Apr. 17, 1923. **1,452,391**

L. RUPERT

CLOSURE

Filed March 22, 1921

Fig. 1

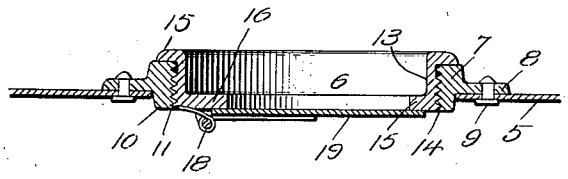
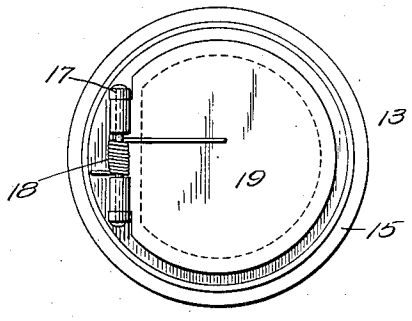


Fig. 2.



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By

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Patented Apr. 17, 1923. 1,452,391

UNITED STATES PATENT OFFICE.

LOUIS RUPERT, OF DECATUR, ILLINOIS.

CLOSURE.

Application filed March 22, 1921. Serial No. 454,348.

To all whom it may concern:

Be it known that I, LOUIS RUPERT, a citizen of the United States, residing in Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Closures, of which the following is a specification.

This invention relates to closure caps and more particularly to a self closing cap for automobile tanks, filling spouts, and various types of metallic containers.

The primary object of the invention is directed to a self closing closure for a gasoline tank wherein a normally closed cover plate is carried by a threaded closure member removably secured in a filling opening or pouring spout of a liquid container whereby any sediment or foreign matter may be excluded from the said container and also dispensing with the necessity of removing the closure when it is desired to fill the tank for instance.

Another and very important object of the invention is directed to a threaded closure member adapted to be detachably removed from a filling opening or pouring spout of a gasoline tank including a cover plate carried by and disposed within the body of the tank and opening within the same and having automatic means for closing the cover plate when the nozzle of a hose for instance, is withdrawn from the opening.

A still further object of the invention resides in the construction of a threaded closure having a pivoted, spring controlled cover plate attached thereto and opening inwardly of a tank or receptacle, whereby the same may be filled without removing the closure member, and which construction will be extremely simple, consisting of comparatively few parts therefor inexpensive to manufacture, rigid and durable, and of universal application in connection with various types of metallic containers or receptacles.

With these objects in view and others which will be suggested and manifest as the purpose and nature of my invention are revealed in the following specification and drawing,

Figure 1 is a sectional view showing the invention as applied in use in the filling opening or spout of a gasoline tank.

Fig. 2 is a bottom view of the closure removed from the spout or filling opening.

Referring now to the drawing wherein like parts designate corresponding parts throughout the specification, 5 designates a portion of the top of an automobile tank for instance, provided with a filling opening 6 about which I have provided an annular ring 7 preferably constructed of metal and having its flange 8 riveted or otherwise secured as at 9 to the body of the tank as clearly illustrated in Fig. 1 of the drawing.

It will be observed that the annular ring 7 is also provided with a reduced rounded extension 10 within the body of the tank and is screw-threaded as at 11 for detachably receiving a closure member in the form of a relatively shallow saucer shaped plug designated by numeral 13. The plug 13 is also screw threaded as at 14 for engagement with the threads 11 of the annular ring, said plug being provided with an outwardly turned, annular lip 15^a which overlies the top of the annular ring 7 forming a tight connection therewith when the respective members are threaded with each other. The closure member formed by the plug 13 is also provided with a bottom or flange 15, being formed with an enlarged extension 16 to which the bearings 17 are attached and carry the spring hinge 18 of the closure plate 19 transversely pivoted to the bottom of the said closure member 13 and more particularly to its extension 16 above referred to.

It will be observed that the spring hinge normally retains the closure plate 19 at all times in its closed position thus being such as to permit the nozzle (not shown) to be inserted within the tank or filling spout thereof when it is desired to admit gasoline therein. Upon the release of the filling nozzle, it will be quite apparent that the cover plate 19 will immediately fly back to its closed position and thus prevent the admission of dirt or foreign matter within the tank. In this manner, it will be readily apparent that when the screw closure member 13 is once placed in position that it is not necessary at any time to remove the same when it is desired to fill the tank and by reason of the normally closed cover plate 19, a top cover for said closure member 13 is not necessary. The annular ring 7 cooperating with the closure member 13 forms a tight joint therewith and of course is necessarily of a size to receive the same in threaded engagement and since the closure mem-

ber 13 may be constructed of different material and of various size to meet the needs required, the annular ring 7 must also be of such size and construction to accommodate the closure member 13 when it is desired to install the same in the opening of a tank or filling spout.

In the accompanying drawings, I have illustrated my invention embodied in one form by way of example, and which in practice has been found to be highly satisfactory in obtaining the desired results. It will be obvious however that other embodiments may be adopted and that various changes in the details of construction may be resorted to by those skilled in the art without departing from the spirit and scope of the invention. It will be furthermore understood that the invention is not necessarily limited or restricted to the precise elements shown except in so far as such limitations are specified in the subject matter being claimed.

Having shown and described my invention, what I now claim as new and desire to secure by Letters Patent of the U. S. is:—

A closure of the class described, comprising an internally screw threaded ring of appreciable thickness and provided on its exterior with an annular ledge for attaching the ring to a container, another relatively thick ring having an external flange at one end defining a lip engaging over the top edge of the first named ring and at the opposite inner edge formed with an internal inwardly directed lip having the receiving and pouring orifice of the container, the two rings having matching screw threads where joining, and a spring impelled cover plate hinged to the second named ring at one side thereof, whereby the plate will yield to opening forces and automatically return to the closed position when open.

In testimony whereof, I affix my signature hereto.

LOUIS RUPERT.