May 30, 1939. E. G. MELRATH 2,160,598

METHOD OF MOUNTING A SPUT IN A METAL CONTAINER

Filed Feb. 9, 1937

Fig. 1.

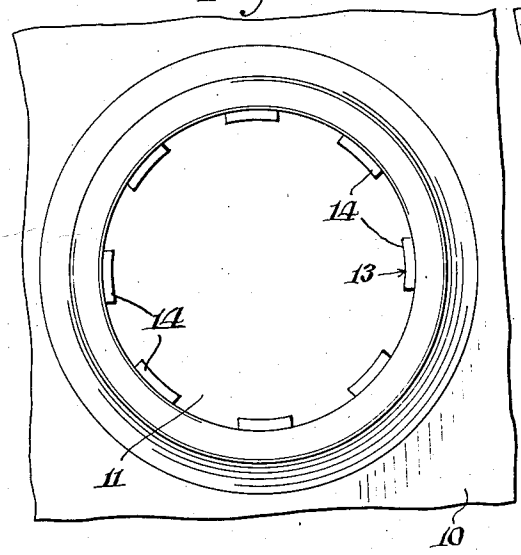


Fig. 2.

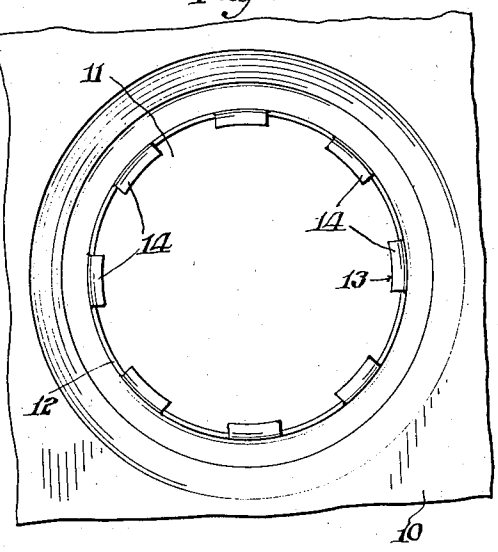


Fig. 3.

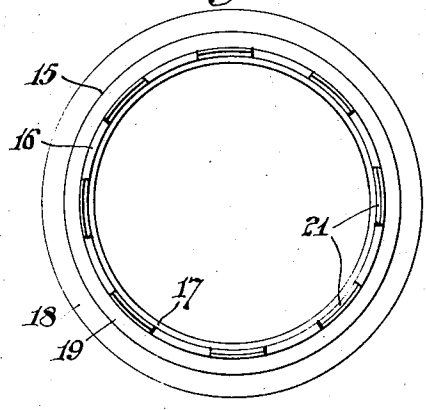


Fig. 4.

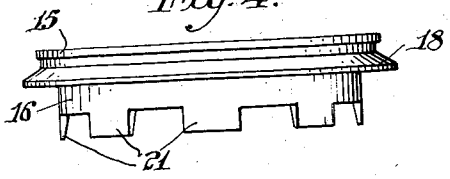


Fig. 8.



Fig. 5.

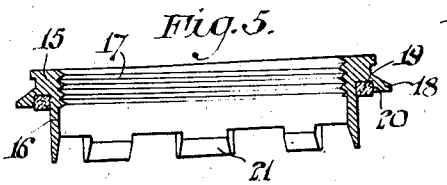


Fig. 6.

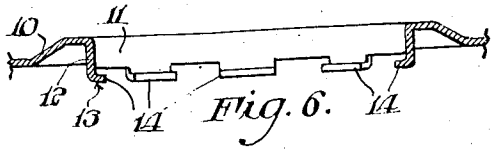
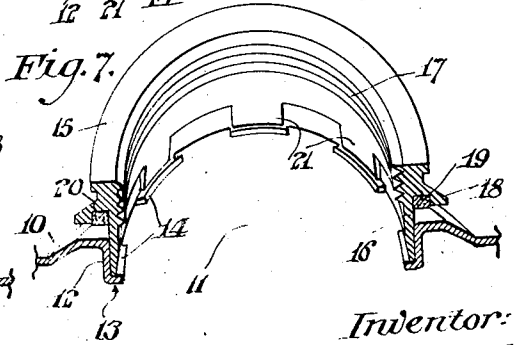


Fig. 7.



Inventor:
Earle Gordon Melrath,
By W. B. Williamson
Attorney.

Patented May 30, 1939

2,160,598

UNITED STATES PATENT OFFICE

2,160,598

METHOD OF MOUNTING A SPUT IN A METAL CONTAINER

Earle Gordon Melrath, Philadelphia, Pa., assignor, by mesne assignments, to American Flange & Manufacturing Co., Inc., New York, N. Y., a corporation of Illinois

Application February 9, 1937, Serial No. 124,814

9 Claims. (Cl. 29—148.2)

My invention relates to a new and useful method of mounting a sput in a metal container and has for one of its objects to provide a sput of simple construction which may be readily inserted in a bung hole having a serrated flange.

Another object of the invention is to provide a unique method of mounting a sput to a metal container such as a barrel or drum.

A further object of this invention is to provide a method of mounting a sput in a metal wall of a container which consists of forming a bung hole in the wall in a manner to produce an inwardly projecting collar having a serrated flange at its inner end, then inserting a sput having a toothed lower edge into the bung hole and rotating said sput to cause the teeth to enter the serrations and then turning the teeth over the edge of the bung hole collar to secure the sput in place.

Other and still further objects will appear in the specification and be specifically set out in the appended claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe the construction and method in detail, referring by numerals to the accompanying drawing, in which:—

Fig. 1 is an outer face view of a section of a metal wall with a bung hole therein.

Fig. 2 is an inner face view of the same section of metal wall.

Fig. 3 is an inner end view of a sput.

Fig. 4 is a side elevation of the sput.

Fig. 5 is a longitudinal sectional view of the same.

Fig. 6 is a sectional view of the metal wall taken through the bung hole.

Fig. 7 is a sectional perspective view of the metal wall and sput illustrating the manner in which the teeth rest on the serrated flange prior to a meshing between the tongues on the bung hole collar.

Fig. 8 is a sectional view showing the sput secured to the metal wall.

In carrying out the invention as herein embodied 10 represents a portion of a metal wall such as the head of a metallic drum or barrel and in this wall is formed a bung hole 11. During the formation of the bung hole, an inwardly projecting collar 12 is produced having an inturned serrated flange 13 including a multiplicity of tongues 14 extending radially from the lower part of the collar 12 towards the axial center of the bung hole 11. These tongues 14 are of uniform width and equally spaced.

The bung hole 11 is to hold a sput 15 having a neck 16 and interiorly formed threads 17. On the outer end of the sput is a ring or flange 18 which overlaps the metal wall surrounding the bung hole and in the underneath face of the ring 18 is formed a groove 19 to receive a gasket 20 which will be interposed between the ring 18 and the outer face of the wall 10 when the sput is assembled on said wall.

A multiplicity of teeth 21 extend from the inner end of the sput neck in endwise alignment and these teeth are of uniform width and equally spaced apart. In fact, said teeth are approximately as wide as the serrations so as to readily pass between the tongues and they are in equal number to said serrations. These teeth are preferably tapered or beveled as plainly shown in Figs. 4 and 5 to make them easier to bend or turn over as will be obvious.

The combined length of the sput neck 16 and the teeth 21 is greater than the length of the collar 12 so that when the teeth have been projected between the tongues, the inner ends of said teeth may be turned or bent over the inner edge of the collar 12 to secure the sput in place.

Where the teeth and tongues both extend in tubular arrangement as the teeth are illustrated herein, it is difficult, tedious and time consuming to cause the teeth to register with the spaces between the tongues so said teeth may be in a position that they can be bent over the inner edge of the collar. This problem is entirely overcome by the use of my method of mounting the sput because by providing a serrated flange on the inner end of the collar it is only necessary to drop or project the toothed end of the sput into the bung hole and cause the teeth to mesh with tongues of said serrated flange. When the sput is inserted in the bung hole 11, toothed end first, the teeth 21 are projected through the spaces between the tongues 14 and if said teeth do not directly enter the serrations it is only necessary to rotate the sput less than the distance of the width of a tongue at which time the teeth will pass into the serrations. As this part of assembling the sput on the wall is done by hand the operator can feel when the teeth and tongues mesh. After inserting the sput in the bung hole the teeth are turned or bent over the inner edge of the collar between the tongues to fasten said sput in place and compress the gasket 20 to provide a liquid tight seal between the sput and the wall 10. The tongues meshing with the teeth prevent rotation

of the sput and if desirable the ends of the tongues may be bent tightly against the inner surface of the sput.

While one illustrative embodiment of my method has been described in detail I do not intend to limit the scope of the invention other than by the terms of the appended claims.

Having thus fully described my invention, what I claim as new and useful is:

1. The method of mounting a sput in the bung hole of a metal container defined by a collar extending from a wall of said container and said collar having an inturned serrated flange at the inner end thereof, which comprises inserting a sput, provided with a toothed inner end, into the bung hole and rotating said sput until the teeth enter the serrations, and then turning the teeth over the inner edge of the collar to secure the sput in place.

2. The method of mounting a sput having a neck provided with longitudinally extending teeth in the bung hole of a metal wall defined by a collar extending from said wall and said collar having a serrated inturned flange at its inner end consisting of inserting the sput neck in the bung hole collar with the teeth in registration with the serrations, and of drawing the sput in firmly seated position by turning the teeth over the inner edge of the collar.

3. The method of mounting a sput in a metal container consisting of forming a bung hole in a wall of said container, of producing an inwardly projecting collar on a wall of said container, of forming spaced tongues on the inner end of said collar, said tongues projecting radially towards the axial center of the bung hole, of inserting in said collar a sput having longitudinally extending teeth at its inner end, of causing said teeth to mesh with the tongues, and of turning the teeth over the inner edge of the collar between the tongues to secure the sput in place.

4. The method of applying a sput to a metal container consisting of forming a bung hole in a wall of said container, of producing an inwardly projecting collar on said wall concentric with said bung hole, of forming an inturned serrated flange on the inner end of said collar thereby providing radial tongues, of inserting in said collar a sput having a ring on its outer end with a groove therein and containing a gasket to engage the wall surrounding the bung hole and said sput further having longitudinally extending teeth at its lower end, of rotating said sput to cause the teeth to mesh with the tongues, and of turning said teeth over the inner edge of the collar between the tongues to compress the gasket to form a liquid tight seal and fasten the sput in place.

5. The method of mounting a sput in the bung hole of a metal container defined by a collar extending from a wall of said container and said collar having circumferentially spaced inwardly projecting radial tongues on the inner end thereof, which comprises inserting a sput having spaced longitudinally extending teeth on its inner end into the bung hole and within the collar and rotating said sput until the teeth mesh with the tongues, and then bending the teeth and tongues back upon themselves in opposite directions to one another until said teeth are imposed upon the collar and said tongues are imposed upon the lower edge of the sput.

6. The method of mounting a sput in a metal container consisting of forming a bung hole in a wall of said container, producing an inwardly projecting collar on said wall surrounding said bung hole, forming circumferentially spaced inwardly projecting radial tongues on the inner end of said collar, inserting in said collar through the bung hole a sput having spaced longitudinally extending teeth on its lower end and rotating said sput until said teeth mesh with the tongues, and finally bending the teeth and tongues outwardly towards the said container wall until they firmly engage the collar and sput respectively.

7. The method of mounting a sput in the wall of a metal container, comprising forming an aperture in the wall and surrounding the same with an upstanding neck formed with a radially directed serrated flange therearound, seating a sput having teeth for mating with said serrations in place in said aperture and bending a portion of said sput to secure the same in place in said wall.

8. The method of mounting a sput in the wall of a metal container, comprising, perforating the wall and forming a toothed periphery on the wall surrounding the perforation, seating a sput having a flange formed with tooth receiving portions in place in said opening by interengaging the teeth and portions, and then securing said teeth and said portions in engagement by bending a portion of said sput against said wall.

9. The method of mounting a sput in the wall of a metal container which comprises, perforating the container wall and forming a sput engaging portion around said perforation, inserting a sput in said perforation, said sput and said engaging portion having interengaging notch and lug portions to prevent relative rotation, seating said sput by interengaging said lugs and notches and then securing said sput in place by bending part of the same against said wall.

EARLE GORDON MELRATH.