C. L AND F. W. HOLDERLE.

FAUCET FOR DISPENSING HIGH PRESSURE LIQUIDS.

APPLICATION FILED SEPT. 9, 1919.

1,340,769. Patented May 18, 1920.

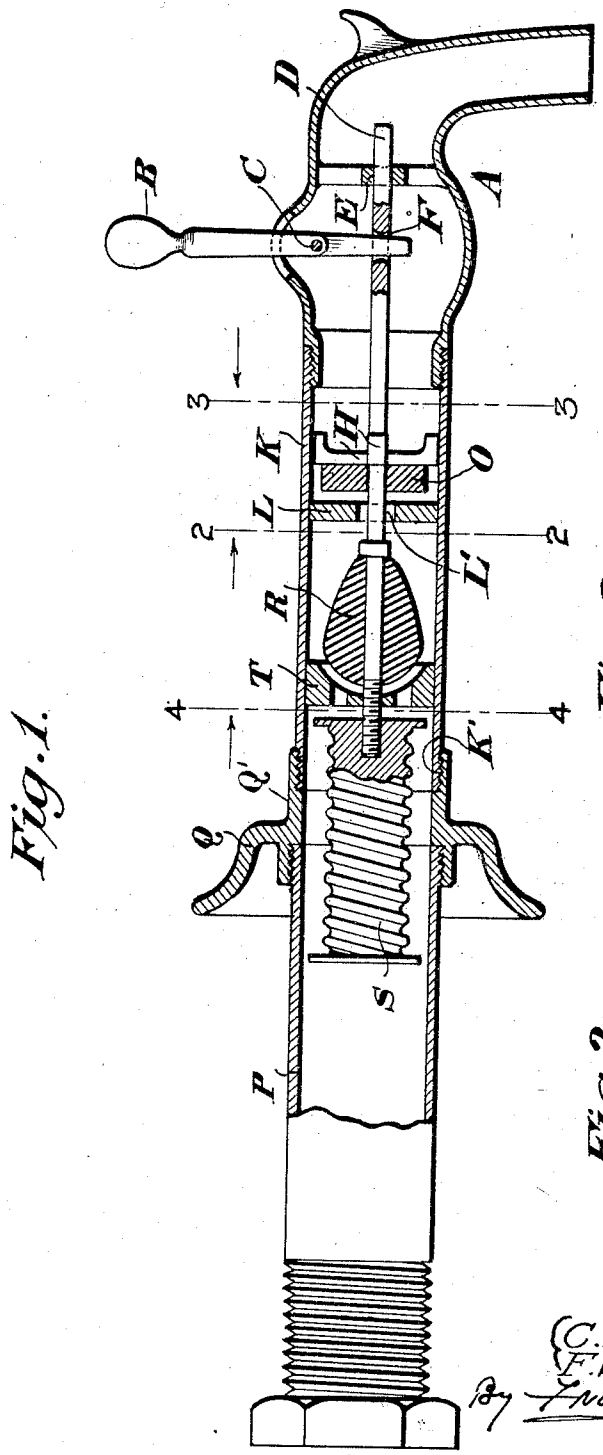


Fig. 1.

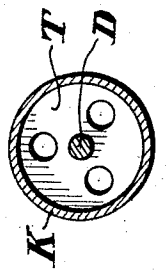


Fig. 4.

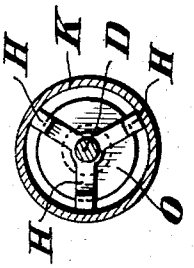


Fig. 3.

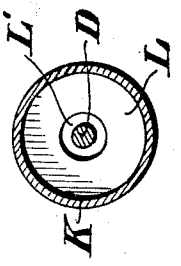


Fig. 2.

INVENTORS
C. L. Holderle
F. W. Holderle
By Francis N. Hough
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CARL L. HOLDERLE AND FREDERICK W. HOLDERLE, OF ROCHESTER, NEW YORK.

FAUCET FOR DISPENSING HIGH-PRESSURE LIQUIDS.

1,340,769. Specification of Letters Patent. Patented May 18, 1920.

Application filed September 9, 1919. Serial No. 322,743.

To all whom it may concern:

Be it known that we, CARL L. HOLDERLE and FREDERICK W. HOLDERLE, citizens of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Faucets for Dispensing High-Pressure Liquids; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in faucets, designed especially for use in dispensing carbonated soft drinks, the object of the invention being to reduce high pressure and affording means for effecting a steady flow of liquid.

Heretofore faucets which have been used for dispensing highly carbonated waters have been objectionable for the reason that they are likely to leak incident to the high pressure of the liquid and which are inconveniently operated owing to the force of the liquid being drawn and tending to knock the glass out of the person's hand holding same while being filled.

The present invention obviates this objection and affords means whereby a sudden flow of liquid may be checked and causing a creamy flow of the carbonated water.

We illustrate our invention in the accompanying drawings which, with the letters of reference marked thereon, form a part of this application, and in which:

Figure 1 is a central sectional view through our improved faucet.

Fig. 2 is a sectional view on line 2—2 of Fig. 1.

Fig. 3 is a sectional view on line 3—3 of Fig. 1, and

Fig. 4 is a sectional view on line 4—4 of Fig. 1.

Reference now being had to the details of the drawings by letter:

A designates a faucet and B a handle pivotally mounted upon the pin C in the wall of the faucet, and D is a stem guided in its longitudinal movements by passing through a hole E formed in an integral portion of the casting. Said stem is provided with a slot F through which the inner contracted end of the handle passes and affording means whereby as the handle is rocked upon its pivot, the stem may be moved longitudinally in one direction or the other. Said stem has radially disposed lugs H forming guides to the stem. Said lugs are movable within the shell K which has a threaded end K′ engaging threads in the coupling Q′ having an integral flange Q. Said coupling Q′ is interiorly threaded for the reception of a pipe P. The shell, as shown in the drawings, has a partition L, having a central valve opening L′ therein. The stem is movable through said opening and mounted upon the stem intermediate the radial lugs H and said partition L is a high pressure check washer O, which is of sufficient size to close the valve opening L′ when moved against the latter by the lugs H.

A rubber washer or fuller ball R is mounted upon said stem intermediate the partition L and a yoke guide washer T, detail of which is shown in Fig. 4 of the drawings, and which guide washer has a central threaded aperture adapted to engage the threaded portions of the stem upon which they are adjustable.

A cylindrical spiral agitator S has a threaded socket in one end adapted to receive the threaded end of the stem D, said agitator extending through a portion of the pipe P, the union Q′ and into the adjacent end of the shell K.

In operation, a quick forward pull upon the handle B will cause the stem D to move backward, and the lugs H upon the stem coming in contact with the high pressure check washer O will cause the same to move against the partition or seat L and which action will nearly shut off the passage of liquid through the valve opening L′. By gradually releasing the handle the stem will be moved forward by the force of the liquid, the high pressure check washer moving away from the valve seat and which will allow whatever volume of liquid to pass through the faucet as may be desired regulated by the control of the handle.

It will be understood that the rubber fuller ball R is removable, being easily replaced when worn and by pushing upon the handle the stem carrying the ball may be moved forward causing the opening in the valve to be closed thereby.

In the present invention the high pressure check washer will tend to prevent a sudden

rush of liquid, which will result in a steady creamy flow of the liquid, and if a somewhat faster volume is desired, it may be obtained by releasing the handle and the desired quantity will be dispensed without any splash.

What we claim to be new is:

1. An apparatus for dispensing high pressure carbonated liquids comprising a faucet with a longitudinally movable stem therein, guides upon the latter, a handle pivotally mounted for actuating the stem, a shell connected to the faucet and provided with a valve seat through which the stem passes, a high pressure check washer loosely mounted upon the stem intermediate said guides and seat, a ball valve mounted upon the stem, and a high pressure agitator connected to said stem, and a yoke guide intermediate said valve and agitator.

2. An apparatus for dispensing high pressure carbonated liquids comprising a faucet with a longitudinally movable stem therein, guides upon the latter, a handle pivotally mounted for actuating the stem, a shell connected to the faucet and provided with a valve seat through which the stem passes, a high pressure check washer loosely mounted upon the stem intermediate said guides and seat, a ball valve mounted upon the stem, a cylindrical spiral agitator connected to the inner end of said stem, and a yoke guide mounted intermediate said ball valve and agitator.

3. An apparatus for dispensing high pressure carbonated liquids comprising a faucet with a longitudinally movable stem therein, guides upon the latter, a handle pivotally mounted for actuating the stem, a shell connected to the faucet and provided with a valve seat through which the stem passes, a high pressure check washer loosely mounted upon the stem intermediate said guides and seat, a ball valve mounted upon the stem, the inner end of said stem being threaded, a yoke guide having a central aperture fitted over the threaded part of the stem, and a cylindrical spiral agitator having threaded connection with the end of the stem.

4. An apparatus for dispensing high pressure carbonated liquids comprising a faucet with a longitudinally movable slotted stem, a handle pivoted upon the faucet and having an end engaging the slot in the stem, a bearing to the forward end of said stem, said stem having integral radial guides, a shell fitted to said faucet and having a valve seat with a central opening, a high pressure check washer loosely mounted upon the stem intermediate said guides and seat, a removable rubber ball valve mounted upon the stem, a yoke guide for said valve and mounted upon said stem, a spiral cylindrical agitator fitted to the inner threaded end of the stem, a faucet flange fitted to said shell, and a pipe secured to said flange.

In testimony whereof we hereunto affix our signatures.

CARL L. HOLDERLE.
FREDERICK W. HOLDERLE.