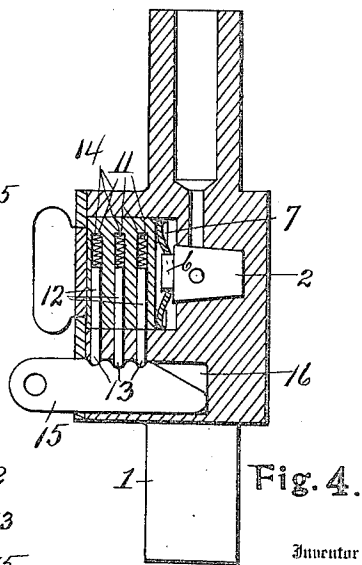
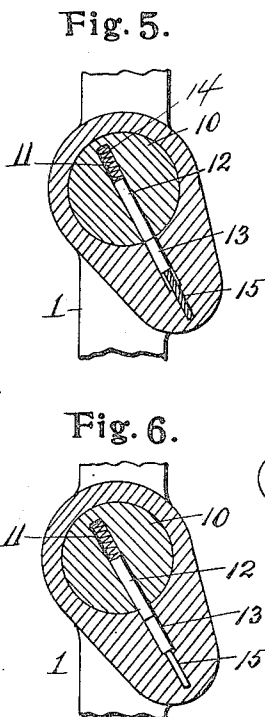
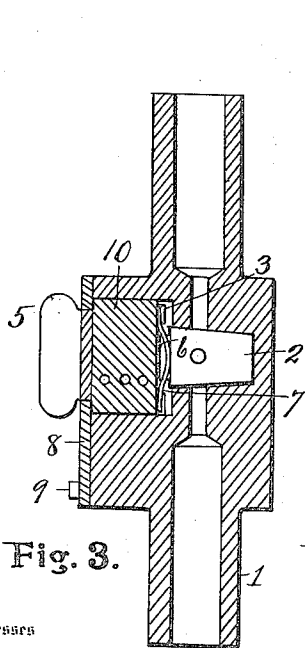
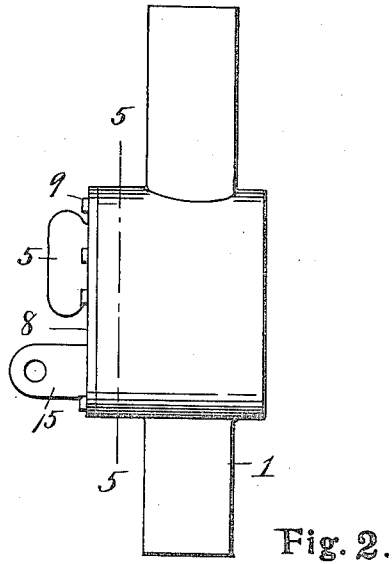
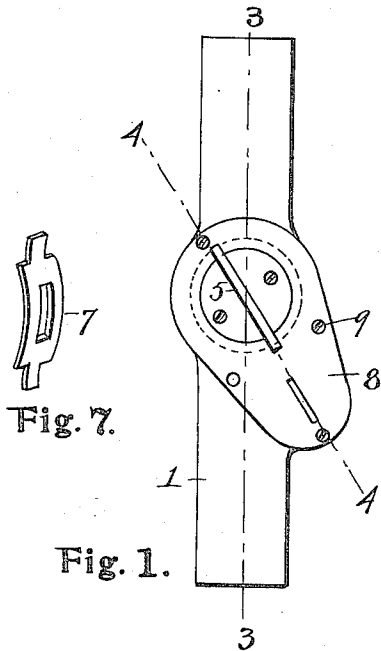


W. W. BRIDGES.
 LOCK FOR FLUID FEED PIPES.
 APPLICATION FILED MAY 20, 1911.

1,024,180.

Patented Apr. 23, 1912.



Witnesses

O. B. Baenziger
 V. C. Spratt.

Inventor

William W. Bridges
 By Parker & Burston
 Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM W. BRIDGES, OF MARINE CITY, MICHIGAN.

LOCK FOR FLUID-FEED PIPES.

1,024,180.

Specification of Letters Patent.

Patented Apr. 23, 1912.

Application filed May 20, 1911. Serial No. 628,434.

To all whom it may concern:

Be it known that I, WILLIAM W. BRIDGES, a citizen of the United States, residing at Marine City, county of St. Clair, State of Michigan, have invented a certain new and useful Improvement in Locks for Fluid-Feed Pipes, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to locks for fluid feed pipes.

It has for its object an improved lock applied directly to stop cock valve through which the fluid is fed to the carbureter of a gasoline engine. The lock is adapted to hold the valve in a closed position and thereby prevent the unauthorized use of the engine.

In the drawings:—Figure 1, is a front elevation. Fig. 2, is a side elevation. Fig. 3, is a vertical section at the line 3—3 of Fig. 1. Fig. 4, is a section along the broken line 3—4 of Fig. 1. Fig. 5, is a cross section at the line 5—5 of Fig. 2. Fig. 6, is a cross section at the same line with the bolts in a different position. Fig. 7, is a perspective showing the spring between the stop cock and the rotary part of the lock.

The entire device comprises a pipe through which there is a passage controlled by a stop cock, the stop cock is actuated by a rotary member that engages in a casing and is axially in alinement with the stop cock. The rotary member has a projecting handle by which it is actuated and it forms a part of a locking device; the remainder of the locking device being in the casing in which the rotary member is contained. A face plate covers the rotary member, which, however, cannot be rotated or moved when in locked condition even though the face plate be removed.

The pipe 1 is preferably located in close connection with the carbureter and forms the conduit to the carbureter and the engine at a convenient place along the pipe. The stop cock 2 is inserted in that part of the pipe which will be considered as the valve casing and lock casing. In axial alinement with the chamber in which the stop cock turns is a somewhat larger chamber 3 in which rotates a member 10 provided with a

winged handle 5 that projects to the outside of the casing. The rotary member 10 is provided with a socket at that end which lies adjacent to the stop cock in which engages a prismatic extension 6 that projects from the end of the stop cock. A spring 7 perforated properly to engage over the projection 6 and provided with extension-keys at its ends to engage in key-recesses in the end of the rotary member bears against the end of the stop cock 2 and bears against the inner end of the rotary member 4. The rotary member 10 is held in place primarily by a face plate 8 that is secured to the casing by screws 9. A neck on the rotary member projects through an opening in the face plate. The face plate has overlay shoulders 10 on the rotary member and holds the rotary member in place. The rotary member is provided with a number of bolt sockets 11 in which engage short bolts 12 that coact with another short bolt member 13 and with springs 14 to lock the rotary member in place. The bolts 12 and 13 are cut to such a length with respect to a special key 15 that when the key is inserted in the key-hole 16 in a way to lift the bolts, the cuts or partings between the members 12 and members 13 are on a line at the surface of the rotary member 4 and at the surface of the chamber 3 in the casing. The device in this respect is quite similar to the well known Yale lock differing from the Yale lock mainly in this, that the key is in a fixed part of the casing and does not rotate, and controls the bolts which at times lock the rotary members against rotation in its chamber. So long as the key is in position in the key-hole 16, the rotary member and the valve which is connected with it may be readily turned to control the passage through the pipe 1. So soon as the key is removed from the key hole, the rotary member can only be turned until the bolts are shot to engage across the passages which are partly located in the casing and partly located in the rotary member. When this occurs, the rotary member can no longer be rotated nor can it be removed from its chamber even though the face plate 8 be removed.

What I claim is:—

1. A lock for a fluid pipe, having in combination, a casing provided with a socket having bolt cavities therein, a removable cock, a rotary member in said socket rotatably connected with said cock and provided with bolt cavities adapted at a certain

part of the turn of said rotary member to register with the bolt cavities in the casing, spring pressed bolts engaging in said bolt cavities, means for forcing the bolts along
 5 their cavities so as to bring the dividing line of each set of bolts at the wall of the socket, yielding means for spacing the cock and rotary member and a removable plate for limiting the separation of said rotary member
 10 and cock, substantially as described.

2. A lock for a fluid pipe, having in combination a casing adapted to be fixed to the pipe and provided with a fluid passage, a socket and bolt cavities off from said socket,
 15 a cock adapted to open and close said passage, a rotary member provided with bolt cavities and adapted to turn said cock, spring pressed bolts engaging in the bolt cavities, a plate adapted to overlie the end
 20 of the rotary member, a spring adapted to space the cock and the rotary member and press the latter against the said overlying plate thereby keeping the bolt cavities in the proper plane for companion cavities to register, and means for forcing the bolts along
 25 their cavities so as to bring the dividing line of a set of bolts at the wall of the socket, substantially as described.

3. A lock for a fluid pipe, having in com-

bination with a casing adapted to be fixed to the pipe and provided with a fluid passage,
 30 a socket and bolt cavities off from said socket, a cock having a prismatic projection and adapted to open and close said fluid passage, a rotary member rotatable in said cavity and provided with bolt cavities, and a key-recess on its end adjacent said cock, spring pressed bolts engaging in the bolt
 35 cavities, a plate adapted to overlie the end of the rotary member opposite the end having the recess, a leaf spring provided with a prismatic aperture through which the prismatic projection of the cock engages, and an extension-key engaging in the key-recess of the rotary member, the said spring
 40 being adapted to press the rotary member against the overlying plate keeping the bolt cavities in the proper planes for companion cavities to register, and means for forcing the bolts along their cavities so as to bring
 45 the dividing line of a set of bolts at the wall of the socket, substantially as described.
 50

In testimony whereof, I sign this specification in the presence of two witnesses.

WILLIAM W. BRIDGES.

Witnesses:

MAUD BURR,
 J. L. CARMAN.