Feb. 28, 1950 C. WADSWORTH 2,498,930

SELF-SEALING JAR CLOSURE

Filed Feb. 6, 1948

Fig. 1.

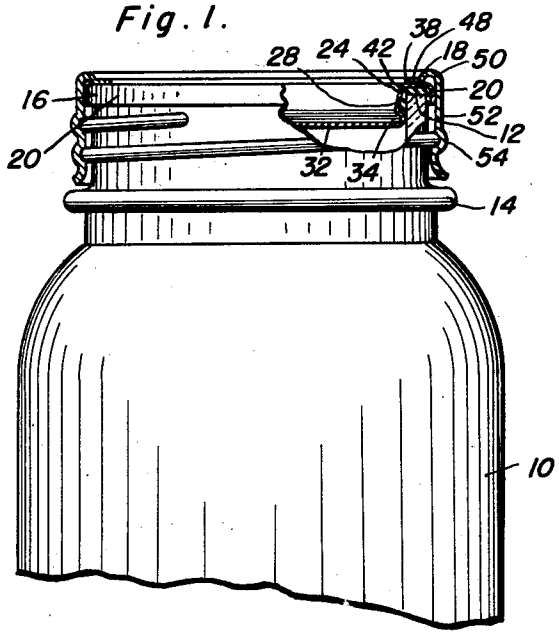


Fig. 2.

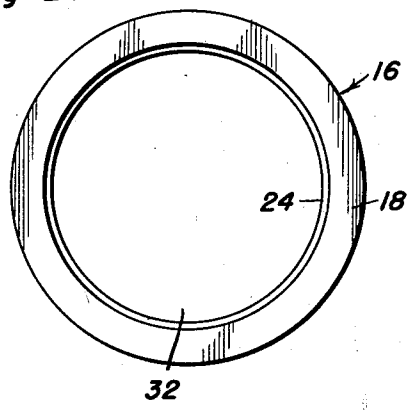
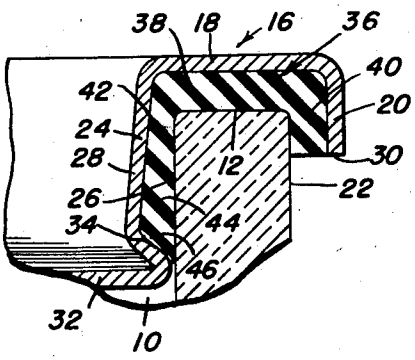


Fig. 3.



Inventor

Clifford Wadsworth

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Patented Feb. 28, 1950 2,498,930

UNITED STATES PATENT OFFICE

2,498,930

SELF-SEALING JAR CLOSURE

Clifford Wadsworth, Blackfoot, Idaho, assignor of forty-five per cent to Ferra Young, Idaho Falls, Idaho

Application February 6, 1948, Serial No. 6,581

3 Claims. (Cl. 215—40)

1

This invention relates to new and useful improvements in jar closures and the primary object of the present invention is to provide a novel and improved self-sealing closure or lid for jars.

Another important object of the present invention is to provide a closure for jars and the like embodying a sealing gasket so designed as to facilitate the same to effectively and efficiently seal the normal space between the closure and jar in a convenient manner.

A further object of the present invention is to provide a self-sealing jar closure for jars and the like containers that is extremely small and compact in structure and which may be quickly and readily applied to or removed from a jar in a minimum time.

A still further aim of the present invention is to provide a self-sealing jar closure that is simple and practical in construction, strong and reliable in use, neat and attractive in appearance, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a fragmentary side elevational view of a jar showing the present closure applied thereto, and with parts broken away and shown in section;

Figure 2 is a top plan view of the present closure removed from the jar; and,

Figure 3 is an enlarged fragmentary vertical sectional view of a jar showing the present closure (in section) applied thereto, and showing the retaining ring removed from the jar.

Referring now to the drawings in detail, wherein for the purpose of illustration, there is disclosed a preferred embodiment of the present invention, the numeral 10 represents a conventional jar which is provided with an annular sealing lip 12 at its upper open end, and external threads 14 adjacent the said sealing lip.

The numeral 16 represents an annular channeled attaching strip generally, which includes a flat annular web portion 18 of a width greater than the width of the sealing lip 12, an outer annular flanged portion 20 which is spaced relative to the outer face 22 of the open upper end of the jar 10, and an inner annular, inwardly and downwardly inclined flanged portion 24 that is spaced inwardly from and inclined relative to the inner

2

face or wall 26 of the open upper end of the jar 10. The inner annular flanged portion 24 is extended or elongated as at 28 well below the free extremity 30 of the outer annular flanged portion 20 and is integrally formed with a circular closure plate 32. There is provided an annular substantially V-shaped channel or inclined shoulder 34 adjacent the juncture of the closure plate 32 with the extended portion 28 of the inner annular flanged portion 24 for a purpose which will later be more fully apparent.

Fixed by any suitable means to the channeled attaching strip 16, is a flexible or resilient substantially channel shaped annular sealing gasket 36 having a web portion 38 that engages the web portion 18 of the strip 16, an outer annular flanged portion 40 that engages the inner face of the outer annular flanged portion 20, and an inner annular flanged portion 42 that engages the inner face of the inner flanged portion 24 of the channeled strip 16. The inner flanged portion 42 of the sealing gasket 36 is elongated or extended as at 44 to engage the inner face of the extended portion 28 of the strip 16. The free inner extremity of the extended portion 44 of the annular inner flanged portion 42 is provided with an annular concaved groove or lipped portion 46 that engages the shoulder 34, as best shown in Figure 3 of the drawings.

In practical use of the present invention, the strip 16 and sealing gasket 36 are positioned on the sealing lip 12 so that the gasket 36 will frictionally embrace the sealing lip 12 and the flanged portions 40 and 42 will frictionally engage the faces 22 and 26 of the open upper end of the jar 10, also the extended portion 44 being substantially wedge shaped will effect a tight seal between the extension 28 and the jar.

Frictionally engaging the web portion 18 of the channeled strip 16, is an annular pressure or retaining strip 48 the outer edge of which is arcuately formed as at 50 and terminates in an annular skirt 52 having internal threads 54 that receivably engage the external threads 14 of the jar 10.

It should be noted, that the present closure is particularly applicable for use with jars which are chipped or cracked on their sealing tips or adjacent the same, thus reducing the normal expense of discarding slightly chipped or cracked jars during home canning due to the improbability of having a seal that will be effective should the sealing tip be other than smooth.

In view of the foregoing description taken in conjunction with the accompanying drawings it

is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A jar having a sealing lip at its open end, a closure comprising a resilient channel shaped sealing gasket yieldingly embracing the sealing lip and including inner and outer annular flanged portions, a channeled attaching strip embracing said sealing gasket and including inner and outer annular flanged portions, the inner flanged portion of said attaching strip tapering inwardly relative to the open end of said jar, a susbtantially V-shaped channel having one leg integrally formed with the inner flanged portion of said attaching strip, a closure plate integrally formed with the free leg of said V-shaped channel, and a concaved recess provided in the inner flanged portion of said sealing gasket bearing against the first mentioned leg of said V-shaped channel.

2. A jar having a sealing lip at its open upper end, a closure comprising a resilient substantially annular, channel shaped sealing gasket yieldingly embracing the sealing lip and including inner and outer annular flanged portions, an annular substantially channel shaped attaching strip embracing said sealing gasket and including inner and outer annular flanged portions, a substantially V-shaped channel integrally formed with the inner flanged portion of said attaching strip and extending toward the outer flanged portion of said attaching strip, an annular concaved groove provided in the inner flanged portion of said sealing gasket bearing against said V-shaped channel, and a closure plate integrally formed with the V-shaped channel.

3. A jar having a sealing lip at its open upper end and external threads adjacent said sealing lip, an annular substantially channel shaped resilient sealing gasket yieldingly embracing the sealing lip and including inner and outer flanged portions, an annular substantially channel shaped attaching strip embracing said sealing gasket and including inner and outer flanged portions, an annular substantially V-shaped channel integrally formed with the inner flanged portion of said attaching strip and extending toward the outer flanged portion of said attaching strip, a closure integrally formed with said V-shaped channel, said inner flanged portion of said sealing gasket being provided with an annular concaved groove receiving one leg of said V-shaped channel, and a retaining ring engaging the external threads of the jar for holding the sealing gasket and attaching strip relative to the sealing lip.

CLIFFORD WADSWORTH.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,109,484	Taliaferro	Sept. 1, 1914
1,427,133	Taliaferro	Aug. 29, 1922
1,488,567	Taliaferro	Apr. 1, 1924
1,823,786	Crabbe	Sept. 15, 1931
2,008,593	Pedersen	July 16, 1935
2,021,265	Spahn	Nov. 19, 1935
2,404,410	Smith	July 23, 1946

FOREIGN PATENTS

Number	Country	Date
22,224	Australia	Apr. 12, 1935