

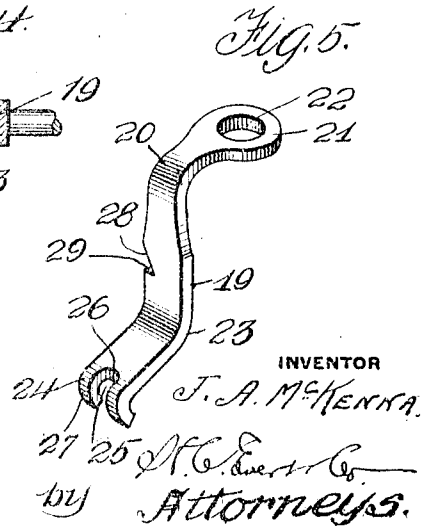
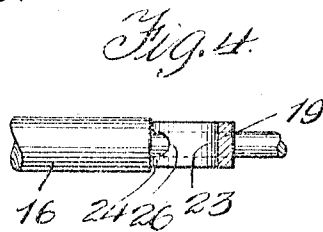
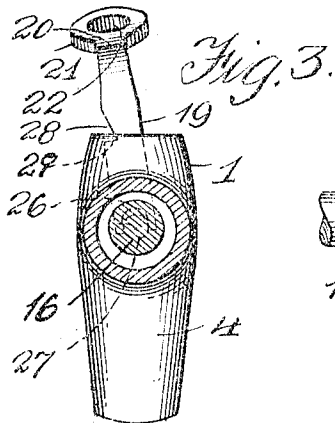
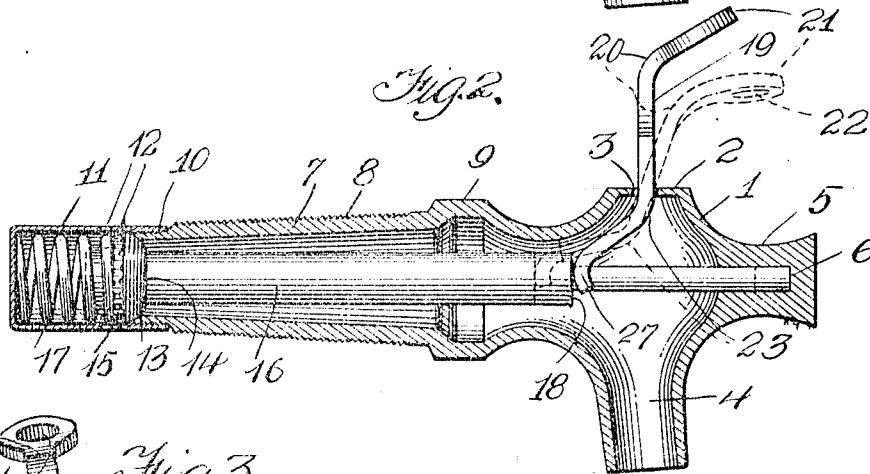
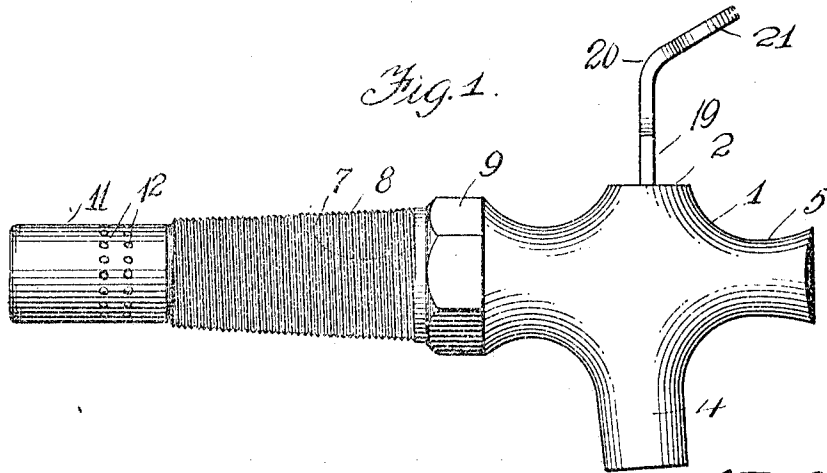
J. A. McKENNA.

FAUCET.

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1,020,434.

Patented Mar. 19, 1912.



WITNESSES

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FAUCET.

1,020,434.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN A. McKENNA, a citizen of the United States of America, residing at Crafton, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Faucets, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to faucets, and more particularly to that type of faucet or spigot used in connection with barrels and kegs, the faucet normally remaining closed and having a detachable actuating lever or key that can be used for opening the faucet whereby the contents of a barrel or keg can be withdrawn.

The object of my invention is to provide an actuating lever or key that will be positive in its action, thus preventing the valve stem of the faucet or the key from being injured or unduly worn, to an extent which will render the key useless for the purposes for which it is intended. In connection with this type of faucet, it has been the present practice to use a key having a blunt or squared end for engaging a shoulder of the valve stem in order that when the key is rocked or moved in the faucet body, the valve stem will be shifted to open the faucet. It is the movement of the key against the shoulder of the valve stem that eventually wears the contacting surfaces of the key and shoulder that causes the end of the key to slip upon the shoulder and fail to positively move the valve stem. The movement of the key also wears the faucet body to such an extent that the key often slips off of the shoulder and wedges between the valve stem and the faucet body, and as the stem is spring-pressed, it is often difficult to remove the key. Besides it being necessary to renew the key, it is often necessary to renew the valve stem, and it is this defect in connection with the present type of faucet that my invention aims to obviate by providing a key that will positively engage and move the valve stem without unduly subjecting the same to wear and tear by the action of the key.

My invention will be more fully understood when reference is had to the drawing forming a part of this specification, wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the same is susceptible to varia-

tions without departing from the scope of the appended claim.

In the drawings: Figure 1 is a side elevation of a faucet constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view of the same showing the key in adjusted position in dotted lines. Fig. 3 is a cross sectional view of the faucet showing the key in a locked position. Fig. 4 is a horizontal sectional view of the key showing the same in engagement with the valve stem, and Fig. 5 is a perspective view of the key.

In the accompanying drawings the reference numeral 1 denotes a valve body having a flat top 2 provided with a longitudinal opening or slot 3. The bottom of the body terminates in a spout or outlet opening 4 and the front side of the body is provided with an extension 5 having a guide socket 6 formed therein which is in communication with the interior of the valve body. The opposite end of the valve terminates in a tapering body portion or plug 7, said plug being exteriorly screw threaded, as at 8, whereby it can be screwed into a hole or opening provided therefor in the barrel. The large end of the plug is provided with flat faces 9 to form a hexagon-shaped nut to accommodate a wrench or other instrument employed for screwing the plug in a barrel. The small end of the plug is reduced and exteriorly screw threaded, as at 10, to receive a cap 11, said cap adjacent to the inner end thereof being provided with two rows of circumferentially arranged apertures 12 adapted to admit the contents of the barrel to the cap 11. The small end of the plug 7 is also provided with a valve seat 13 for a valve 14 mounted against the collar 15, carried by a valve stem 16 longitudinally arranged within the plug 7. The valve 14 normally engages the seat 13 and is held in place by a coiled compression spring 17 arranged between the outer end of the cap 11 and the collar 15.

The valve stem 16 extends into the valve body 1 and has the end thereof reduced to engage in the guide socket 6, also to provide an annular shoulder 18. To move the valve stem 16 a key or lever is employed, comprising a compound curved metallic bar 19, said bar being reduced and curved, as at 20, to form a handle having an enlarged end 21 provided with an aperture 22. The opposite end of the bar 19 is curved, as at 23,

and the end thereof curved, as at 24, and bifurcated, as at 25, the closed end of the bifurcation being rounded, as at 26. This bifurcated end of the key forms a claw, and the rounded closed end 26 of the bifurcation 25 serves in connection with the rounded surfaces 27 of the curved end 24 of the key in obtaining the desired action on the part of the key, as will presently appear. One of the edges of the key between the curves 20 and 23 is provided with a notch 28 providing a shoulder 29, for a purpose that will presently appear.

The key is adapted to be inserted in the opening or slot 3 whereby the curved bifurcated end thereof will engage over the reduced end of the valve stem 16 with the rounded surfaces 27 of the key engaging the shoulder 18. The key is of a less width than the opening or slot 3 and as said key is pushed downwardly in the slot the rear side of the key rides against the rear wall of the slot 3 and after the notch 28 has passed into the slot 3, the key can be shifted to one side, whereby the shoulder 29 of the notch 28 will engage under one of the end walls of the slot 3 and hold the key in its lowered adjusted position.

The action of the lower end of the key engaging the valve stem 16 is as follows:—The valve stem is moved axially by the depressing movement of the key, the direction of movement of the stem being toward the inner end of the plug 7, placing the spring 17 under tension and opening the valve 14, whereby the contents of the barrel can pass through the plug into the valve body 1. As the valve stem is given this movement the rounded surfaces 27 ride against the shoulder 18 while the rounded closed end of the bifurcation 26 provides clearance for that portion of the reduced end of the valve stem adjacent the shoulder 18.

As will be seen, the inner end of the key is bifurcated so as to straddle the valve stem, and the forward face of the bifurcated ends is of a curvature which will cause such face to contact with the shoulder 18 at approximately the same point on said shoulder

regardless of the movement of the valve. As this point is substantially on diametrically opposite sides of the stem, it will be readily understood that the pressure will cause the valve to be moved without any binding of parts and without any liability of the front of the key slipping off of the shoulder.

A key constructed in accordance with my invention is easily operated inasmuch that the lower end of the key has a rocking movement upon the shoulder 18 and since the wear and tear upon the valve stem and its actuating key or lever are reduced to a minimum, it is obvious that the longevity of the faucet is increased.

What I claim, is:

The combination with a faucet having a valve seat and a reciprocating valve and valve stem spring-supported to normally retain the valve on its seat, the valve body having an opening, said stem having a shoulder inwardly of and facing said opening, of a key insertible through said opening and adapted to engage said shoulder, the inner end of said key being bifurcated, the legs provided by said bifurcation being adapted to straddle the stem and being curved in the direction of length of the key on an arc which will place the point of contact of key and shoulder on approximately diametrically opposite sides of the stem and intermediate the ends of the curved face of the legs when the valve is closed, said curved face of the legs riding over said shoulder and applying valve-opening pressure to said shoulder during the inward movement of the key, the point of pressure application remaining substantially the same during such valve movement, whereby lateral pressure on the valve stem is avoided.

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

JOHN A. MCKENNA.

Witnesses:

H. C. EYERT,
MAX H. SROLOVITZ.