June 11, 1929. T. S. GREER 1,716,724

COVER LOCK FOR VEHICLE FUEL TANKS

Filed Feb. 17, 1928

Fig. 1

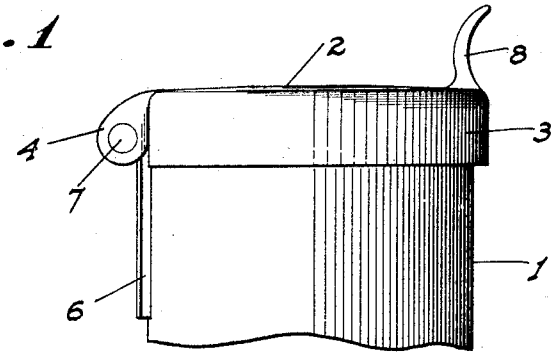


Fig. 2

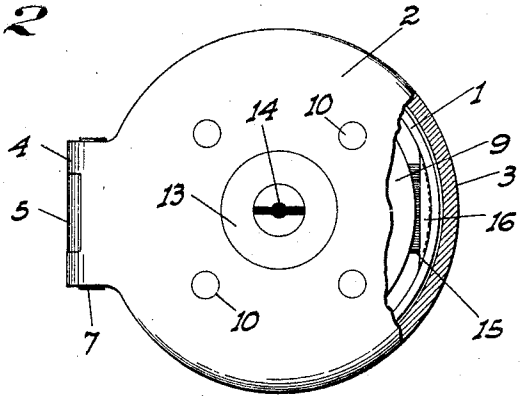
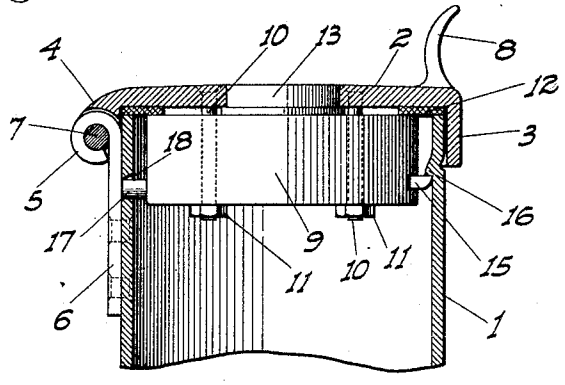


Fig. 3



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COVER LOCK FOR VEHICLE FUEL TANKS.

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This invention relates to the fuel tanks of motor vehicles, my principal object being to provide a combination cover and lock structure for the filling opening of a tank so that the tank can only be filled when the cover is unlocked by the person having the key.

Such a device as this provided on automobiles would, I believe, materially reduce the theft of cars since a car cannot of course be long run without fuel and the cover lock would therefore have to be broken open before fuel could be supplied to the tank. A service station attendant would then know, if the driver of a car having a multilated tank cover requested gasoline, that such driver was not the proper owner and all reputable attendants would under such circumstances not only refuse to supply the fuel but would notify the police.

A further object of the invention is to arrange the structure in such a manner that without a key it is practically impossible to get the cover off even if various parts should be removed or distorted, and it would be probably necessary to saw off the filling tube below the cover.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views:

Fig. 1 is a side elevation of my improved cover and lock as mounted on a tank-filler tube.

Fig. 2 is a top plan view of the device partly broken out.

Fig. 3 is a sectional elevation of the cover showing the lock structure mounted therein.

Referring to the numerals of reference on the drawings, 1 denotes the cylindrical filler-tube of a gasoline tank which if made to be equipped with my improved lock would preferably be of heavier material than is ordinarily used. Fitting over the top of the tube is a cover 2 having a deep side flange 3 depending therefrom around the tube. On one side the cover has lugs 4 cooperating with an eye 5 formed on the upper end of a vertical strap 6 which is rigidly secured to the tube. A hinge pin 7 connects the eye and lugs and on the side opposite the hinge the cover has an upstanding handle member 8 so that the cover can be easily manipulated.

The lock structure which is applied to the cover comprises a cylindrical lock box 9 disposed inside the cover concentric therewith and depending into the tube. This box which contains a locking mechanism of any standard character is supported in place by bolts 10 or the like countersunk in the cover and projecting through convenient points in the box to the bottom thereof, where said bolts receive nuts 11. The box when thus secured in place also clamps a gasket ring 12 which engages the rim of the tube. A relatively small centrally located barrel 13 on the box projects upwardly through the cover to expose the key opening 14 to the top of said cover. A slidable lock tongue 15 projects radially from the side of the box opposite the cover hinge and engages a ledge 16 preferably formed by pressing the side of the tube inwardly as indicated on the drawing. Further locking means is provided in the form of a rigid pin 17 projecting radially from the lock box opposite to the tongue 15 and adapted when the cover is closed to engage a blind socket 18 provided in the side of the tube.

By reason of the arrangement of parts recited it will be seen that the cover can only be opened by retracting the lock tongue with the proper key, the lock structure being of the latest approved theft proof type. The gasket 12 not only prevents possible leakage of the fuel out of the tank but acts as a compressive cushion element between the cover and tube when the cover is locked, so as to enable the lock tongue to be snugly engaged with the ledge and thus prevent rattling.

The structure is practically theft proof apart from the lock, since prying up of the flange 3 even if possible would not aid in releasing the lock; the bolts 10 cannot be handled or removed from above; and even if the pin 7 were removed or the hinge otherwise wrecked the locking pin 17 would still prevent raising of the cover on that side. The socket for this pin being blind it cannot be locked and possibly drilled out from the outside.

No air holes are necessary in the cover or tube since ample passage means for the air is had through the lock structure from the tongue opening in the box to the keyhole on top.

The lock box being removable the gasket

may be replaced at any time or necessary repairs made to the lock without having to remove the cover itself.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claim.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

A fuel tank cover and lock structure comprising with a tank filler-tube, a cover for the tube hinged thereon, a lock box mounted on and depending from the cover inside the tube, catch means between said box and tube, means for securing the box to the cover, and a gasket ring to engage the rim of the tube clamped between the box and cover by said securing means.

In testimony whereof I affix my signature.

TONY S. GREER.