B. WATTS.

AUTOMOBILE LOCK.

APPLICATION FILED JULY 13, 1914.

1,141,223. Patented June 1, 1915.

Fig. 1

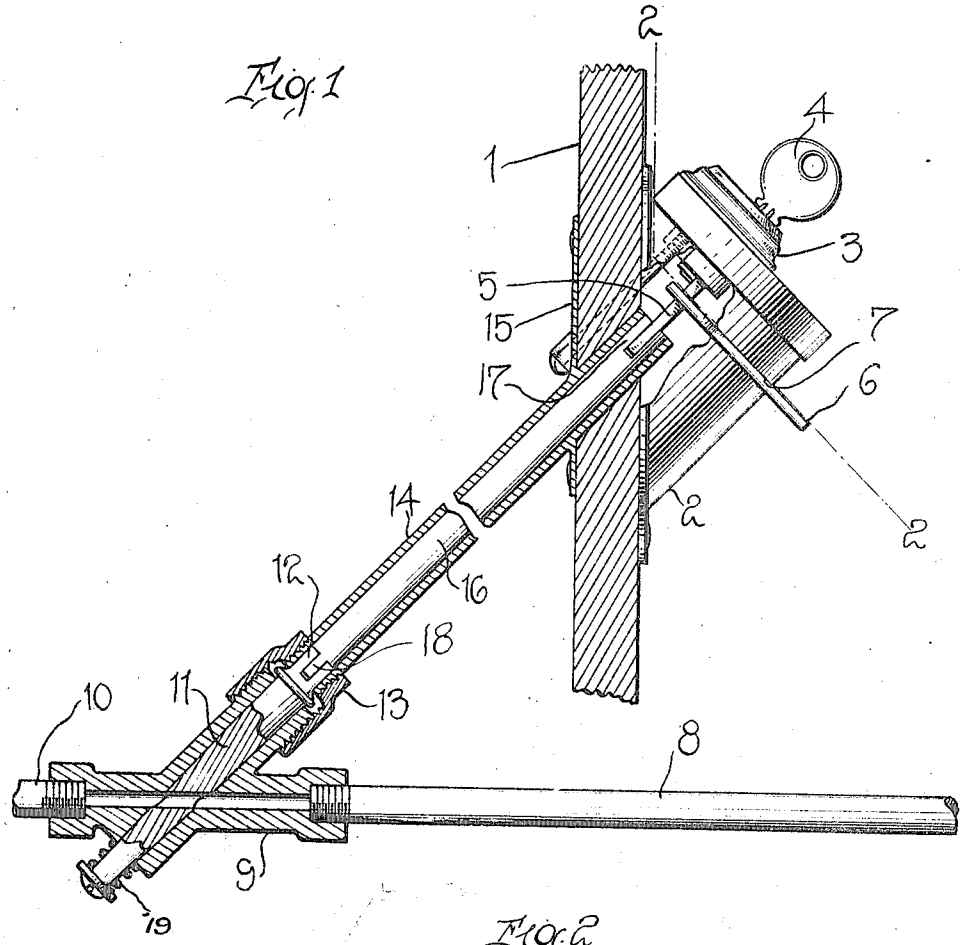
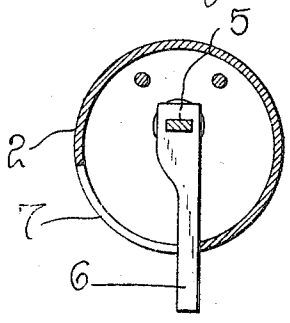


Fig. 2



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UNITED STATES PATENT OFFICE.

BEN WATTS, OF PASCO, WASHINGTON, ASSIGNOR OF ONE-THIRD TO ROBERT A. GALLOWAY, OF PASCO, WASHINGTON, AND ONE-THIRD TO GROSVENOR H. DE PUE, OF SEATTLE, WASHINGTON.

AUTOMOBILE-LOCK.

1,141,223. Specification of Letters Patent. Patented June 1, 1915.

Application filed July 13, 1914. Serial No. 850,707.

To all whom it may concern:

Be it known that I, BEN WATTS, a citizen of the United States, residing at Pasco, in the county of Franklin and State of Washington, have invented certain new and useful Improvements in Automobile-Locks, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to locks, and particularly to locks for automobiles, to render the same theft proof.

The general object of my invention is the provision of lock controlled means for cutting off or admitting the flow of fuel to the engine of an automobile, and in this connection to provide means for connecting a feed controlling valve with a lock, such means being so formed as to permit the lock to be readily removed if required or to permit the valve to be removed, and also being so arranged as to permit of play between the parts allowing the valve to be moved to take up wear, and also permitting a slight vibration in the several parts or a sagging of the feed pipe without disconnecting the valve operating mechanism.

With these and other objects in view, my invention consists in the novel construction, combination, and arrangement of parts, to be hereinafter more fully described, claimed, and illustrated in the accompanying drawing, in which—

Figure 1 is a longitudinal sectional view of my device showing the housing in elevation and partly broken away to show the lock therein; and Fig. 2 is a sectional view on the line 2—2 of Fig. 1.

Referring more particularly to the drawing, the numeral 1 designates a portion of the dashboard of a motor vehicle, to which a housing 2 is connected, the housing in closing a suitable lock mechanism 3, which is operated by a key 4 of a particular conformation. The lock 3 is preferably of the cylinder type, and projecting rearwardly from the inned end of the cylinder is an angular stem 5, the inner end of which projects within an opening in the dashboard, and secured at one end to the stem 5 is an operating handle 6, the outer end of which projects through an arcuate slot 7 in the housing and which serves not only as a means for rotating the feed controlling valve, but also as a stop for preventing the feed controlling valve from being rotated too far, it being understood that the feed controlling valve, as will hereafter appear, is operatively connected to the stem 5 and that a rotation of this stem, which in turn rotates the controlling valve, cannot be accomplished unless the key is inserted in the lock. The length of the slot 7 through which the handle projects is such that the end walls of the slot limit the movement of the handle 6 in either direction so that when the handle is engaged against one end wall of the slot the valve will be closed and when the handle is engaged against the other end of the slot the valve will be open.

The numeral 8 designates a fuel pipe which projects from the fuel tank of the vehicle, and is connected at its forward end in a valve casing 9, a fuel pipe 10 being connected at its rear end in the valve casing to conduct the fuel to the engine of the vehicle. A suitable rotary valve 11 is mounted in the casing 9 to control the flow of fluid through the casing, the valve tapering downward and at its upper end having an upwardly extending split stem 12 which extends within a nipple 13 on a branch of the casing, and mounted at its lower end in the nipple is a tubular housing 14. Connected to the tube 14 adjacent its upper end is a supporting plate 15, which is adapted for connection to the dashboard on its face opposite from that to which the housing 2 is connected, so that the upper projecting end of the tube 14 extends within the opening in the dashboard. Rotatably and loosely mounted in the tube 14 is an operating rod 16, the upper end of which is split as at 17 to receive the extremity of the angular stem 5, the lower end of the rod being provided with a reduced extension 18 to engage in the split stem 12 of the valve.

In the practical use of my improved de-

vice, when the vehicle is desired for use, the key 4 is inserted in the lock mechanism so that the cylinder may be turned to rotate the operating rod 16, to open the valve, whereby fuel is adapted to flow from the source of supply to the motor. When it is desired to leave the vehicle stand for any length of time, the operating handle 6 may be moved to rotate the stem 5 which in turn rotates the operating rod 16 to close the valve, thereby shutting off the supply of fuel to the engine, and the key then may be removed from the lock so that the machine is locked against movement by its own motive power, until the proper key is again inserted into the lock whereby the cylinder may be turned so as to open the valve and allow the fuel to flow to the engine.

From the above description taken in connection with the accompanying drawing, it will be seen that I have provided a simple mechanism whereby a fluid fuel propelled device may be locked against theft, my improved device being readily attachable to automobiles or the like at present in use, or being adapted for connection to new vehicles as a part of the same.

As previously noted, the valve 11 is longitudinally tapered and a spring 19 is provided at its lower end whereby the valve is drawn to its seat. This permits the wear on the valve to be taken up. The rod 16, it will be seen, is loosely connected with the upper extremity of the valve so that it may be readily removed therefrom without taking out any pins or like connecting devices. It is also to be noted that the stem 5 has a loose connection with the upper end of the rod of such character that the stem 5 may be lifted from its engagement with the upper end of the rod 16 without causing the withdrawal of the rod and without removing any pins or like devices. This is productive of a number of advantages. It permits the lock casing 2 to be readily removed from the dashboard of the automobile and the stem 5 to be disengaged from the upper end of the rod 16. It also permits the upper end of the rod to be readily raised out of engagement with the valve when the union or nipple 13 is unscrewed. When the union 13 is detached from the valve casing 9 it is an easy matter to withdraw the valve to clean it, repair it or replace it if necessary. Thus it will be seen that the several parts of the valve may be readily removed from coöperative relation without disturbing the device as a whole. Furthermore, the tube 8 may sag to a slight extent without disengaging the rod 16 from the valve 11 and stem 5, and without impeding the rotation of the stem 16 and the valve, and thus the valve casing may be bent laterally slightly as is likely to occur through the jars and jolts to which the machine is subjected without disengaging the rod 16 from the valve, and the tube 14 may also be bent slightly out of axial alinement with the cylinder without in any way affecting the engagement between the stem 5 and the rod 16.

Having thus fully described my invention, what I desire to claim and secure by Letters Patent is:—

1. The combination with an automobile having a fuel feed pipe and a dashboard, of a valve casing mounted in the length of said pipe and having a tubular extension detachably connected thereto and passing upward and rearward through the dashboard, a lock casing removably mounted upon the rear face of the dashboard and entirely disconnected from said tubular extension, a lock in said casing including a rotatable stem, a valve disposed in the valve casing, and a rod operatively connecting said stem with the valve for common rotary movement, the stem of the lock being disengageable from the rod by relative longitudinal movement and the rod being detachable from the valve by longitudinal movement.

2. The combination with an automobile having a fuel feed pipe and a dashboard, of a valve casing mounted in the length of said pipe and having a tubular extension detachably connected thereto and passing upward and rearward through the dashboard, a lock casing removably mounted upon the rear face of the dashboard and entirely disconnected from said tubular extension, a lock in said casing, including a rotatable stem, a valve disposed in the valve casing, a rod operatively connecting said stem with the valve for common rotary movement, the stem of the lock being disengageable from the rod by relative longitudinal movement, the rod being detachable from the valve by longitudinal movement, said valve projecting at its lower end beyond the valve casing, and a spring surrounding the lower end of the valve, urging the valve to its seat but permitting the valve to be forced upward to thereby force the upper end of the rod out of the extension from the valve casing.

3. The combination with an automobile having a fuel feed pipe and a dashboard extending at right angles to the feed pipe; of a valve casing disposed in the length of the feed pipe forward of the dashboard and having a barrel upwardly and rearwardly inclined, a conical valve disposed in the barrel, a spring urging said valve to its seat, a tubular casing extending upward from said barrel and passing through the dashboard and connected thereto, an actuating rod passing through the casing and detachably engaging the valve, a key operated locking mechanism mounted upon the rear face of the dashboard and including a rotatable

member, and a handle extending out through the casing whereby the member may be rotated upon the insertion of a key in the lock, said rotatable member having detachable engagement with said actuating rod.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

BEN WATTS.

Witnesses:
EDWARD A. DAVIS,
L. M. DELL.