H. F. SCHROEDER.

QUICK CLOSING FAUCET.

APPLICATION FILED OCT. 5, 1908.

926,024. Patented June 22, 1909.

Fig. 1.

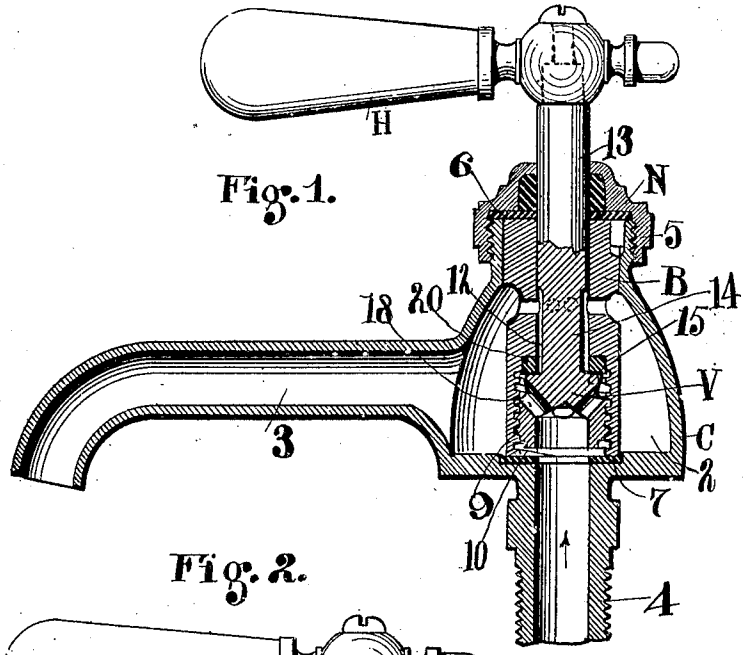
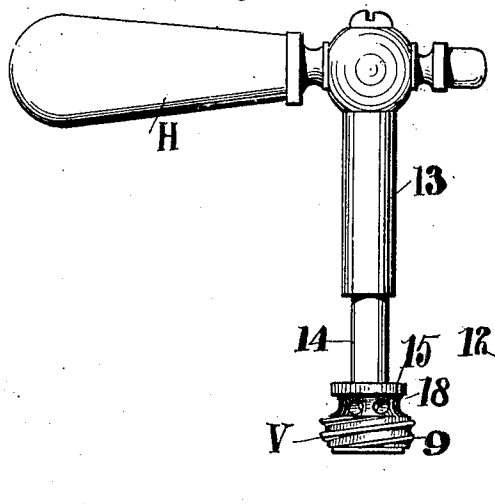


Fig. 2.



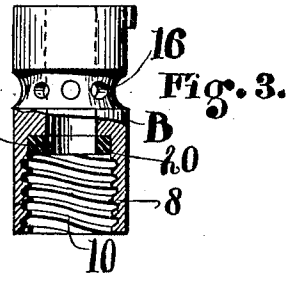
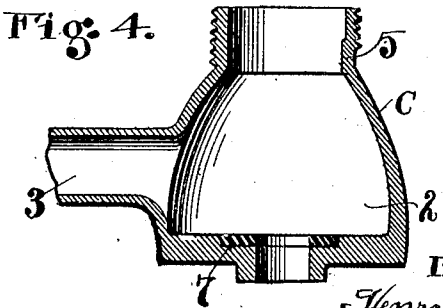


Fig. 3.

Fig. 4.



ATTEST

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UNITED STATES PATENT OFFICE.

HENRY F. SCHROEDER, OF CLEVELAND, OHIO, ASSIGNOR TO THE GLOBE BRASS MANUFACTURING COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

QUICK-CLOSING FAUCET.

No. 926,024. Specification of Letters Patent. Patented June 22, 1909.

Application filed October 5, 1908. Serial No. 456,134.

To all whom it may concern:

Be it known that I, HENRY F. SCHROEDER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Quick-Closing Faucets, and do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to quick closing faucets, and the invention consists in a faucet constructed and adapted to operate substantially as herein shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical central sectional elevation of my new and improved faucet showing the valve closed. Figs. 2, 3 and 4 are detail views. Thus. Fig. 2 is an elevation of the valve and valve stem and handle. Fig. 3 is an elevation partially in section of the barrel within the faucet casing, and Fig. 4 is a sectional elevation of the casing or body of the faucet, with stem and spout broken away.

The faucet thus shown comprises a body or casing C, an internal barrel B, and a valve V with stem and handle to operate the same. Essentially, therefore, the faucet consists of three main parts, plus a nut N adapted to confine the parts in operating relations.

In detail, the body or casing C is constructed with a relatively enlarged chamber or space 2 about barrel B of sufficient size to afford the necessary clearance for the liquid as it enters through said barrel and flows thence via said chamber out through the discharge spout 3, and the said body C has a threaded tubular stem 4, at its bottom by which it is adapted to be connected up with the service pipe, not shown. At its top the said casing has a cylindrical neck 5, which is externally threaded and adapted to be engaged by the confining nut N.

The barrel B is a separate and peculiarly constructed member removably seated in casing or body C and sealed fluid tight at each end by suitable packing 6 and 7, and nut N bears directly or through barrel B with more or less pressure upon said packings to make a close seal. Said barrel has a differential bore through its center, the larger diameter of which has a quick internal thread 8 adapted to receive a corresponding thread 9 on the valve, and the depth of said larger diameter 10 is relatively enough greater than the depth of valve V to enable the valve to be rotated on its thread to open and closing positions. The smaller diameter 12 receives the stem 13 of the valve, and said stem has a reduced or equivalently constructed portion 14 next above the valve portion proper 15, to permit flow of water about the same from beneath up through the barrel B and out into chamber 2 through lateral orifices or holes 16 in the otherwise reduced or annularly channeled portion of said barrel.

Valve or valve member V has an internal passage with radiating and inclined outlets or orifices 18 about the same through which the fluid flows into the barrel and thence out past valve seating portion 15 when the valve is open. In this connection it is to be observed that the valve seats upward and not downward, as is most common, so that it has the benefit of the fluid pressure both in helping to seat it and to hold it on its seat, which has a suitable packing 20, in this instance. The handle H serves to control the valve by rotation.

What I claim is:—

1. A quick closing faucet comprising a suitable body with a fluid outlet at its side, a barrel packed fluid tight at its ends in said body and provided with an internal valve seat and having outlet passages from said seat to discharge into said body and threaded internally about its inside beneath said seat, in combination with a valve having a quick thread engaged in said threaded portion of said barrel and having a fluid passage centrally therein terminating at its side below the valve seat.

2. In quick-closing faucets, a body having an inside fluid space and a side spout, a barrel seated at both ends in said space and provided with openings for the flow of fluid through the same and a valve seat below said openings, in combination with a quick closing valve having a shouldered seating portion adapted to said seat and having a fluid passage through the inside thereof opening to the outside of the valve next above the thread thereon.

3. A faucet comprising a suitable body having an inlet at its bottom and an outlet at its side, a barrel having its ends seated in said body and provided with bores of differ-

ent diameters, the lower and larger bore having a quick thread and having outlets at its side in the smaller diameter, in combination with a valve adapted to engage said seat and threaded to run in said thread in said barrel, a stem for said valve having channels adapted to communicate with said outlets in said barrel and said valve having passages through the same from within.

4. A quick closing faucet comprising a suitable body with an inlet opening at its bottom and an outlet at its side, a barrel of larger diameter than said opening seated about the same and open internally and at its side to discharge into said body, said barrel having an internal shouldered valve seat and a quick screw thread running toward said seat in the direction of the flow of the liquid through said barrel, in combination with a valve having a thread operatively engaged with said thread in the barrel and substantially flat upon its top to engage said valve seat and adapted to run down to said seat for the barrel about the inlet to said body.

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

HENRY F. SCHROEDER.

Witnesses:
R. B. MOSER,
E. M. FISHER.