C. S. NEVILLE.

GASOLENE FLOW LINE LOCK.

APPLICATION FILED MAR. 10, 1921.

1,394,860. Patented Oct. 25, 1921.

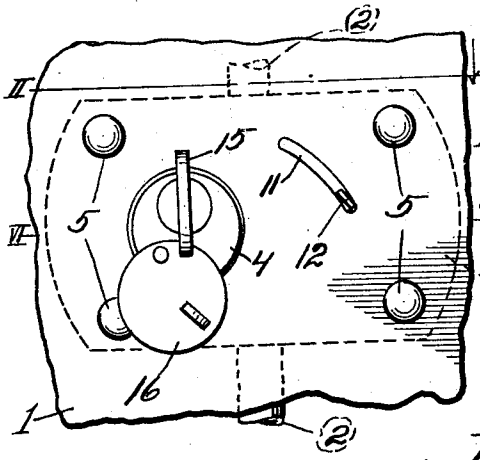


Fig. 1

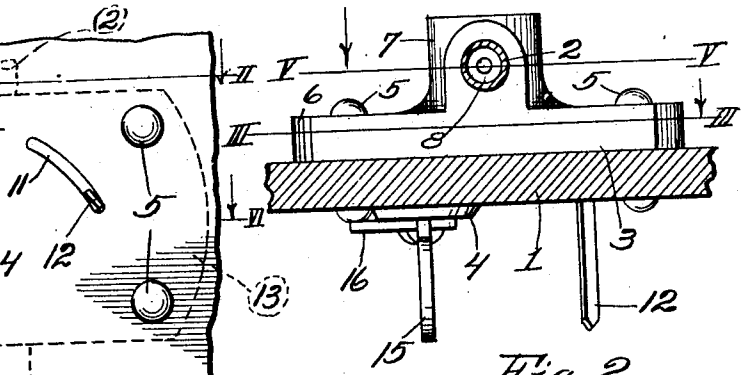


Fig. 2

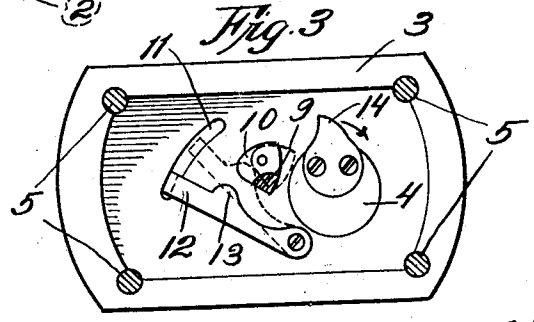


Fig. 3

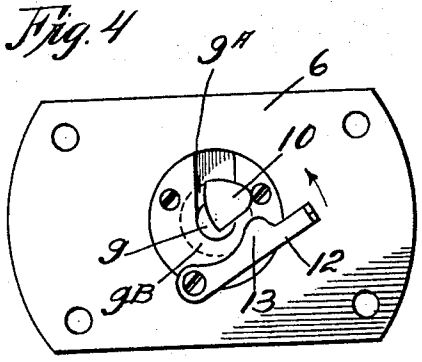


Fig. 4

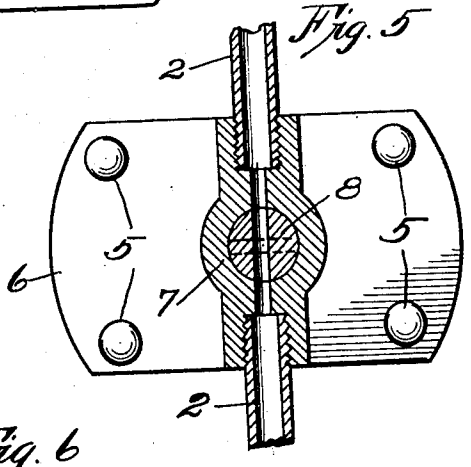


Fig. 5

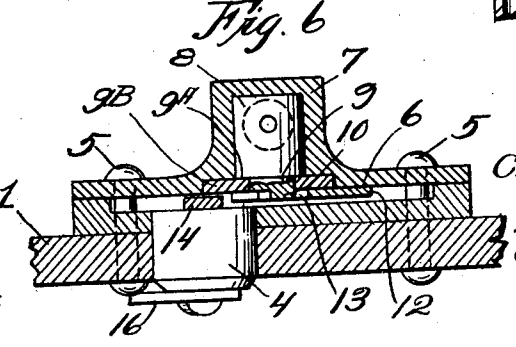


Fig. 6

Witness:

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UNITED STATES PATENT OFFICE.

CHRIS S. NEVILLE, OF KANSAS CITY, MISSOURI, ASSIGNOR OF ONE-HALF TO CLARENCE D. ARMSTRONG, OF LOS ANGELES, CALIFORNIA.

GASOLENE-FLOW-LINE LOCK.

1,394,860. Specification of Letters Patent. Patented Oct. 25, 1921.

Application filed March 10, 1921. Serial No. 451,340.

To all whom it may concern:

Be it known that I, CHRIS S. NEVILLE, a citizen of the United States, and resident of Kansas City, Jackson county, Missouri, have invented a certain new and useful Improvement in Gasolene-Flow-Line Locks, of which the following is a complete specification.

This invention relates to flow line locks for automobiles, and more especially to that class of lock whereby the flow of gasolene may be cut off at any convenient point between the source of supply and the carbureter, and which is equipped with a valve in the flow line which necessitates the use of a key to open to the flow of gasolene, but which may be closed and locked in such position without the use of the key.

My object is to produce a lock of this character, which may be mounted on the instrument board of an automobile without requiring any great alterations therein, and which, when installed on such instrument board, will not detract from the ornate appearance thereof.

A still further object is to produce a lock of this character which is strong, durable, efficient and inexpensive in construction, and in order that it may be fully understood reference is to be had to the accompanying drawing, in which:—

Figure 1 is a broken elevation of a part of the instrument board of a motor car, showing the position of the locking mechanism in dotted lines.

Fig. 2 is a section on the line II—II of Fig. 1.

Fig. 3 is a section on the line III—III of Fig. 2.

Fig. 4 is a plan view of the cover and valve carrying member of the lock mechanism.

Fig. 5 is a section on the line V—V of Fig. 2, and illustrates in full lines the valve in open position and in dotted lines in closed position.

Fig. 6 is a section on the line VI—VI of Fig. 1.

In the said drawing, where like reference characters identify corresponding parts in all of the figures, 1 is an instrument board of a motor car and 2 the gasolene flow line.

Secured to the instrument board at the outside thereof, that is beneath the hood of the automobile, is a base member 3, equipped with a tubular lock 4 which projects through a perforation in the instrument board and has its face substantially flush with the said board. Securely holding the base member to the instrument board are a series of bolts 5, which also engage a cover member 6 of the mechanism and immovably clamp it in place against the base member (see Fig. 2). Said member 6 is formed with an extension portion 7 in which is mounted a plug valve 8, adapted to cut off communication between the opposite ends of the flow line 2 in communication therewith (see Fig. 5).

The stem 9 of the plug valve is reduced in diameter to form a rearwardly facing shoulder 9^A, against which a clamp plate 9^B is adapted to press and hold the valve against accidental turning movement. A cam 10 is formed or secured on the extremity or reduced portion of the stem 9, and is adapted to be acted upon on two of its edges, as hereinafter appears, to open or close the valve.

Pivoted to the cover plate and extending through a slot 11 in the base plate and instrument board is a right angle-shaped arm 12, equipped with a cam portion 13 for contact and operation of cam 10 for closing the valve. By reference to Fig. 4, it will be seen that if the arm 12 is moved in the direction of the arrow, the cam 13 will operate cam 10 and close the valve, the arm then being free to swing back and rest upon the bottom of the slot 11. From the above description it will be apparent that after this operation has been performed, the arm 12 can have no further action on the cam 10 and the valve will, therefore, remain closed until it has been opened by the operation of the lock by a key as hereinafter explained.

For opening the valve, the lock 4 is provided on the inside of the base plate with a cam 14 which is adapted to come into contact with cam 10 on the opposite edge thereof from arm 12 and turn it in the opposite direction, that is turn it from the dotted line position (closed position), shown in Fig. 3, to the full line position (open position) shown in the same figure. The lock may be of any suitable or preferred character, and is illustrated with a key 15 inserted in position, and equipped with a dust guard 16, which may be thrown upward over the face of the lock after the key has been withdrawn.

From the above description, it will be apparent that after the key has been used to

operate the cam 10 and the valve has been opened, the key may be withdrawn and the flow line will be left open to the unobstructed passage of gasolene. When the machine is stopped and it is desired to lock it against unauthorized use, the operator will move arm 14 upward and its cam will operate cam 10 and close the valve to the flow of gasolene. The opening of the valve is now impossible, until it has been opened by the use of the key as above described.

It will be apparent that the small quantity of gasolene standing in the carbureter will be available for driving the car, perhaps, a block, but even this short operation can be defeated if the driver after stopping his car at the desired point, permits his engine to run for a minute or so for the purpose of exhausting the supply of gasolene standing in the carbureter. It will also be understood that while the preferred position for the lock is on the instrument board, it may be positioned at any convenient point and is, therefore, susceptible of use in connection with all types or makes of cars.

From the above description it will be apparent that I have produced a lock of the character described, which possesses all of the features of advantage pointed out as desirable, and while I have described and claimed the preferred embodiment of the same, I reserve the right to make all changes properly falling within the spirit and scope of the appended claims.

I claim:

1. A device of the character described, comprising a casing provided with inlet and outlet ports, a rotary valve in said casing, adapted to control said ports, a stem for said valve, friction means for opposing movement of the valve on its seat, a cam mounted on the stem of said valve, a manually operable lever adapted to contact with said cam for moving the valve in one direction, and key operable mechanism for moving said valve in the opposite direction through contact with said cam.

2. A device of the character described, comprising a casing provided with inlet and outlet ports, a valve in said casing between the ports thereof, a stem projecting from said valve, a cam mounted on said stem, an arm pivoted in said casing and adapted for moving said cam in one direction, and key operated mechanism carried by said casing for moving said cam in the opposite direction.

3. The combination with a suitable support of a casing provided with fuel inlet and discharge ports, a rotary valve controlling communication between said ports and reduced at one end to provide a rearwardly facing shoulder, a clamp plate secured within the casing and fitting against said shoulder and provided with an opening accommodating the reduced portion of said valve, a cam rigid with the reduced end of the valve, a lever pivoted within the casing and adapted for applying pressure on said cam to close the valve and with an arm projecting through the casing and said support for accessibility of operation, a key controlled lock mounted in said support and casing, provided with a cam for engagement with said first-named cam to reverse the operation of the valve.

In witness whereof I hereunto affix my signature.

CHRIS S. NEVILLE.