L. A. KENNEDY.

FUEL LOCK FOR MOTOR CARS.

APPLICATION FILED FEB. 1, 1921.

1,403,086.

Patented Jan. 10, 1922.

FIG. 1

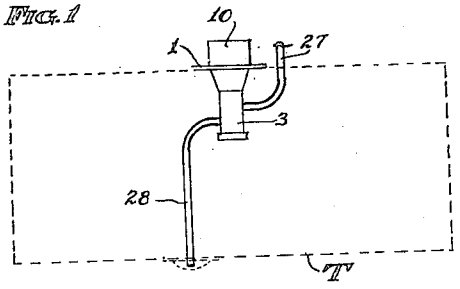


FIG. 2

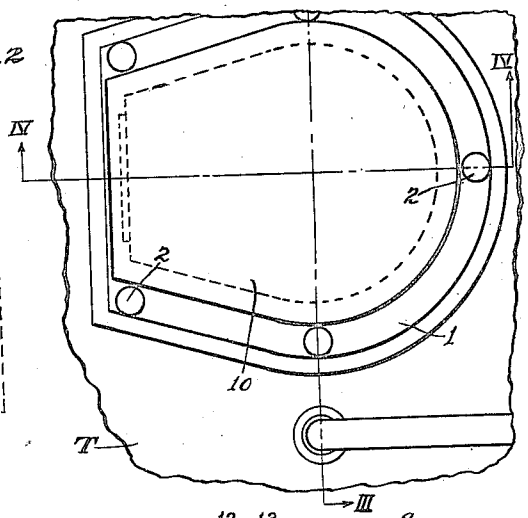


FIG. 3

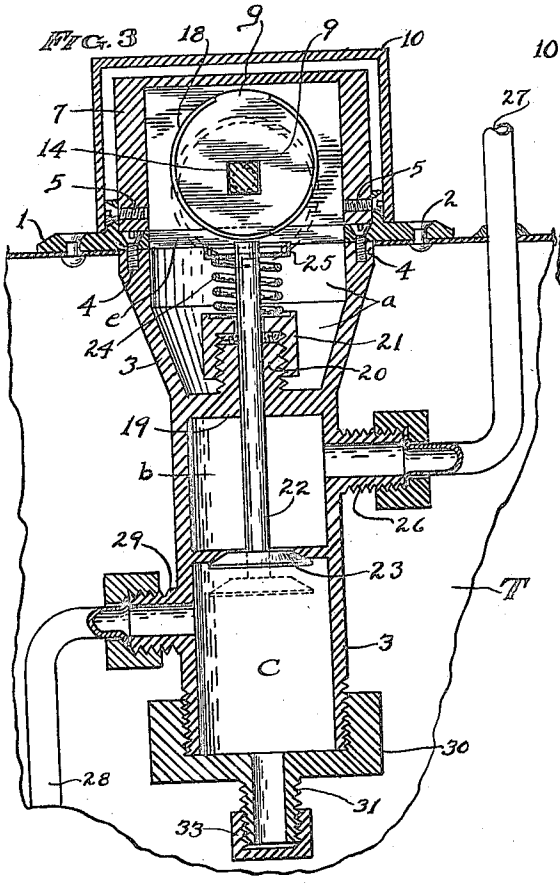


FIG. 4

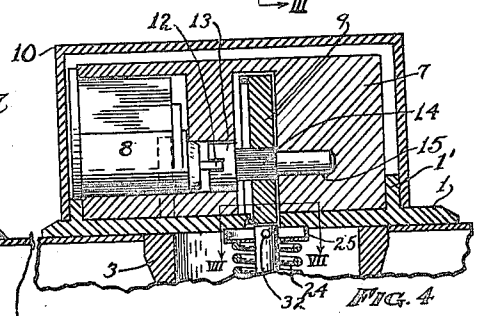


FIG. 5

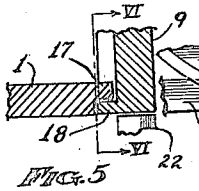


FIG. 6

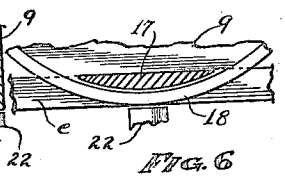
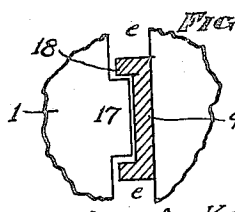


FIG. 7



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FUEL LOCK FOR MOTOR CARS.

1,403,086. Specification of Letters Patent. Patented Jan. 10, 1922.

Application filed February 1, 1921. Serial No. 441,692.

To all whom it may concern:

Be it known that I, LEO A. KENNEDY, a citizen of the United States, and a resident of Derby, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Fuel Locks for Motor Cars, of which the following is a specification.

My invention relates to fuel locks for motor cars, and has for its object the provision of a simple, effective means for preventing the theft or unauthorized use of motor cars driven by internal combustion engines, by locking off the fuel supply from the carbureter.

The invention is embodied in the combination of a valve-chamber provided with an inlet and an outlet for the liquid fuel, a valve in said chamber adapted to open or close the fuel port, a pin-tumbler lock, and a cam actuated by said lock and adapted to open and close the valve, the valve being in closed position when the lock is locked.

The invention further consists in the peculiar details of construction and arrangement of parts shown on the accompanying drawings, which illustrate the preferred construction of the device.

In said drawings, Fig. 1 is a rear elevation diagram of a gasoline tank equipped with the lock; Fig. 2 is a top view of the device full size, with a portion of the top of the tank; Fig. 3 is a vertical section of the complete device, taken on line III of Fig. 2; Fig. 4 is a vertical section of the upper portion of the device, taken on line IV of Fig. 2; Fig. 5 is a sectional detail view; Fig. 6 is a sectional detail view taken on line VI of Fig. 5; and Fig. 7 is a sectional detail view (enlarged) taken on line VII of Fig. 4, but with the cam in reverse position.

The device is here shown as mounted on and within the regular fuel tank, and is best installed before the tank is assembled. The flanged plate 1 is secured to the tank T with rivets 2. The valve body 3 is secured to ring 1 with screws 4. Plate 1 has an upstanding flange 1′ to receive screws 5 which hold in position a block 7, in which are cast recesses which receive the lock proper, 8, the cam 9, and the connecting means between the lock and cam. The lock 8 is a cylinder lock of the Yale type.

When the removable cover 10 is off, the keyhole is exposed. The lock cylinder has a projecting lug 12 which lies in a slot in a head 13 of a cam-shaft 14—15, the part 15 being rotatable in a hole drilled in the block 7. The squared portion 14 fits in a square opening in the cam 9. Block 7 and plate 1 are slotted as shown, to receive the cam. The slot *e* in said plate has a lug 17 on one side and at the centre of the slot. The cam is formed with a lateral annular flange 18, located to pass freely beneath said lug 17, in order to prevent removal of the block 7 except when the parts are in unlocked position. In that portion of the flange 18 which is uppermost when the cam is in locked position, I cut a notch *g*, just large enough to pass freely over the fixed lug 17 when the cam is in unlocked position. The purpose of this device will be referred to below.

The valve-body is formed with three chambers, *a*, *b* and *c*. On web 19 is a guide 20, on which is threaded a packed gland 21. The stem 22 of the disc valve 23 abuts the rim of the cam. The valve-closing spring 24 rests on the gland and is confined by a flanged washer 25 which is held down by a pin 32. A nipple 26 communicates with chamber *b* and connects with the delivery tube 27 which leads to the motor. The induction tube 28 connects with a nipple 29 which communicates with chamber *c*. The bottom cap 30 is simply a closure for the chamber *c*, and is shown as provided with a nipple 31, closed by a cap 33. Tube 28 may be connected to nipple 31, if so preferred.

With the valve closed (closing the fuel port as shown) the fluid cannot pass from the tank into tube 27. By means of the lock 8, the cam 9 is locked in the position shown in Fig. 3. The parts are to be left in this position when the car is left unattended. Before starting the car, the lock must be turned a half-revolution, which will cause the cam to depress the valve-stem and open the valve. The key is then removed and the cap 10 replaced. Should a thief remove the screws 5, the block 7 will yet be non-removable, by reason of the cam-flange 18 being held down by the fixed lug 17.

This lock valve need not necessarily be located in or upon the tank, for it may be installed in any convenient portion of a car, at slight expense.

Having described my invention, I claim as new and desire to secure by Letters Patent:

1. In a device of the kind described, a plate having a slot therein, a fixed lug projecting into said slot, a cam having a lateral curved flange in which is a recess for said lug, said cam entering said slot; a lock for actuating the cam, a valve actuated by the cam, a housing for the cam and the lock, said housing being secured to said plate; said cam-flange being engaged with said lug in all positions of the cam except that in which the valve is allowed to be in open position, by said cam.

2. In a device of the kind described, a fixed plate having a slot therein, a fixed lug projecting into the slot, a rotary cam entering the slot, and a lateral flange on said cam; said flange engaging said lug and having a notch therein to pass over said lug when the cam is in a predetermined position.

LEO A. KENNEDY.

Witnesses:
M. Y. CHARLES,
E. SAWYER.