

Aug. 17, 1948.

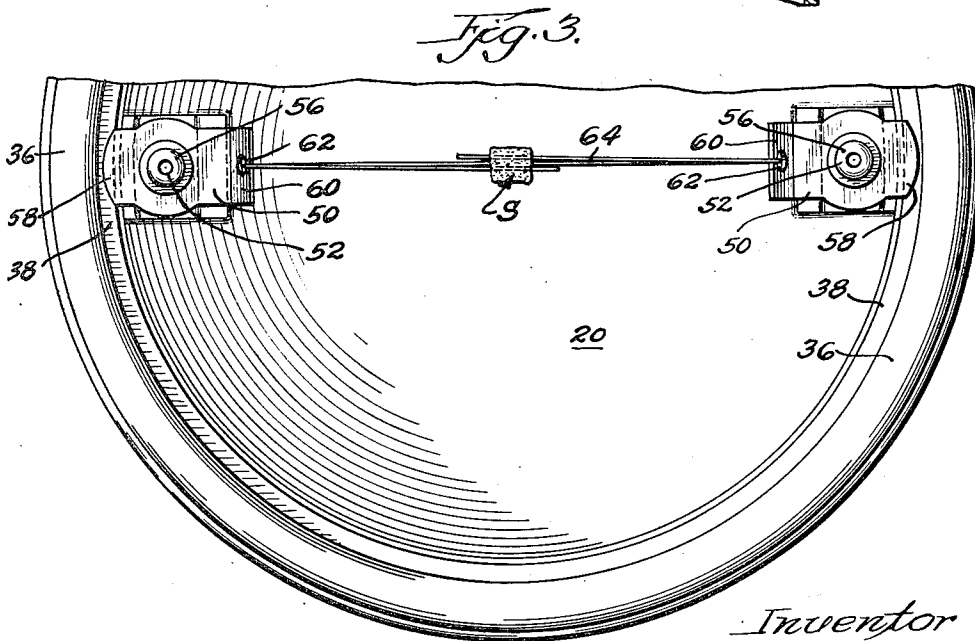
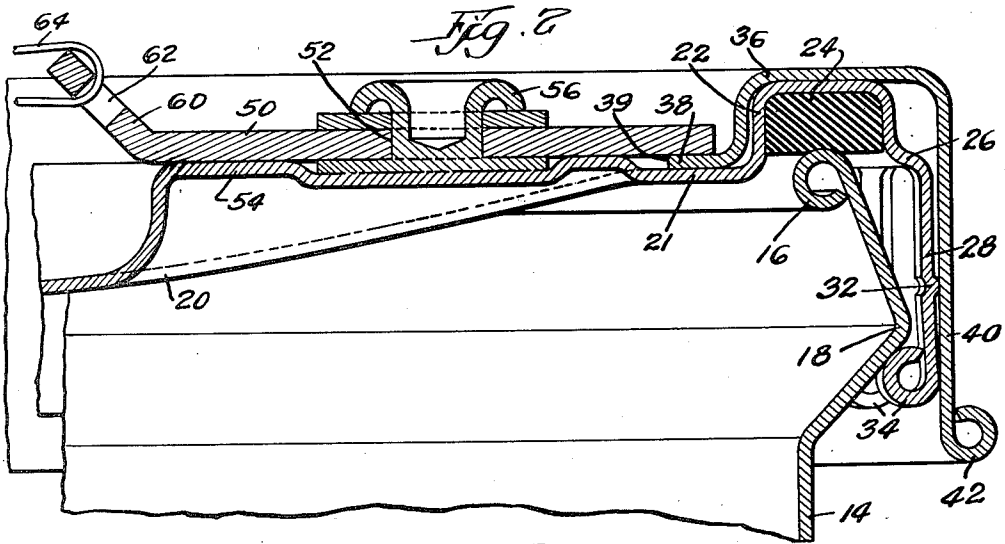
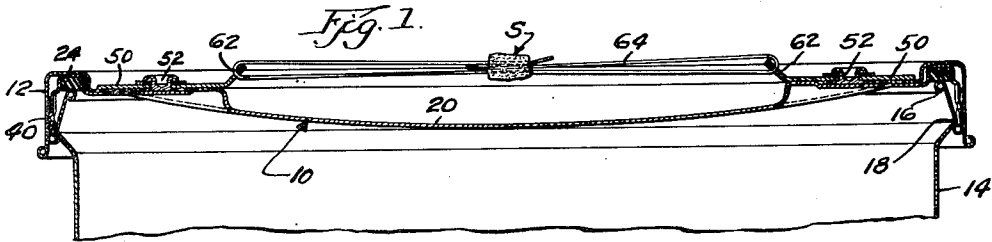
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2,447,076

REUSABLE TAMPER PROOF SEALED CLOSURE

Filed Oct. 1, 1945

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 5.

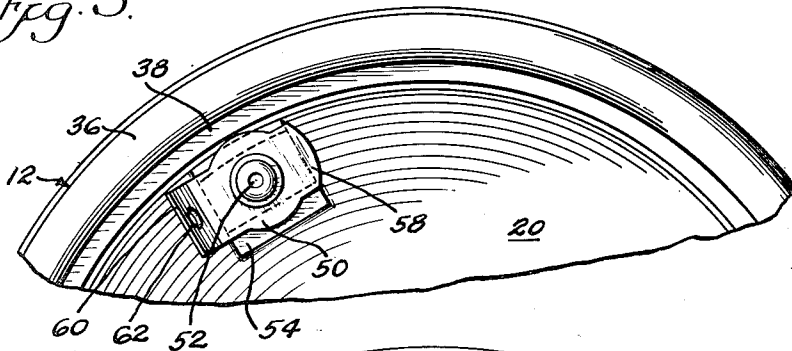
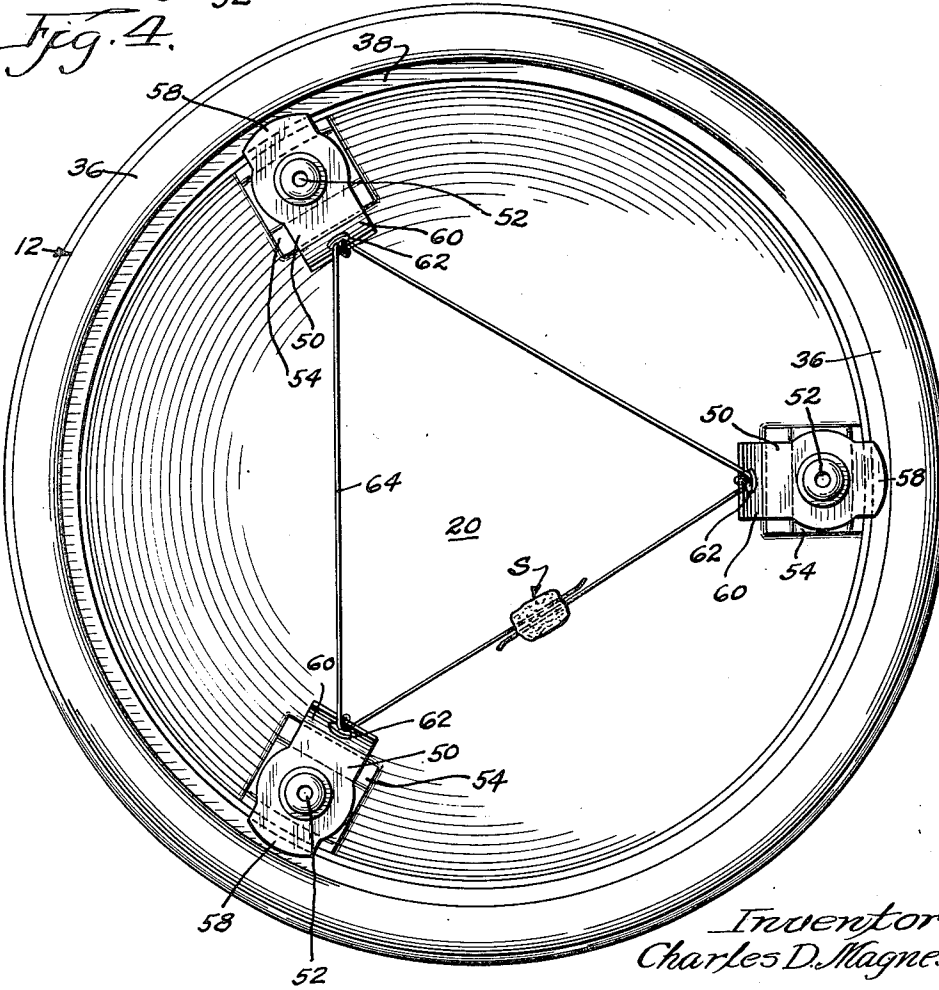


Fig. 4.



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# UNITED STATES PATENT OFFICE

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## REUSABLE TAMPERPROOF SEALED CLOSURE

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Application October 1, 1945, Serial No. 619,490

5 Claims. (Cl. 215-45)

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My invention relates to improvements in closure members or caps adapted to effectively close and seal the mouths or openings of bottles, jars, metal cans or other containers.

My invention relates more specifically to a device of the character described particularly adapted for use with bottles, jars or metal containers that have a comparatively large neck or mouth.

While the general construction of my improved closure may be of the snap-on type, generally similar to that shown and described in U. S. Patent 2,339,343 issued January 18, 1944 to me, my present invention is directed to a cap or closure of this type which is so constructed that a tamper proof seal may be placed on the cover or closure after the same has been placed over the mouth of the receptacle and the cover or closure cannot be removed without breaking the seal.

The principal object of the present invention is to provide a simple and inexpensive cap or closure that is reusable as often as desired to effect a seal to the mouth of the container and with each use the closure can be applied so that it may not be removed without breaking a seal that is employed therewith.

A further object of the invention is to provide a reusable tamper proof seal closure that is easily and cheaply constructed and capable of long and hard use without becoming broken or out of order.

Other objects and advantages will be more apparent from the following description wherein reference is had to the accompanying two sheets of drawings upon which:

Fig. 1 is a cross sectional view of the closure and a portion of the upper end of the container upon which the same is seated.

Fig. 2 is an enlarged fragmentary view of one side of the same.

Fig. 3 is a fragmentary plan view showing the manner in which the tamper proof seal is applied to the closure.

Fig. 4 is a plan view of a modified form of construction wherein the parts which prevent the removal of the container are multiplied to show the manner in which more than two can be utilized; and

Fig. 5 is a fragmentary plan view showing the parts of the tamper proof seal in changed position so that the closure can be removed.

In the embodiment of the invention which I have chosen to describe and which is illustrated in the accompanying drawings:

In Fig. 1 I have shown a closure member con-

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sisting of two principal sheet metal members 10 and 12 forming a top or cap member and an outer member or retainer ring respectively. The cap 10, which is formed of sheet metal bent to the desired size and shape, may be in the nature of a cover portion for a comparatively large open mouthed container 14 which is preferably formed with the rolled over mouth portion 16. The container is also provided with a circular ridge 18 about the neck of the same, disposed a short distance below the opening in the container.

The cap member 10 may be of a size to overlie the opening in the container and have a concave top portion 20 terminating in a flat portion 21 in which a circular rectangularly shaped groove 22 is provided slightly larger in size than the mouth portion 16 of the container. I provide a rubber or other similar resilient gasket 24 which is mounted in the groove 22 and adapted when the cap is in a sealing position to rest against the top of the opening 16. The cap member 10 has a portion 26 extending beyond the edge of the opening 16 which is formed with downwardly projecting finger members 28. The finger members are formed with the transverse bends 32 and the inwardly rolled lower edges 34.

The outer or retainer member 12 may be formed with a circular ridge 36 terminating at its inner edge in a flat portion 38 resting on the portion 21 of the cap 10 and an arcuately disposed opening 39 formed thereby which permits the positioning of the same over the groove 22 formed in the cap member 10. The member 12 may also have a downwardly depending skirt 40 having an external bead or flange 42 at its lower end. The bead or flange imparts strength to the member and also provides a convenient finger grip for manipulating the retainer member in applying or removing the cap.

The cap or closure member as thus far described may embody generally the elements of the patent to the applicant heretofore mentioned. In addition thereto, and to provide a tamper proof seal for a reusable cap of the type described, I provide a plurality of lug members 50 which may be positioned upon pivot members 52 welded or otherwise secured on flattened portions 54 of the top 20 of the cap. The pivot member 52 may have a shank as shown and have its upper portion curled over as shown at 56 to position the lug 50. Each of the lugs 50 may have a leg portion 58 adapted to overlie the flat portion 38 of the retainer member 12. Each lug is also provided with an upwardly turned leg 60 which has a hole 62 therein. Thus as shown in Fig. 3, a sealing wire 64 may be

extended through the openings 62 drawn taut and have its ends sealed together with a lead seal S. In this position the lugs 50 cannot be turned with the result that the retainer member cannot be raised to permit the cap to be taken from the container.

In Fig. 4, I have shown a modified form of construction wherein I provide three lug members 50 positioned upon three platforms 54 on the top 20 of the cap 10. Thus, where the diameter of the container and cover become larger, the number of sealing lugs 50 is increased so that when the cover is sealed upon the container a sealing wire 64 may be drawn through the openings 62 in the lugs pulled taut and the two ends connected together with a lead seal S.

In Fig. 5, I have shown the position to which the lugs 50 are turned when the seal is broken, the sealing wire removed and the container is ready to be opened. It will be noted that in this position the leg 58 of the lug 50 has been moved away from its position overlying the lip 38 of the outer retainer member 12.

While I have illustrated and described a specific embodiment of the invention, it will be apparent to those skilled in the art that changes and modifications can be made in the exact details shown and I do not wish to be limited in any particular; rather what I desire to secure and protect by Letters Patent of the United States is:

1. The combination with an open-ended container having a mouth with a ridge about the same, a reusable snap-on closure formed of two parts and having an inner cover member with depending flanges adapted to grip below the ridge on the mouth of the container and an outer ring member having a downwardly depending skirt adapted to press portions of said inner cover member into engagement below the ridge on the mouth of the container, pivots on the top of said inner cover member, a plurality of lug members mounted upon said pivots, each of said lug members having a portion overlying portions of said outer ring member and a seal member connecting all of said lugs so that no one of them can be rotated without breaking the seal member.

2. The combination with an open-ended container having a mouth with a ridge about the same, a reusable snap-on closure formed of two parts and having an inner cover member with an upper wall adapted to fit over the mouth of the container and with depending flanges adapted to grip below the ridge on the mouth of said container, an outer ring member having a portion overlying a portion of the upper wall of said inner cover member, a downwardly depending skirt on said outer ring member adapted to press portions of said inner cover member into engagement below the ridge on the mouth of said container, pivots on the top of said inner member, a plurality of lug members mounted upon said pivots, each of said lug members having a portion overlying a portion of said outer ring member and a seal member tautly connecting all of said lug members so that no one of them can be rotated without breaking said seal member.

3. The combination with an open-ended container having a mouth with a ridge about the same, a reusable snap-on closure formed of two parts having an inner cover member with an upper wall adapted to fit over the mouth of the container with depending flanges adapted to grip below the ridge on the mouth of said container and an outer ring member having a portion overlying a portion of the upper wall of said inner cover member, a

downwardly depending skirt on said outer ring member adapted to press portions of said inner cover member into engagement below the ridge on the mouth of said container, a plurality of pivots on the top of said inner member, a lug member mounted upon each of said pivots, said lug members having portions overlying a portion of said outer skirt and a seal member tautly connecting all of said lugs, so that no one of them can be rotated without breaking the seal member, said seal member comprising a wire connected between all of said lugs with its ends fastened together.

4. A reusable snap-on closure for use with an open container having a mouth and a ridge below the mouth, said closure comprising an inner cover member having an upper wall adapted to fit over the mouth of the container, depending flanges on said inner cover member adapted to grip below the ridge on the mouth of the container and an outer ring member having a portion overlying a portion of the upper wall of said inner cover member and a downwardly depending skirt adapted to press portions of said inner ring into engagement below the ridge on the mouth of the container, a plurality of pivots on said inner member, a lug member mounted upon each of said pivots, each of said lug members having an upstanding ear, a hole through said ear, said lug members in operative position having portions overlying portions of said downwardly depending skirt and a seal member connecting all of said lug members so that no one of them can be rotated without breaking the seal member, said seal member consisting of a single wire passed through the holes in all of said lug members with a lead block pressed over the meeting ends of said wire.

5. A closure member for a container having a large mouth and a circular shoulder about its mouth comprising a sheet metal cap having an upper wall adapted to fit over the mouth of the container, a circular ridge on said cap, the wall of said cap having downwardly depending fingers with portions thereof adapted to be extending below the circular shoulder about the mouth of the container, a retainer member having a circular ridge telescoped over the circular ridge on said cap, a downwardly depending skirt thereon adapted to engage said fingers and press them into frictional contact with the above mentioned shoulder, said retainer member having an inwardly projecting ledge extending from its ridge and pivoted lug members mounted on the upper wall of said cap, each of said lug members having a leg overlying the inwardly projecting ledge of said retainer member to normally prevent relative movement between said cap and said retainer member when said closure member is in place on a container.

CHARLES D. MAGNESEN.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,570,519	Mittinger	Jan. 19, 1926
1,673,240	Grosser	June 12, 1928
2,339,343	Magnesen	Jan. 18, 1944
2,347,605	Magnesen	Apr. 25, 1944

FOREIGN PATENTS

Number	Country	Date
556,698	Germany	Aug. 12, 1932