Sept. 1, 1936. R. L. WAKELEE 2,052,681

METAL CONTAINER

Filed Feb. 20, 1935

FIG. 1.

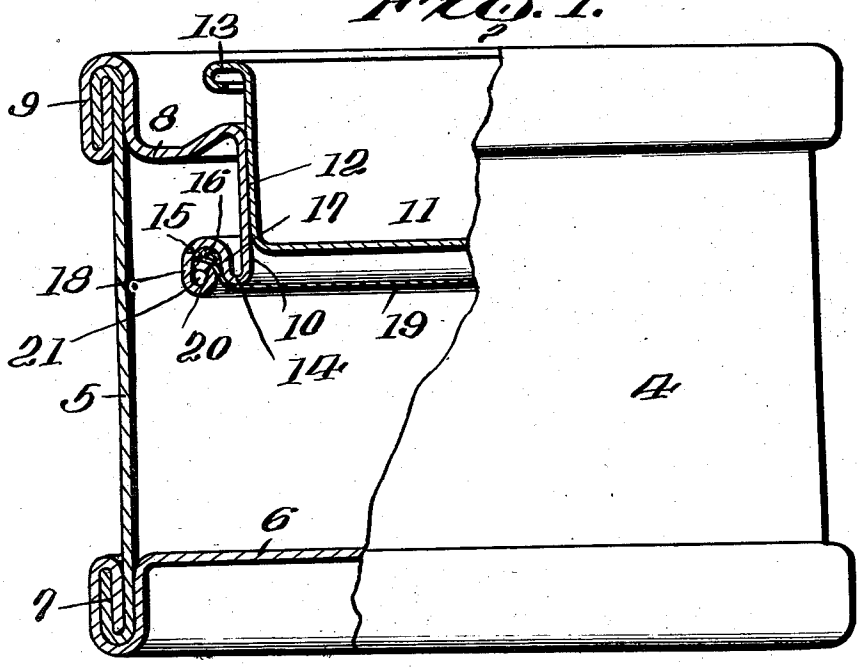


FIG. 2.

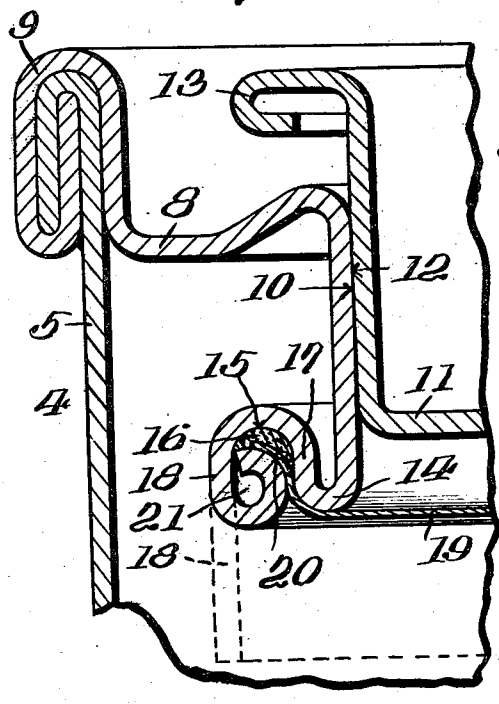
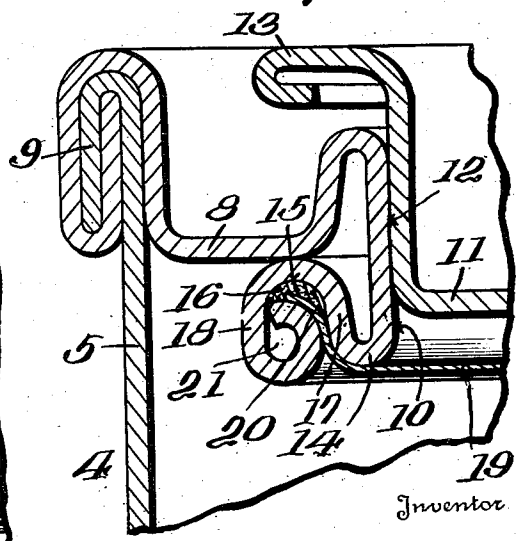


FIG. 3.



Inventor

Ronald Leroy Wakelee

By Mason & Porter

Attorneys

Patented Sept. 1, 1936 2,052,681

UNITED STATES PATENT OFFICE

2,052,681

METAL CONTAINER

Ronald Leroy Wakelee, Chicago, Ill., assignor to Continental Can Company, Inc., New York, N. Y., a corporation of New York

Application February 20, 1935, Serial No. 7,411

1 Claim. (Cl. 220—27)

The invention relates to new and useful improvements in a metal container of the friction closure type and more in particular to a container wherein a frangible sealing member is used in conjunction with a friction closure.

An object of the invention is to provide a container wherein the frangible sealing member is disposed within the container beneath the friction closure and secured to the can top by shaping metal parts disposed at the lower end of the friction wall and formed integrally therewith to provide a clamping means for said frangible member.

A further object of the invention is to position the clamping means for the frangible member in respect to the friction wall of a container of the above type so that said clamping means will not interfere with the natural flexibility of said friction wall upon the insertion of the friction closure for closing the container.

These and other objects will in part be obvious and hereinafter more fully disclosed.

Referring to the drawing:

Fig. 1 is a view partially in side elevation and partially in vertical section of the container embodying the improvements of the invention.

Fig. 2 is an enlarged partial vertical sectional view of the container showing the friction closure and frangible sealing member in place.

Fig. 3 is an enlarged vertical sectional view similar to Fig. 2 but showing a slightly modified manner of shaping the can top for securing the frangible sealing member.

The invention relates particularly to a metal container of the friction closure type having a frangible sealing member used in conjunction therewith. The container comprises a body portion preferably of metal having ends double seamed thereto, one of said ends being in the form of a can top, having a central opening and a vertical friction wall surrounding said opening. A friction closure is provided for the container, said closure being adapted to frictionally engage the vertical friction wall of the can top for closing the container. The lower edge portion of the vertical friction wall of the can top is shaped outwardly and upwardly to form a rounded shoulder and thence outwardly and downwardly to form a pocket adapted to receive a plastic sealing the container. The lower edge portion or disc is provided, said disc being of such diameter as to extend across the opening surrounded by the vertical friction wall, contact with said rounded shoulder, and have its peripheral edge portion terminate in said pocket. The metal forming the outer wall of the pocket is curled inwardly for contacting with the peripheral edge portion of the sealing disc for clamping the same against the sealing compound and the inner wall of the pocket.

Referring more in detail to the drawing, a container embodying the invention is indicated at 4. The container is preferably of metal comprising a body portion 5, having a bottom end 6 double seamed thereto as indicated at 7, and a top end 8 secured thereto by a double seam 9. The top end 8 or can top as it is usually called, has a central opening with a vertical friction wall 10 surrounding said opening. A friction closure 11 is provided for closing the container having a depending friction wall 12 which is adapted to be forced into engagement with the friction wall 10 of the can top. A hollow bead 13 extends around the upper peripheral edge of the friction closure and is adapted to overlie the can top.

In the drawing of the metal to form the can top, the lower edge portion of the vertical friction wall 10 of said can top is shaped so as to extend outwardly and upwardly to form a rounded shoulder 14, and thence outwardly and downwardly to form a pocket 15, which is adapted to receive a plastic sealing material 16, said pocket being defined by the parallel inner and outer walls 17 and 18 respectively formed by shaping the metal of the can top as described above.

A frangible sealing member or disc 19 is used in conjunction with the friction closure, said disc being adapted to overlie the same for further sealing the container. This disc 19 is preferably made of aluminum, but might easily be made of any other frangible material such as tagger's tin, paper or the like. The disc 19 is of such diameter as to extend across the opening surrounded by the vertical friction wall 10, contact with the rounded shoulder 14, and have its peripheral edge portion 20 terminate in the pocket 15 and contact with the sealing material 16 therein. The metal forming the outer wall 18 of the pocket is curled inwardly to form a hollow bead 21 which contacts with the peripheral edge portion 20 of the disc for clamping the same against the sealing material 16 and the inner wall 17 of the pocket.

In the modified form of the invention shown in Fig. 3 of the drawing, the vertical friction wall is raised relative to the can top so that the outer portion of the metal forming the receiving pocket for the sealing disc contacts with the under face of the can top. As in all containers of this type in both forms of the invention, the can top with

its sealing disc is assembled by the manufacturer, double seamed to the body portion of the container, and shipped to the packer. The container is then filled through and closed at its opposite end and in the well-known manner by seaming a conventional end thereto.

When it is desired to open containers of the type disclosed by the invention, the friction closure is pried out in the usual manner and the frangible sealing disc is cut away by a knife or other sharp instrument. In containers of this type the friction closure may be used for reclosing the container after the inner seal has been removed. It will be evident, however, that if a customer finds the inner seal ruptured it is an indication that the contents thereof have been tampered with.

From the above it will be apparent that a container of the friction closure type has been devised wherein an air-tight seal has been established and wherein means for securing said air-tight or frangible seal is spaced from the friction wall for the friction closure, and therefore the friction wall will have its natural flexibility throughout the region where the closure contacts therewith.

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

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

A metal container comprising a body portion having a can top secured thereto by seaming, said can top having a central opening and a vertical friction wall surrounding the opening, a friction plug closure adapted to frictionally engage said vertical wall of the can top for closing the container, the lower edge portion of said vertical friction wall being bent outwardly and upwardly to form a rounded shoulder and thence outwardly and downwardly to form a pocket for a sealing material, and a sealing disc extending across said opening and contacting with said rounded shoulder on the vertical friction wall and terminating in said pocket, the metal forming the outer wall of said pocket being rolled inwardly for contacting with the peripheral portion of the sealing disc for clamping the same against the plastic sealing material and drawing said sealing disk tightly across said rounded shoulder.

RONALD LEROY WAKELEE.