

Oct. 29, 1935.

W. F. PUNTE

2,019,360

EASY OPENING SEALED CONTAINER

Filed April 18, 1932

2 Sheets-Sheet 1

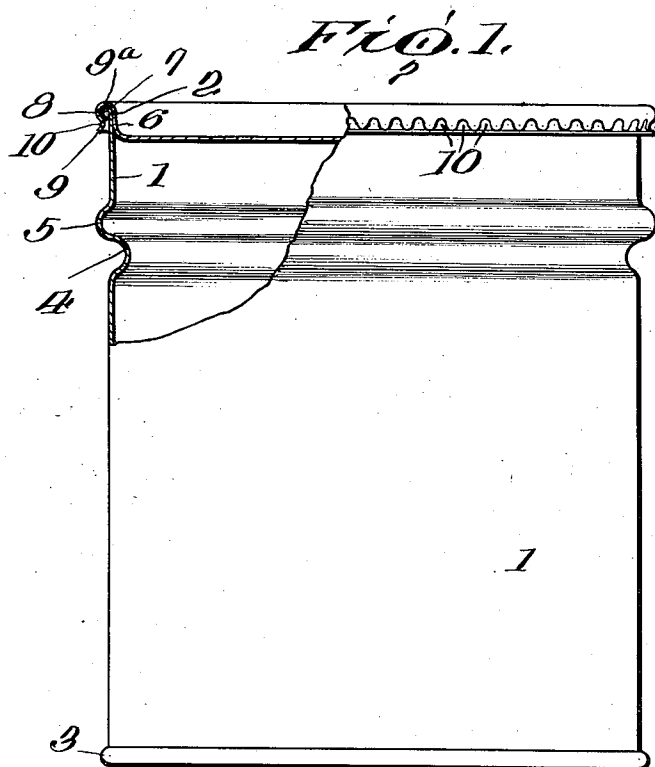
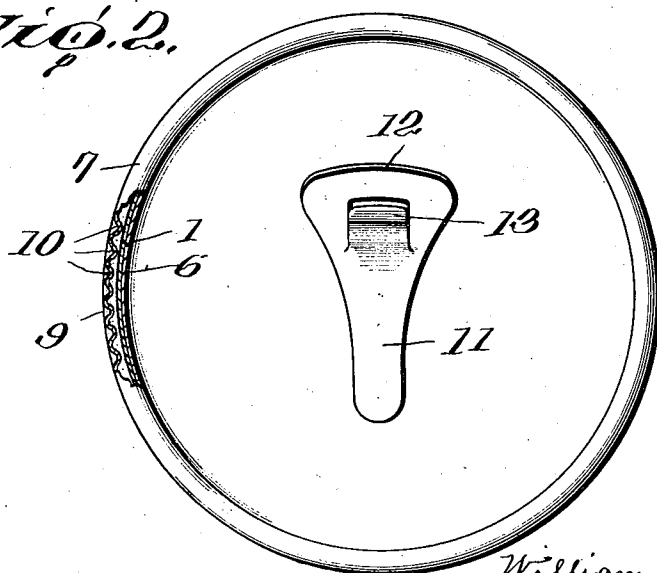


FIG. 2.



Inventor

William F. Punte

By

Sturtevant, Mason & Porter
Attorneys

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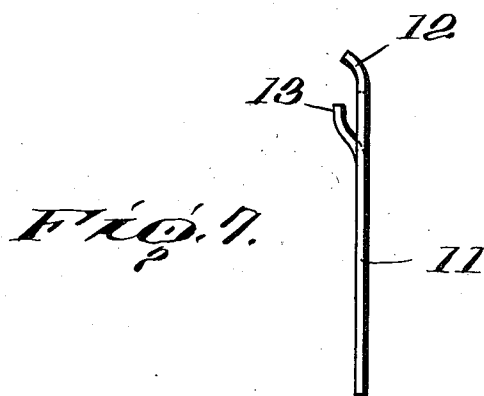
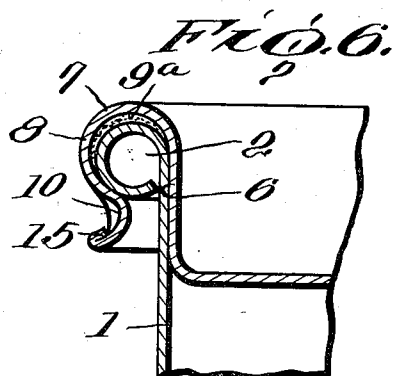
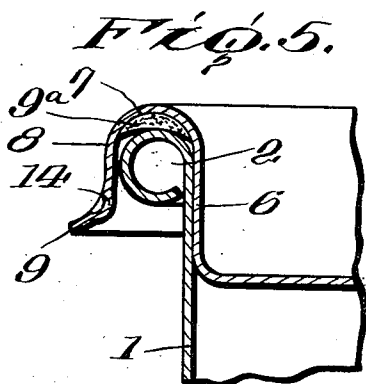
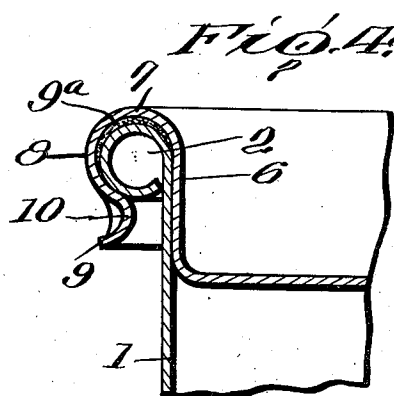
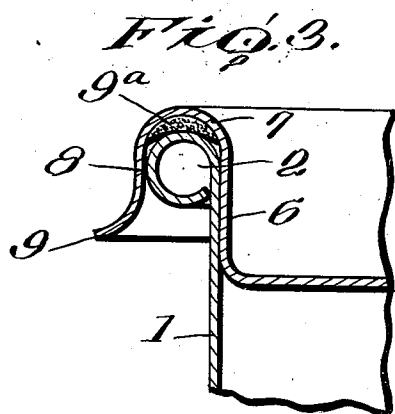
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EASY OPENING SEALED CONTAINER

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2 Sheets-Sheet 2



Inventor

William F. Punte

Sturtevant, Mason & Porter
Attorneys

UNITED STATES PATENT OFFICE

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EASY OPENING SEALED CONTAINER

William F. Punte, Syracuse, N. Y., assignor to
Continental Can Company, Inc., New York,
N. Y., a corporation of New York

Application April 18, 1932, Serial No. 605,960

1 Claim. (Cl. 220—59)

The invention relates to new and useful improvements in an easy opening container wherein the cover is attached to the container for sealing the same.

5 An object of the invention is to provide a construction of container body and cover whereby the cover may be secured to the container body by the crimping of a depending flange in the cover to form projecting portions extending beneath the bead on the container body and tightly drawing the cover into contact with a sealing material between the inner face of the cover and the outer face of the bead.

15 A further object of the invention is to provide a cover securing means of the above type wherein the flange of the cover extends below the projections and is flared outwardly so as to facilitate the insertion of a cover lifter for removing the cover from the container.

20 A still further object of the invention is to provide a cover securing means of the above type wherein the cover is formed with a depression extending into a container body and making frictional contact therewith to aid in the reclosure of the container by the cover after it has been pried loose therefrom.

In the drawings—

30 Figure 1 is a view partly in side elevation and partly in section showing a container embodying the improvements;

Fig. 2 is a view partly in plan and partly in section through a container and cover just below the bead on the container body;

35 Fig. 3 is an enlarged vertical section showing the cover plate on the container ready for attachment thereto;

40 Fig. 4 is a view similar to Fig. 3, but showing the depending flange of the cover as crimped and formed with projections which extend beneath the bead on the cover for sealing the container;

Fig. 5 is a view similar to Fig. 3, but showing a slightly different shaping of the depending flange before it is crimped to secure the cover to the container;

45 Fig. 6 is a view similar to Fig. 4, but showing a modified form of depending flange, wherein the lower edge portion is folded back to strengthen and reinforce the same, and

50 Fig. 7 is a detail in side elevation showing a cover lifter which may be used for releasing the cover from the container.

The invention consists in a container having a body portion which is preferably cylindrical. The body portion at its upper end is rolled outwardly to form a bead. The cover consists of a

central depressed portion adapted to extend into the container body to some distance below the bead and make frictional contact with the inner wall of the container body. The cover has a flange which extends over the bead, and the flange is provided with a depending portion which extends below the bead. A sealing material is placed in the cover between the depending flange and the wall of the depression therein, and when the cover is applied, this sealing material makes contact with the outer face of the bead. The depending flange may have indentations formed therein between the upper and lower edges, but the projections formed by these indentations are spaced away from the vertical wall of the depression in the cover, so that the cover may be easily placed on the container and the bead entered between the flange and the vertical wall. This depending flange of the cover may be straight and free from indentations when the cover is placed on the container body. After the cover is placed on the container body, it is pressed tightly against the sealing material, and the depending flange crimped so as to provide projections extending beneath the bead and contacting therewith, so as to hold the cover in tight contact with the sealing material.

Referring more in detail to the drawings, the container includes a body portion 1 which is rolled outwardly at the upper end thereof to form a bead 2 lying on the outer wall of the container body, so that the container body is of uniform diameter at the mouth thereof. The lower end of the container 3 is preferably secured thereto by a double seam, and the wall of the container body may have half beads 4 and 5 reversely rolled therein to strengthen the same. The cover for the container is provided with a central depression forming a vertical wall 6. The depressed portion of the cover is adapted to fit within the mouth of the container and the outer face of the wall 6 of the depression makes frictional contact with the inner face of the wall of the container body. The cover has an outwardly extending flange 7 which overlies the bead 2. The flange is provided with a depending portion 8 which is spaced away from the wall 6 so as to permit the free entering of the bead 2 between the flange and the wall. A plastic sealing material 9a is placed in the annular recess or groove formed between the flange 8 and the vertical wall 6 of the cover, and when the cover is placed on the container body, this sealing material or gasket contacts with the outer upper face of the bead. The depending flange 8, as shown in Fig. 3, is free from

indentations, but the lower end 9 thereof is flared outwardly slightly. After the cover has been placed on the container, it is then placed in a sealing machine which preferably includes a 5 chuck extending into the depression in the cover, bearing against the vertical wall 6, and a crimping roll which is brought into engagement with the depending portion 8 of the flange contacting therewith between its upper and lower ends so 10 that when the crimping roll is forced inwardly it will form closely spaced projecting portions 10 which extend beneath the bead to a certain extent. Inasmuch as the cover is pressed firmly against the sealing material, these projections 15 will hold the cover in its sealed seated position. Below the projections, the flange projects outwardly and away from the body portion of the container. This lower portion of the flange is free from the indentations formed by crimping, and therefore, a uniform space is provided between 20 the lower portion 9 of the flange and the wall of the container.

One form of cover lifter is shown in Fig. 7 of the drawings. It consists of a body portion 11 25 having the end 12 thereof curved away from the body 11 and struck up from the body 11 is a tongue 13. The curved portion 12 is slipped over the cover directly above the bead, while the tongue 13 is forced underneath the flange 8 and 30 in between the lower end 9 and the body wall of the container. This permits the tongue to extend well up under the flange, and when the lower end of the handle of the lifter is swung outward away from the wall of the container, it will pry or force the flange 8 outwardly in the region where 35 the lifter is applied, until the projections 10 are released from the bead. By applying the lifter to the cover at different places in succession, the cover may be completely released from the container. This breaks the seal, and the cover may 40 be readily removed from the container. It may also be readily slipped on to the container, and the depression in the cover will extend into the mouth of the container and frictionally hold the cover in place. The cover, therefore, while 45 slipped on to the container and firmly secured thereto, may be easily released and serve as a reclosure for the container.

In Fig. 5 of the drawings, the depending flange 50 8 is provided with slight indentations 14 before it is applied to the container. These indentations

14 are not of sufficient extent to in any way interfere with the easy application of the cover to the container. They are primarily for the purpose of facilitating the crimping of the flange by the aid of the crimping roller. The projections 10 are 5 formed in the same way as above described, leaving the lower part of the flange substantially free from indentations and flaring outwardly to facilitate the application of the lifter.

In Fig. 6 of the drawings, the lower portion of 10 the flange 8 is shown as bent back upon itself as indicated at 15. This is for the purpose of strengthening the lower edge of the flange. The crimping of the flange takes place above this hemmed lower edge. The hemming of the edge 15 prevents the springing of the same, and therefore, holds the projections 10 firmly in contact with the under face of the bead on the container body. This insures a very tight seal of the container, and at the same time, the cover may be 20 readily pried loose and removed from the container.

It is obvious that minor changes in the shaping of the parts may be made without departing from the spirit of the invention as set forth in 25 the appended claim.

Having thus described the invention, what I claim as new and desire to secure by Letters-Patent, is:—

An easy opening sealed container comprising a 30 body portion having the upper end of the wall thereof rolled outwardly to form a bead, a cover having a depression therein adapted to extend within the container and frictionally contact with the inner face thereof, said cover having a flange 35 overlying said bead and provided with a depending portion extending below said bead, a sealing material disposed between said bead and the inner face of the cover portion overlying the same, said depending portion of the flange defining an 40 unbroken surface, the lower portion of the flange being bent outwardly and backwardly upon itself for strengthening said lower edge of the flange and forming a smooth unbroken surface, the flange between the bent back portion and the upper 45 portion thereof being formed with inwardly projecting rigid indented portions adapted to extend beneath the bead on the container body and draw the cover into contact with the sealing material.

WM. F. FUNTE. 50