Jan. 29, 1929. 1,700,474

J. J. DUNN

KEY CONTROLLED VALVE

Filed April 7, 1927

Fig. 1

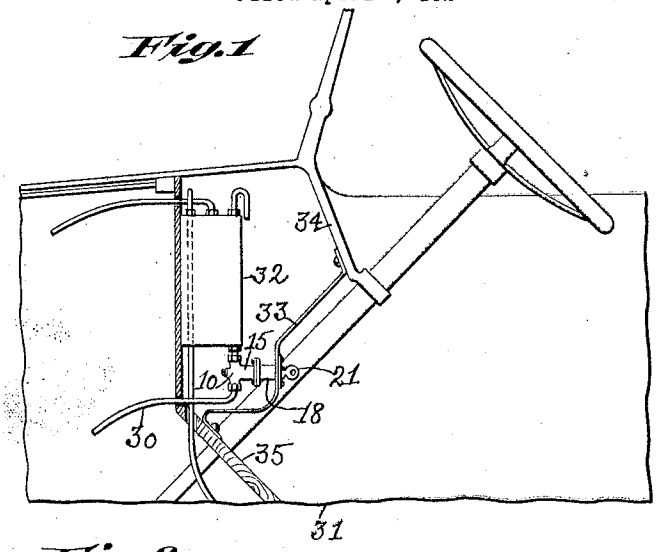


Fig. 2

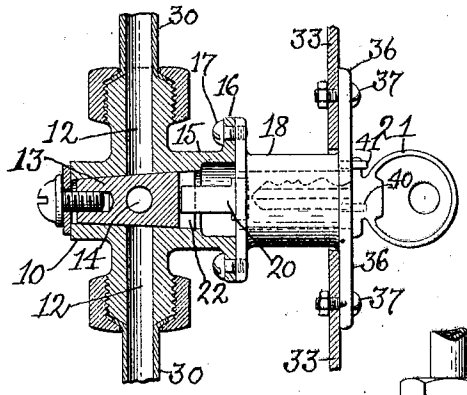


Fig. 3

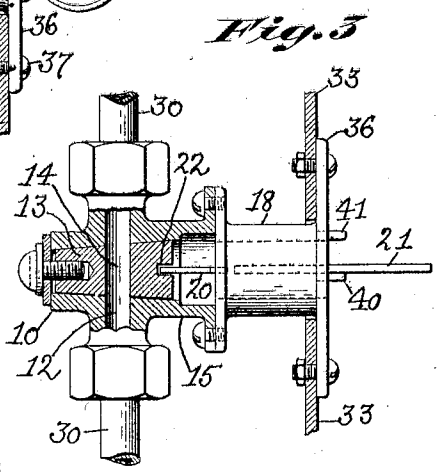
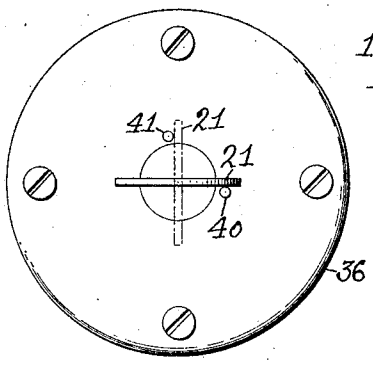


Fig. 4



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Patented Jan. 29, 1929. 1,700,474

UNITED STATES PATENT OFFICE.

JOHN J. DUNN, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO WILLIAM A. MACE, OF DORCHESTER, MASSACHUSETTS.

KEY-CONTROLLED VALVE.

Application filed April 7, 1927. Serial No. 181,686.

This invention relates to a key-controlled valve, especially adapted for use on automobiles and like motor vehicles for safeguarding the same against theft.

To this end, the gasoline supply pipe leading to the engine or motor of the vehicle is provided with a valve casing having a valve which is coupled with a rotatable member of a lock of the Yale type so as to be operated by the key which operates the lock, said valve being closed by the operator of the car when he leaves the same, and being opened when he desires to use the car.

The particular features of the invention will be pointed out in the claim at the end of this specification.

Fig. 1 represents a portion of an automobile provided with a key-controlled valve embodying this invention;

Fig. 2, a view in section and elevation of the key-controlled valve shown in Fig. 1, the valve being shown in its closed position;

Fig. 3, a similar view showing the valve open, and

Fig. 4, a side elevation of Fig. 2 looking toward the left.

Referring to the drawing, 10 represents a valve casing provided with a fluid passage 12, which is controlled by a rotatable valve 13 having a bore 14, which is adapted to register with the passage 12 in the open position of the valve, as shown in Fig. 3.

The valve casing 10 is provided with a lateral extension or hollow boss 15 provided with an annular flange 16 to which is secured as by screws 17, the casing or barrel 18 of a lock, preferably of the Yale type and which will be referred to as the Yale lock.

The Yale lock is of well-known construction and is provided with a member 20, which in the ordinary use of the lock operates the usual bolt.

In the present instance the member 20 of the lock is connected with the rotary valve 13, so as to operate the same, when the member 20 is turned by a key 21, which is individual to each Yale lock.

In the present instance, the operating member 20 of the Yale lock is coupled with the rotary valve 13 by providing the latter at its rear end with a transverse, substantially narrow slot 22, into which the operating member 20 is extended, as shown in Figs. 2 and 3.

By providing the valve casing 10 with the laterally extended hollow boss 15, the Yale lock of standard construction as now found on the market can be utilized without change, as the hollow boss 15 is made of the proper length to receive the operating member 20 and have it engaged with the rotary valve 13 when the barrel 18 of the Yale lock is fastened to the hollow box 15 of the valve casing.

By reference to Fig. 2, it will be seen that the rotary valve 13 is closed, which is effected by turning the key 21 into the position shown by dotted lines in Fig. 4. The valve may be left locked in its closed position by withdrawing the key from the lock.

When it is desired to open the valve, the key 21 is inserted into the lock and turned into substantially the position shown in Fig. 3, and indicated by full lines in Fig. 4, in which the valve is in its open position.

The key-controlled valve herein shown is especially adapted among other uses to be employed on automobiles and like vehicles as a protection against theft, and in Fig. 1, the valve casing 10 is shown as connected in the gasoline supply pipe 30 for the internal combustion engine or motor (not shown) of the automobile 31.

As herein represented, the valve casing 10 is included in the pipe 30 leading from the vacuum tank 32 to the carbureter (not shown) and the Yale lock is supported by a plate or bar 33 secured to the dash 34 and floor board 35, the disk or end plate 36 on the barrel 18 of the Yale lock being secured as by screw bolts 37 to the bar or plate 33.

From the above description and by reference to Fig. 1, it will be seen that when the operator desires to use the car, he inserts the key 21 into the Yale lock and turns the key so as to rotate the valve 13 from its closed position in Fig. 2, into its open position shown in Fig. 3, which allows the gasoline to flow from the vacuum tank 32 or other source of supply to the carbureter of the engine or motor.

When the operator leaves the car, he turns the key 21 so as to close the valve, as represented in Fig. 2, and then withdraws the key, and as each Yale lock is operated by its individual key, the car is safeguarded against theft, for the only supply of gas available to the thief, is that in the carbureter, which would be exhausted before the car could be driven any material distance, and when this supply of gas was exhausted, it could not be run any farther.

By constructing the valve casing so that the standard Yale lock may be used without change, the cost of the safety device is reduced to a minimum.

One embodiment of the invention is herein shown but it is not desired to limit the invention to the particular construction shown.

The disk or end plate 36 may be provided with studs or pins 40, 41 to arrest movement of the key 21 and the parts operated by it, when the valve 13 is in its closed and open positions, the pin 40 being engaged by the key 21 when the valve 13 is in its open position and the pin 41 being engaged by the key when the valve is in its closed position.

What I claim is:

In a device of the character described, in combination, a valve casing provided with a valve and with a hollow boss extended laterally beyond said valve and having an outwardly-extended flange, and a lock of the Yale type having its barrel provided with a flange at its inner end co-operating with the flange on said hollow boss and with a flange at its outer end spaced apart from said inner flange and provided with a key-operated member projecting into said hollow boss and operatively connected with said valve, and means for securing the inner flange on said barrel to the flange on said hollow boss.

In testimony whereof, I have signed my name to this specification.

JOHN J. DUNN.

CERTIFICATE OF CORRECTION.

Patent No. 1,700,474. Granted January 29, 1929, to

JOHN J. DUNN.

It is hereby certified that the above numbered patent was erroneously issued to the inventor and William A. Mace, of Dorchester, Massachusetts, as assignee of one-half interest in said invention, whereas said "Mace" should have appeared as owner of one-fourth interest only, as shown by the records of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 19th day of February, A. D. 1929.

M. J. Moore,
Acting Commissioner of Patents.

(Seal)