April 19, 1927. 1,625,652

H. L. GROESBECK

LOCKING CAP FOR TANKS

Filed May 6, 1926

Fig. 1.

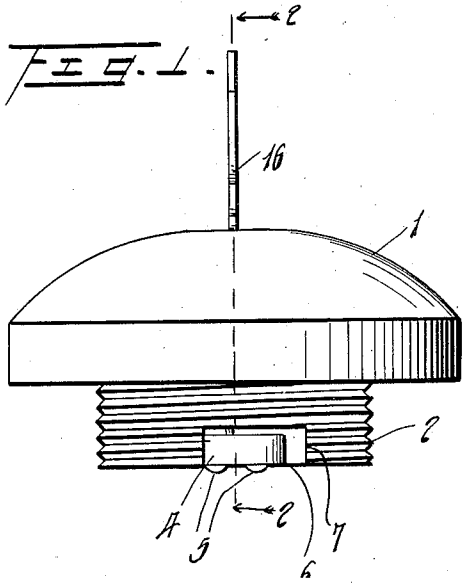


Fig. 2.

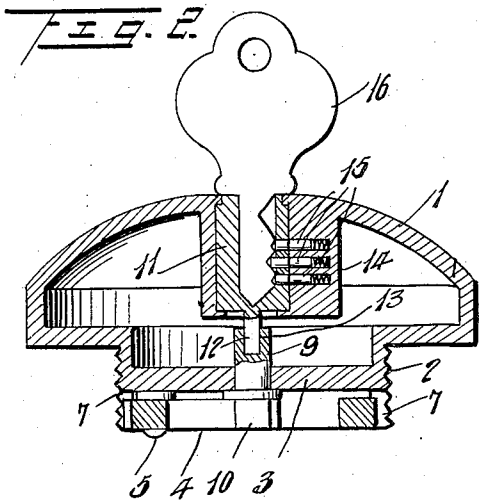


Fig. 3.

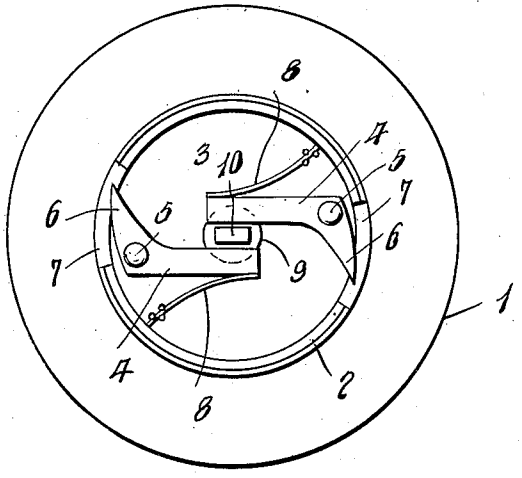


Fig. 4.

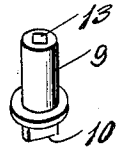
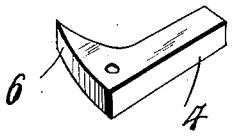


Fig. 5.



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UNITED STATES PATENT OFFICE.

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LOCKING CAP FOR TANKS.

Application filed May 6, 1926. Serial No. 107,178.

The invention relates to means for locking the caps used to close nozzles of tanks to prevent unauthorized removal thereof, and has particular reference to means for locking the closure cap of an automobile fuel tank to prevent removal of the fuel from the tank while the vehicle is parked, and has for its object the provision of means including a lock mechanism controlling locking dogs whereby the closure cap of an automobile fuel tank or other tank may be secured in position against unauthorized removal.

The invention will be described in detail hereinafter and will be found illustrated in the accompanying drawings in which

Figure 1 is a side view in elevation of the improved locking cap,

Figure 2 a vertical sectional view on a plane indicated by the line 2—2 of Figure 1,

Figure 3 a bottom plan view,

Figure 4 a detail view of the locking stud, and

Figure 5 a detail view of one of the locking dogs.

In the drawings similar reference characters will be used to designate corresponding parts throughout the several views.

The type of cap selected for illustration of the locking mechanism, shown at 1, has a reduced threaded extension 2 adapted to screw into the internally threaded nozzle (not shown) of a fuel tank, but it will be readily apparent that the invention to be hereinafter described may be applied to other types of caps.

Arranged in the threaded extension 2 is a horizontal partition 3 on which are pivotally mounted locking dogs 4 as at 5, and having their locking ends 6 arranged in recesses 7 in the lower portion of the threaded extension 2. The engaging ends 6 of the locking dogs 4 are held, normally, in position to engage the tank nozzle (not shown) by means of the springs 8, and it will be understood that when the engaging ends 6 are in engagement with the nozzle that the cap 1 cannot be unscrewed but will be locked in position.

To move the locking dogs 4 into unlocked position a stud 9 is pivotally mounted in the partition 3 and has an elongated projection 10 that is adapted to engage the dogs 4 when the stud 9 is turned and move the engaging ends 6 thereof out of engaging position. The stud 9 is actuated by means of a lock cylinder 11 having a non-circular pin extending therefrom, designated 12 that engages in a similarly shaped opening 13 in the stud 9. The locking cylinder 11 is rotatably mounted in lock casing 14 that is integral with the cap 1. Any form of lock may be employed, the construction shown in the drawings employing spring actuated pins 15 being used for the purpose of illustration only, and 16 indicates a preferred construction of key for actuating the lock.

It is also understood that the invention may be applied to other types of caps for closing the nozzles of tanks than the type shown in the drawings, so that the invention is not limited to the specific form of cap shown.

What is claimed is:—

A locking cap for tank closures, including a threaded cap adapted to engage the threaded nozzle of a tank, a horizontal partition in said cap, spring actuated dogs pivotally secured to said partition and adapted to engage the tank nozzle to prevent unscrewing of the cap, a stud rotatably mounted in said partition and having a projection engaging said dogs to move them into non-engaging position, and a lock cylinder engaging said stud to rotate it.

In testimony whereof I affix my signature.

HAROLD L. GROESBECK.