Dec. 14, 1943. A. T. AUGENSEN 2,336,457

DISPENSING CONTAINER

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Fig. 1

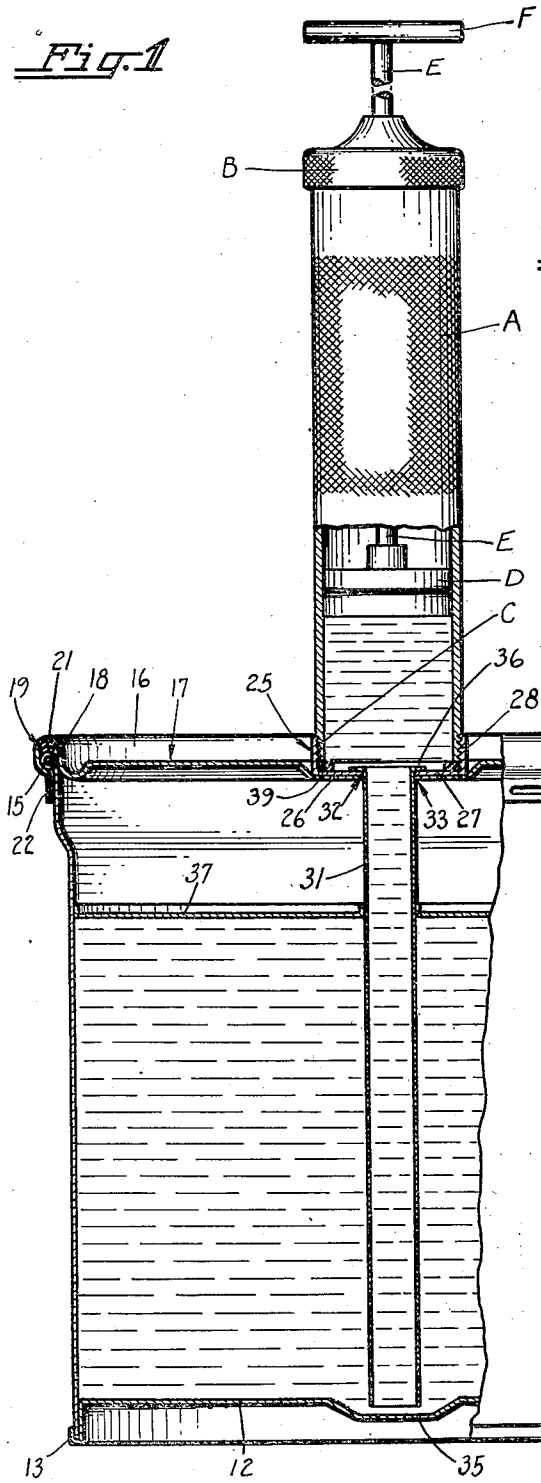
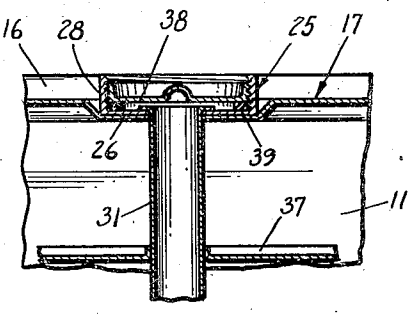



Fig. 2




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## DISPENSING CONTAINER

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2 Claims. (Cl. 221—47.5)

The present invention relates to dispensing containers for lubricating grease and the like and has particular reference to a container to which a grease gun lubricator may be temporarily attached for filling.

An object of the invention is the provision of a dispensing container of simple construction wherein a gun type lubricator may be readily attached to the top of the container for filling without having to move or tilt the container into any special position.

Another object is the provision of such a dispensing container wherein the simple fittings required for the accommodation of the gun lubricator, is made a part of the cover of the container so that the cover may be used with a standard container.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawing, discloses a preferred embodiment thereof.

Fig. 1 is a part side elevation and part sectional view of a dispensing container embodying the instant invention, the view showing a grease gun in position on the container, with portions of the gun broken back and shown in section; and

Fig. 2 is a fragmentary detailed view showing the container closed after removal of the grease gun.

As a preferred embodiment of the instant invention the drawing illustrates a sheet metal container comprising a cylindrical body 11 having a bottom closure 12 secured thereto in a suitable seam 13. The upper portion of the body is preferably enlarged as indicated at 14 and this enlarged portion terminates in a smooth outwardly bent edge curl 15 which defines the mouth of the container.

After the container is filled with its contents it is closed and sealed with a cover 16. The cover is preferably formed with a countersunk panel 17 which is surrounded by an inverted U-shaped channel section 18 enclosing an annular channel 19. The channel retains a resilient sealing gasket 21 and when the cover is in place on the container body the gasket seats tightly on the body curl 15 while the channel section 18 fits down over the curl. Depending tabs 22 formed on the outer edge of the cover extend down adjacent the side of the container body and are bent inwardly under the curl 15 and thus hold the cover tightly in sealing position on the container.

Such a container is especially designed for lubricating greases and the like which are adapted to be filled into and dispensed from the well known grease gun type of lubricator such as disclosed in United States Patent 1,692,423, issued November 20, 1928 to A. T. Shere on Grease gun. Such a gun preferably includes a tubular body A, having at one end a cover B and at the other end a threaded section C on which the dispensing nozzle of the gun is secured. Within the gun body there is a piston D secured to a rod E which extends through the cover B and terminates in a handle F.

In the container of the instant invention the gun itself, after its dispensing nozzle end has been removed, is adapted to be applied to the top end of the container and filled without having to move or tilt the container or the gun. For this purpose the cover 16 of the container is provided with a cylindrical cup shaped dispensing nozzle 25 which is preferably located at the center of the cover and disposed in an auxiliary countersunk panel 26. The nozzle includes a bottom wall section 27 which is preferably spot welded to the cover and also includes an integral vertical wall section 28 which is formed with internal screw threads which correspond to the threads on the end of the gun and into which the end of the gun may be screwed.

The nozzle 25 also includes a long vertically disposed tube 31 which extends down into the interior of the container through aligned holes 32, 33 formed respectively in the nozzle bottom wall section 27 and in the cover auxiliary panel 26. The tube extends down through the middle of the container body and projects into a depressed recess 35 formed in the bottom closure 12, the lower end of the tube terminating just short of the bottom of the recess and well below the inner surface of the bottom closure. A flange 36 on the upper end of the tube engages against the nozzle bottom wall section and thus serves as a stop for holding the tube in proper position relative to the bottom recess. If desired this flange may be welded or soldered to the nozzle to insure permanancy of location.

With the gun screwed into position in the threaded nozzle 25, it may be readily filled upon drawing the piston D upwardly within the gun cylinder by pulling on the handle F. This movement of the piston creates a vacuum within the container dispensing tube 31 and thus permits atmospheric pressure within the head space of the container to force down on the surface of the

contents and thereby push the contents up through the dispensing tube into the gun. Between such fillings of the gun the atmospheric air within the container is replenished or built up by small leakage around the nozzle at the spot welded joint.

A follower plate or disc **37** loosely disposed within the container and resting on the surface of the contents maintains the latter in a level compact condition and helps force the contents up into the dispensing tube. This plate or disc surrounds and loosely slides on the dispensing tube. One stroke of the gun piston fills the gun which is then unscrewed from the container nozzle and its own dispensing nozzle is replaced ready for use.

It will thus be seen that such a gun filling operation may be quickly effected as is sometimes required in automobile service stations and the like. Not only is the gun quickly filled but the filling may be done without handling the container in any particular manner. The construction of the container with its dispensing tube extending down into the bottom recess **35** also makes it possible to drain out practically all of the contents without moving or tilting the container.

When the grease gun is not in place on the container the dispensing nozzle **25** is preferably closed with a removable imperforate screw cap **38** (see Fig. 2) which is adapted to be screwed in place within the threaded wall section **28** of the nozzle. The cap is screwed down onto an annular sealing gasket **39** which is retained within the nozzle and this insures a hermetic seal for the nozzle. This cap is also in place during shipment and storage of the container.

It is thought that the invention and many of its attendant advantages will be understood from the f regoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

1. A dispensing container adapted to receive the end of a piston type grease gun for filling the latter, comprising a body member having a centrally apertured cover secured to an open end thereof, a centrally apertured cup-shaped nozzle member secured directly to said cover with the cover and nozzle apertures disposed in aligned registry with one another, said nozzle member having an upstanding interiorly threaded wall adapted to removably engage the end of a gun type lubricator for filling with the contents of the container, a filling tube having an outer flange permanently secured to the interior of said nozzle member for support thereby and depending into the interior of said body member through said aligned nozzle and cover apertures for directing the contents of the container into said gun, a follower plate slidably mounted on said tube and resting upon the surface of the container contents to facilitate admission thereof to said filling tube for dispensing purposes, and a reclosure cap element having threaded engagement with the said threaded wall of the nozzle for sealing the container when the gun is not in engagement therewith.

2. A dispensing container adapted to removably receive a piston type grease or lubricating gun for filling, comprising a body member having a cover member including a sunken panel portion removably secured thereto, a bottom closure member having a centrally disposed sunken recess secured to said body member, a cup shaped nozzle secured to and supported by the sunken panel portion of said cover and having an internally threaded wall adapted to removably receive and hold the threaded end of a gun type lubricator to be filled with the container contents, a filling tube carried by said nozzle and extending down through the body member into the sunken recess of said bottom closure, the outermost end of said tube having a laterally extending flange permanently secured to the bottom wall of said cup shaped nozzle for retaining the tube in spaced relation to said recess, and a loose disc slidable on said tube and resting on the surface of the contents of the container for maintaining said contents in compact condition.

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