A container reclosure member adapted to re-seat an opening which has been cut in a sheet metal container, comprising a supporting plate, an elastic pad attached to said plate, a depending tongue adjacent one end of said plate projecting through and extending beneath said elastic pad for engagement beneath an edge of the dispensing opening to locate said pad in registry with said opening, a depending bracket extension at the opposite end of said plate, and a cam lever pivotally mounted on said bracket extension adapted to be swung in a plane substantially parallel to the longitudinal axis of the container into locking engagement beneath the rim of the latter, whereby to draw the elastic pad into hermetic sealing engagement with the container wall surrounding the opening.

4. A container reclosure member adapted to reseat an opening which has been cut in a sheet metal container, comprising a supporting plate, an elastic pad secured to said plate, an inclined tongue formed on said plate at one end thereof, lugs also on said plate at the opposite end thereof and extending down adjacent the inside surface of a rim of the container when the reclosure member is applied thereto, and devices carried on said plate for locking the reclosure member in place on the container rim, said tongue being adapted for insertion into the container opening to locate the elastic pad relative thereto and also being adapted to be wedged into reclosure holding position by said lugs, said tongue cooperating with said locking devices to draw the elastic pad into hermetic sealing engagement with the container wall surrounding the opening when the reclosure member is locked on the rim of the container.

JOHN F. PETERS.