W. H. JACKSON.

GASOLENE VALVE LOCK.

APPLICATION FILED JAN. 12, 1920.

1,366,804.

Patented Jan. 25, 1921.

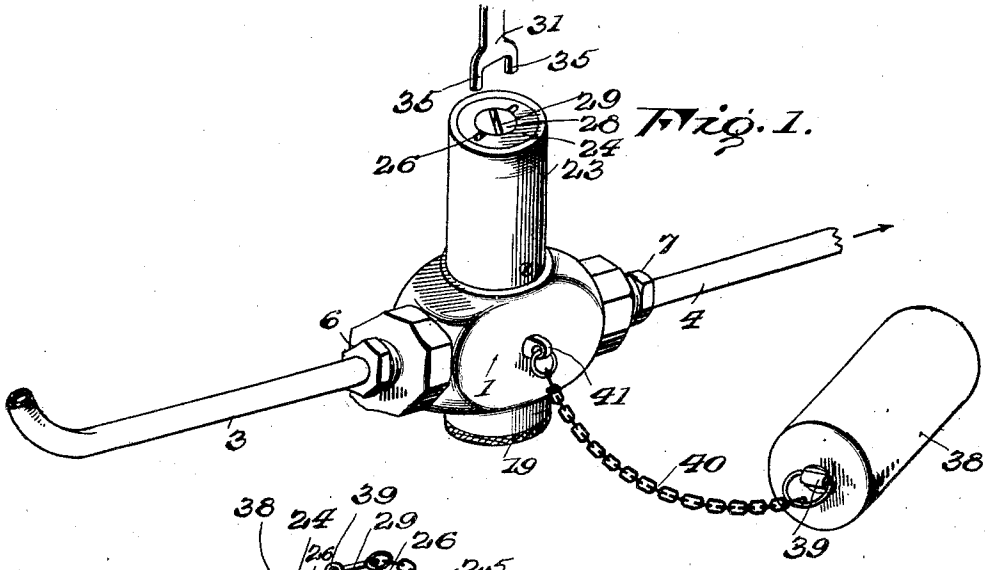


Fig. 1.

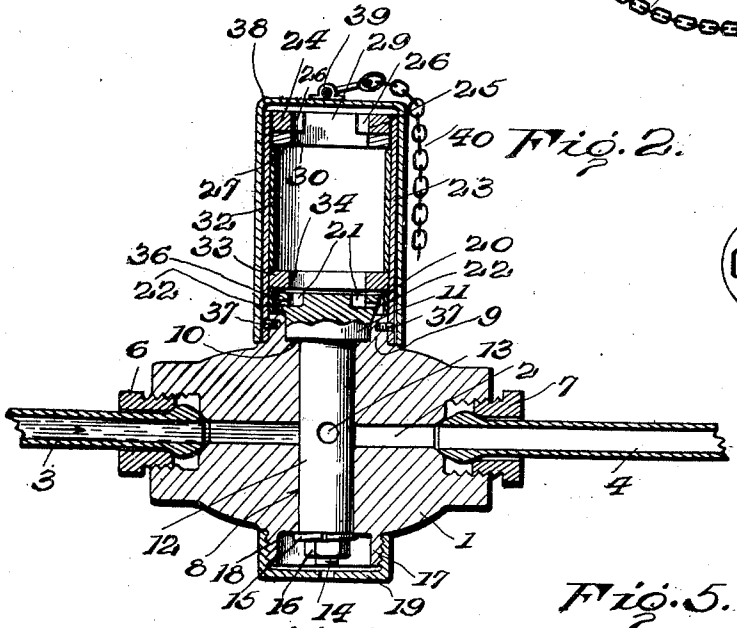


Fig. 2.

Fig. 3.



Fig. 4.



Fig. 5.

Fig. 7.



Fig. 6.

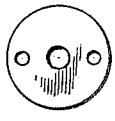
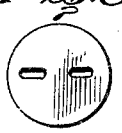


Fig. 9.



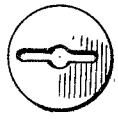
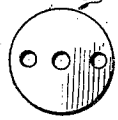


Fig. 8.



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UNITED STATES PATENT OFFICE.

WILLIAM H. JACKSON, OF JACKSON, MICHIGAN.

GASOLENE-VALVE LOCK.

1,366,804. Specification of Letters Patent. Patented Jan. 25, 1921.

Application filed January 12, 1920. Serial No. 350,753.

To all whom it may concern:

Be it known that I, WILLIAM H. JACKSON, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Gasolene-Valve Locks, of which the following is a specification.

The object of this invention is to provide a novel construction of key-controlled lock for turning plug valves whereby the valve can be opened only by a key designed for the particular lock which is connected therewith.

In the accompanying drawings showing a preferred form of the invention—

Figure 1 is a view, in perspective, of the valve as embodied in the fuel supply line.

Fig. 2 is a vertical longitudinal section.

Figs. 3, 4, 6, 7, 8 and 9 represent different forms of key-receiving disks or heads for the turning plug, and

Fig. 5 is a plan view of the key-receiving facing disk embodied in the device shown in Fig. 1, and adapted to receive the key therein shown.

In detail, the invention comprises a valve body 1 having a longitudinal fuel passage 2 therethrough to each end of which is connected the respective terminals of a fuel supply line as indicated at 3 and 4, said terminals being secured in place by suitable unions 6 and 7 respectively. The valve body 1 is provided with a vertically extending shut-off element hole 8 which is at right angles to the axis of the fuel supply line. Integral with the valve body 1 is a vertical flange 9 which is recessed, as shown at 10, to accommodate the enlarged upper end 11 of a shut-off element 12 which is in the form of a turning plug having a passage 13 which will register with the passage 2 in the valve body when the turning plug is moved to the proper position. The turning plug 12 has, at its lower end, a threaded tip 14 which receives a washer 15 and a nut 16 which hold the said turning plug in place within the valve body 1. A dependent vertical flange 17 is provided on the bottom of the valve body 1 surrounding the threaded end 14 and is, itself, threaded as shown at 18 to receive a cap nut 19.

The upper end of the turning plug 12 is, as previously stated, seated in the recess 10 within the vertical flange 9 and is tapered as shown at 20. On the top face of the turning plug 12 are holes 21 which receive a key to be later described. These holes have outlets 22 which permit the escape of any foreign matter gathering in the same.

A tubular member 23 is provided at its upper end with a facing disk 24 having a hole 25 with cut-outs 26 at diametrically opposite points. Beneath this is positioned a key-receiving disk 27 having a boss 28 provided with a slot 29, which slot is elongated in the major portion of the disk as shown at 30 to permit the insertion of a key 31 when said slot 29 registers with the diametrically opposite slots 26. This disk 27 is supported on a sleeve 32 positioned concentrically within the tubular member 23 and against the lower end of which rests a second key-receiving disk 33 having a suitable aperture 34 which, when registering with the slot in the upper disk 27 will permit the insertion of the key so that the tongues 35 thereof may be engaged with the holes 21 in the top of the turning plug to permit the turning plug to be moved to the open or closed position by turning the key. The lower disk is held in a suitable spaced position above the top of the turning plug by a ring 36 which seats on the top of the flange 9 and the tubular member 23 is held in assembled relation with the valve body 1 by screws, pins or other means 37 extending through the tubular member 23 and into the said flange 9 so as to prevent removal of the lock from the valve. A cover or cap member 38 is removably fitted over the entire locking structure and carries an eye 39 connecting with a chain 40 which secures the dust cover or cap to a lug 41 on the valve body 1. In Figs. 1 and 2 the type of disk shown for receiving the key is merely one example of what may be used but it is obvious that any desired number of disks or hole locations in the disks may be resorted to and for this purpose there is illustrated in Figs. 3 to 9 inclusive various forms of disks requiring different keys. In all of the figures it is to be especially noted that the disks are independently rotatable so that in inserting the key it is necessary to "feel" with the key in order to properly line up the slots or apertures in the disks for the accurate insertion of the key. This is especially advantageous in view of the fact that persons attempting to pick the lock will be prevented by the interme-

diate disks as no proper impression can be made for a key nor can wires or other forms of implements be made to open the valve.

The facing disk 24 may be threaded into the outer end of the support 23 or may be formed integral with the same. If the disk be formed integral with the support, the disks 33 and 27 with the spacing sleeve and ring will be inserted into the tubular support through the open end of the same before the support is placed in position upon the valve body and all these assembled parts then placed upon the valve body and secured in the manner described. If the facing disk be provided with screw threads to engage corresponding threads in the outer end of the tubular support, the spacing ring and sleeve and the key-receiving disks 27 and 33 will be inserted through the outer end of the tubular support after the same has been secured in position upon the valve body and after all the parts have been placed within the tubular support the facing disk will be screwed into the open end of the same in an obvious manner.

I claim:

1. The combination with a body, and a turning element mounted therein, of key-receiving means on the end of said turning element and turnable therewith, a tubular support fixed on the body and axially alined with and inclosing the turning element, a key-receiving disk mounted concentrically in said support adjacent the turning element for free turning movement but held against endwise movement, a facing disk fixed in the outer end of the tubular support, and a key-receiving disk mounted in said support in juxtaposition to the facing disk for free turning movement but held against endwise movement, the key-receiving disks being in spaced relation longitudinally of the tubular support and the facing disk and the key-receiving disks being constructed to permit engagement of a key in the turning element in one position and prevent such engagement in all other positions.

2. The combination with a body, and a turning element mounted therein, of key-receiving means on the end of said turning element and turnable therewith, a tubular support on the body axially alined with the turning element, a spacing ring disposed within said support and bearing on the body around the key-receiving means on the end of the turning element, a key-receiving disk fitted within the tubular support for turning movement and held against movement toward the turning element by said ring, a spacing sleeve fitted within the tubular support against the outer face of said key-receiving disk and holding said disk against outward movement, a facing disk in the end of the tubular support, and a key-receiving disk fitted in the tubular support for turning movement and held against endwise movement by the spacing sleeve and the facing disk, the facing disk and said key-receiving disk being constructed to permit the insertion of a key in one position and prevent the insertion of a key in all other positions.

In testimony whereof I affix my signature.

WILLIAM H. JACKSON. [L. S.]