J. R. CASSINGHAM AND W. W. AYRES.

AUTO FUEL SUPPLY LOCK.

APPLICATION FILED MAR. 8, 1918.

1,328,616. Patented Jan. 20, 1920.

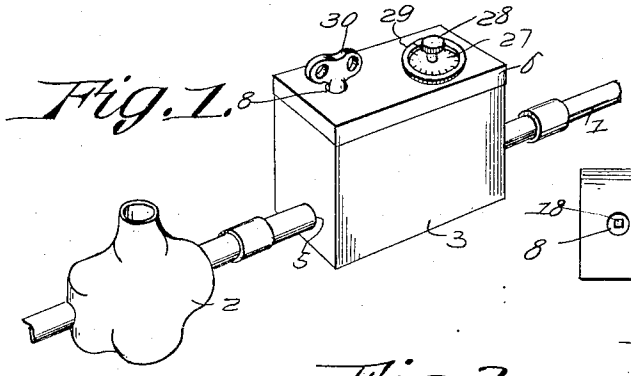


Fig. 1.

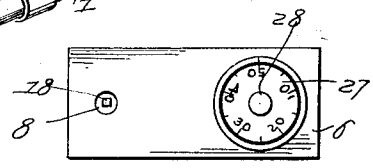


Fig. 2.

Fig. 3.

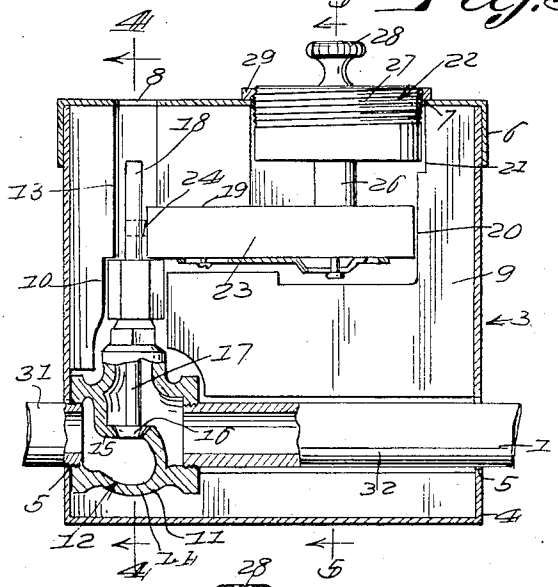
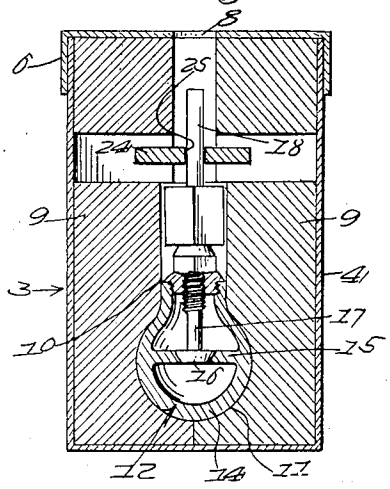


Fig. 4.



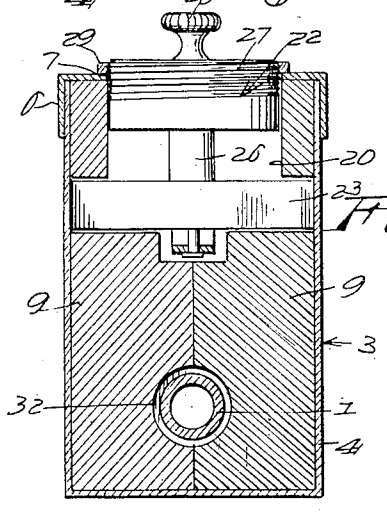


Fig. 5.

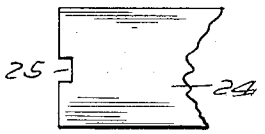


Fig. 6.

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AUTO-FUEL-SUPPLY LOCK.

1,328,616. Specification of Letters Patent. Patented Jan. 20, 1920.

Application filed March 8, 1918. Serial No. 221,253.

To all whom it may concern:

Be it known that we, JOHN R. CASSINGHAM and WALTER W. AYRES, citizens of the United States, residing at Oklahoma, in the county of Oklahoma and State of Oklahoma, have invented new and useful Improvements in Auto-Fuel-Supply Locks, of which the following is a specification.

This invention comprehends generally improvements in that class of inventions known as locks and latches, and more particularly relates to an auto fuel supply lock.

As the primary aim and object the present invention contemplates the provision of a device of the above character designed for attachment in the gasolene or fuel supply pipe of a motor vehicle for enabling the owner or driver of such vehicle to close or shut off the flow of fuel into the carbureter when so desired so as to prevent unauthorized persons from starting the vehicle with a view of stealing the same.

It is an equally important object of this invention to provide a device of the above mentioned character wherein a permutation lock is used in conjunction with a valve preferably of the globe type for removably holding the stem of the valve to prevent turning thereof.

More particularly, this invention embraces the provision of an auto fuel lock of the above mentioned character wherein a casing of an improved construction is designed to receive and support both the valve and the lock in operable relation with respect to each other to assure of an effective coöperation of the parts and to reduce to a minimum tampering with the lock or with the valve.

Among the other aims and objects of this invention may be recited a device of the above character described with a view to compactness, and in which the parts are few, the construction simple, the cost of production low and the efficiency high.

Other improvements and novel details in the construction and arrangement of the various parts of the apparatus will be brought out more in detail in the description to follow, which for a clear understanding of the invention should be considered in connection with the accompanying drawings forming a part hereof, and wherein is disclosed for the purpose of illustration a convenient and satisfactory embodiment of the invention. It is to be noted in this connection that minor changes in the construction and arrangement of parts may be made without departing from the principle of operation of the various parts.

The invention is clearly illustrated in the accompanying drawings, in which: —

Figure 1 is a perspective view showing the device applied to the fuel supply pipe of the motor vehicle;

Fig. 2 is a top plan view of the invention;

Fig. 3 is a longitudinal section thereof.

Fig. 4 is a transverse section taken on line 4—4 of Fig. 3 in the direction in which the arrows point.

Fig. 5 is a transverse section taken on line 5—5 of Fig. 3 in the direction in which the arrows point.

Fig. 6 is a fragmentary horizontal section showing the locking bolt.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now, more particularly, to the accompanying drawings, there is illustrated a fuel supply pipe 1 of a motor vehicle which leads to a carbureter 2 while mounted within the pipe is an improved lock indicated in its entirety by the numeral 3 for removably shutting off the supply of fuel to the carbureter.

In the present instance the lock consists of a main casing 4 of a rectangular configuration, the end walls of which are provided adjacent the bottom with opposed openings 5. A flanged cover 6 serves to removably close the casing and is provided with a large opening 7 and with a key hole 8. Complemental filler blocks 9 are disposed within the casing and are provided on their adjacent inner faces adjacent one end with opposed recesses 10, which form a chamber 11 for accommodating a valve indicated in its entirety by the numeral 12 and also forming an opening 13 which registers with the key hole 8. The valve 12 is preferably of the globe type and consists of a casing 14 having a partition valve seat 15 therein. A valve head 16 is disposed within the casing to coöperate with the seat while the stem 17 projects through and above the casing the upper end thereof being squared as at 18 and positioned within the opening 13 for a purpose that will here-

inafter become apparent. In addition, the filler blocks 9 are provided with opposed horizontal slots 19 which communicate with the opening 13 and which form a chamber 20 for a purpose that will presently appear. These filler blocks are also provided on their inner faces with opposed recesses 21 forming an opening which alines with the opening 7 in the flanged cover 6. The chamber 20 and the opening 21 are designed to accommodate a permutation padlock indicated in its entirety by the numeral 22 and consisting of a circular casing 23 of a rectangular configuration which is seated in the chamber 20. A retractile locking bolt 24 is mounted in the casing 23 and has its outer end provided with a recess 25 for removable arrangement about the squared portion 18 of the valve stem 17. A post 26 is formed on the top of the casing 23 for supporting the exteriorly threaded dial casing 27 of the lock which is designed to be projected through the opening 7. A permutation operating knob 28 is operably mounted in the casing 27 and the casing 23 for retracting the bolt 24. An interiorly threaded and exteriorly knurled ring 29 is engageable with the upper projecting end of the dial casing 27 subsequent to the positioning of the cover 6 on the main receiving and supporting casing 4 so as to properly retain the lock casing. When the operating knob has been adjusted to retract the bolt 24 the key 30 is insertible through the key hole 8 and the opening 13 for engagement with the squared end 18 of the stem to facilitate rotation thereof to consequently raise the valve from its seat to permit fuel to pass through the valve casing.

In connecting the device to the fuel supply pipe a short nipple 31 is arranged in one end of the casing and projects through one of the openings 5 while an elongated nipple 32 has one end exteriorly threaded and engaged in the other end of the valve casing 14. The usual couplings are employed for operably connecting the outer ends of the nipples 31 and 32 to the adjacent sections of the fuel pipe 1.

In use, when the driver or owner stops a vehicle and does not contemplate using the same, to shut off the flow of gasolene through the fuel pipe 1 to the carbureter 2 the operating knob 28 is adjusted so as to move the bolt 24 and allow the recess 25 therein to be positioned about the squared portion 18 of the valve stem 17. This engagement of course takes place subsequent to the seating of the valve by means of the key 30 which may be carried in the pocket of the owner. When it is desired to start the car, the knob 28 is operated to retract the bolt 24 whereupon the key 30 is engaged on the squared ends 18 of the stem to rotate the latter and raise the valve 16 from its seat 15 to permit liquid to flow through the nipples 32 and 31 as well as the valve casing 14 and the carbureter 2, as is apparent.

It is believed in view of the foregoing description that a further description of the operation of the invention is entirely unnecessary. Likewise it is thought that the advantages of the invention will be readily apparent.

Having thus fully described this invention, what is claimed as new and desired to be secured by Letters-Patent, is:—

1. A device of the character described including in combination a fuel supply pipe of a motor vehicle, a main casing having nipples mounted in the opposite end walls and in communication with the supply pipe, a valve casing mounted in the main casing and in communication with the inner ends of the nipples and provided with a valve seat, a valve head disposed within the valve casing, a stem connected to the head and adjustable within the casing and having the upper end squared, a permutation lock within the casing and embodying a lock casing, a retractile bolt operably mounted therein and provided on its outer edge with a recess for removably embracing the squared portion of the valve stem, a dial casing connected to the lock casing, an operating nipple mounted in the lock casing for operating the bolt for releasing the stem, and a key insertible in the main casing for engagement with the squared end of the stem for adjusting the stem subsequent to the actuation of the operating knob.

2. A device of the character described including in combination with the fuel supply pipe of a motor vehicle, a main supporting casing, nipples mounted in the respective ends thereof and in communication with the supply pipe, a valve casing mounted within the main casing and in communication with the inner ends of the nipples and also provided with a seat, a valve head disposed within the casing for coöperating with the seat, a valve stem connected to the head and adjustably mounted within and projecting above the valve casing and having the upper end thereof squared, a cover for the main casing provided with a large opening and with a key hole, the key hole being disposed above the squared end of the stem, manually operably locking means mounted in the main casing, and projecting through the opening in the cover and embodying a retractile locking bolt designed for removable engagement with the squared portion of the stem to normally hold the stem against adjustment, a key insertible through the key hole for removable engagement with the squared end of the stem for adjusting the valve subsequent to the operation of the locking means to control the flow of liquid through the nipples in the valve casing.

3. In combination with the fuel supply

pipe of a motor vehicle, a main casing, a cover for the casing and provided with a large opening and a key hole, filler blocks mounted in the main casing, nipples mounted in the ends of the casing and arranged in communication with the supply pipe, the blocks being formed with a chamber and a communicating opening positioned beneath the key hole, a valve casing in the chamber and connected to the nipples and provided with a valve seat, a valve head in the casing, a valve stem connected to the head and adjustably mounted in the casing and having the upper end squared and disposed in the opening beneath the key hole, the blocks being also provided with opposed slots communicating with the opening and also formed with opposed recesses forming an opening positioned beneath the opening in the cover, a permutation lock, the casing of which is seated in the slots, a locking bolt operably mounted in the casing and having its outer end recessed for embracing the squared end of the stem, a dial casing connected to the lock casing and positioned in the opening above the slots and through the opening in the cover, a knob operably mounted in the dial and lock casings for operating the bolt, a retaining element engageable with the dial casing for removably holding the cover on the main casing, and a key insertible in the key hole and engageable with the squared end of the stem for adjusting the stem subsequent to the operation of the knob.

In testimony whereof we affix our signatures.

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WALTER W. AYRES.