Sept. 22, 1931. W. ISAACS 1,824,352

GAS TANK LOCK

Filed Aug. 16, 1929

Fig 3

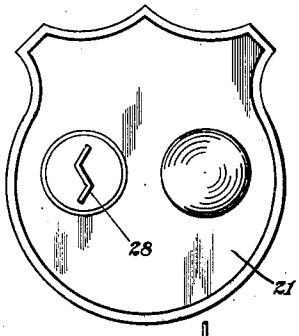



Fig. 4

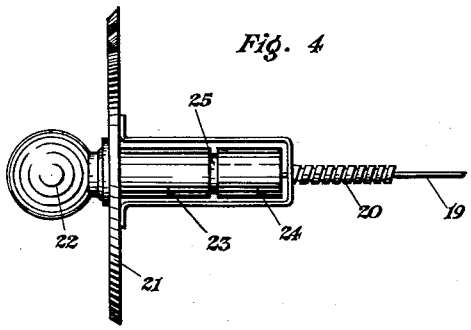



Fig. 5

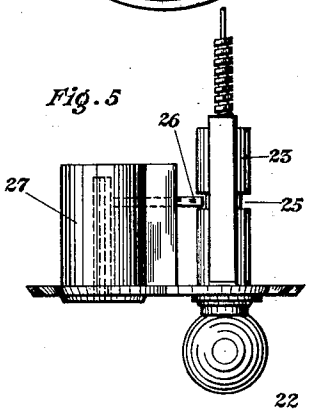



Fig. 2

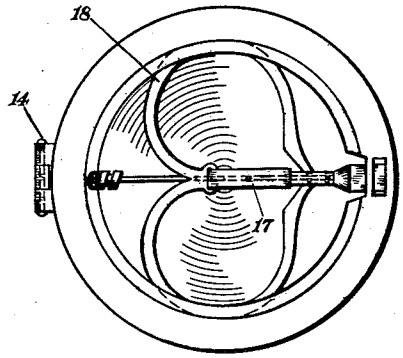
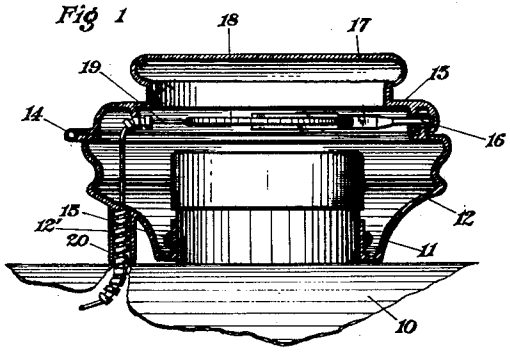



Fig 1




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# UNITED STATES PATENT OFFICE

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## GAS TANK LOCK

Application filed August 16, 1929. Serial No. 386,381.

My invention relates to gas tank locks, its primary object being the provision of a lock for preventing unauthorized access to the contents of the gasoline tanks of automobiles.

It is also my object to provide an efficient lock for the filler openings of gasoline tanks, the lock being simple in construction and easy of operation.

Another of my objects is the provision of a gasoline tank lock which may be locked and unlocked from the driver's position in the car, the lock having its controls on the dash immediately in front of the driver.

Having in view these objects and others which will be pointed out in the following description, I will now refer to the drawings, in which

Figure 1 is a median vertical sectional view of the casing surrounding the filler opening of the gasoline tank and showing also the latch for maintaining the casing in closed position.

Figure 2 is a bottom plan view of the hinged lid as seen when looking up into the lid.

Figure 3 is a face view of the plate on the dash or instrument board, the plate being provided with means for unlatching the latch on the casing and with a keyhole for locking and unlocking the latch.

Figure 4 is a view partly in side elevation and partly in section of the parts shown in Figure 3.

Figure 5 is a view in transverse section showing the latch releasing control and the locking cylinder.

The latch itself is best shown in Figure 1, in which the numeral 10 designates the apron covering the gasoline tank and in which the numeral 11 refers to the filler conduit. My device includes a casing having a stationary part 12 and a hinged closure 13, the two being hinged together at 14. The part 12 is flanged inwardly and upwardly at its bottom and it is adapted to be securely fastened by means of rivets 15 or other suitable fastening means to the filler conduit 11. It should be noted that the fastening devices 15 are wholly inaccessible when the hinged closure 13 is closed and latched.

The hinged closure is downwardly flanged with two spaced apart flanges positioned diametrically opposite the hinge 14. These two flanges are adapted to embrace an upwardly projecting flange on the portion 12 of the casing. The inner of the pair of flanges is provided with an aperture in registration with an aperture in the flange on the member 12 and also in registration with the socket in the outer of the two flanges. When the closure 13 is in its closing position the two apertures and the socket are in registration for the reception of the latch bolt 16. This latch bolt is slidable in a sheath 17 and it is normally forced into latching engagement by means of the curved leaf spring 18 having the form shown in Figure 2. To the latch bolt is also secured a flexible cable 19 having the usual sheath 20. The cable 19 enters the casing at a point which is inaccessible and it passes through the apron 10 and is then carried to the dash or instrument board.

The cable 19 passes through the plate 21 on the dash or instrument board and it is secured to a knob 22 within convenient reach of the driver. It is evident that by pulling out the knob 22 the tension in the cable 19 will withdraw the bolt 16 so as to permit the raising of the lid 13. When the knob 22 is released, the spring 18 will again force the bolt 16 into latching position. The device for latching and unlatching the lid 13 is thus of extreme simplicity and of the utmost convenience.

Between the cable 19 and the knob 22 is a plunger 23 which is slidable in the casing 24 back of the instrument board. The plunger 23 is provided with a circular groove 25 for receiving a bolt 26 as shown in Figure 5. The bolt 26 is slidable toward and away from the plunger, the sliding movements being controlled by a key operated cylinder 27. The turning of the key in the keyhole 28 will thus turn the cylinder 27 to extend or retract the bolt 26. When the parts are in the latching position shown in Figure 1, the cylinder 27 may be turned

to force the bolt into the groove 25 to prevent unlatching of the bolt 16. If it is desired to leave the device unlocked at times when there is no danger of theft of gasoline, the cylinder 27 may be turned to retract the bolt 26 in which case it is only necessary to pull out the knob 22 in order to unlatch the bolt 16. In the case of closed cars which are kept locked when not in use it may sometimes be unnecessary to lock the device. If it is desired to maintain the bolt 16 in unlatched position it is only necessary to draw out the knob 22 and then to extend the bolt 26 so that it engages the rear surfaces of the plunger 23. When the parts are in this position the bolt 16 is maintained in its retracted position against the exertion of the spring 18.

The device, of course, is intended primarily to prevent theft of gasoline from the gasoline tanks and the members shown in Figure 1 are particularly effective for this purpose since the only access to the latch is at the instrument board. The device is, however, very convenient since the access is to be had only from the driver's position. When entering a filling station, the driver has only to unlock and unlatch the device from his driving position after which the filling station attendant has free access to the filler conduit 11. The attendant then closes the lid 13 after the required amount of gasoline has been introduced into the tank and the driver has only to turn the key in the cylinder 27.

Having thus described my invention in such full, clear, and exact terms that its construction and operation will be readily understood by others skilled in the art to which it pertains, what I claim as new and desire to secure by Letters Patent of the United States is:

A lock for gasoline tanks of automobiles, said lock including a casing adapted to surround the filler conduit of the gasoline tank and to be secured thereto, a cover hingedly connected to said casing, a slidable bolt underneath said cover, said casing and said cover being each provided with apertures which are in alignment when said cover is in closing position, a leaf spring having lobes on opposite side of said bolt and having a recessed portion at its rear engaging with said bolt to yieldably hold said bolt in latching position, and means for withdrawing said bolt from the apertures to unlatch said cover.

In testimony whereof I affix my signature.

WILLIAM ISAACS.