

A. GUILD & B. S. LEWIS.
 STEAM AND WATER-COCKS.

No. 192,622.

Patented July 3, 1877.

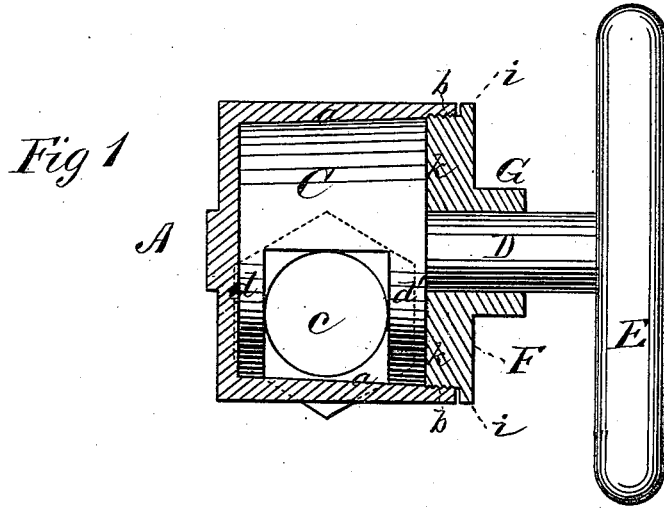
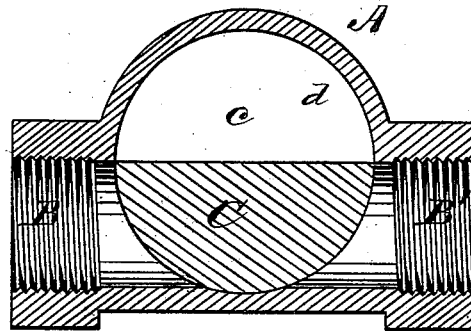


Fig 2



WITNESSES

Mo. S. Utley.
Francis J. Massi

INVENTORS

Augustus Guild,
Bramard S. Lewis,
 by *Edw. Anderson*
 ATTORNEY

UNITED STATES PATENT OFFICE.

AUGUSTUS GUILD AND BRAINARD S. LEWIS, OF MIDDLETOWN, CONN.

IMPROVEMENT IN STEAM AND WATER COCKS.

Specification forming part of Letters Patent No. 192,622, dated July 3, 1877; application filed May 5, 1877.

To all whom it may concern:

Be it known that we, AUGUSTUS GUILD and BRAINARD S. LEWIS, of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and valuable Improvement in Steam and Water Cocks; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal central section of my improved cock; and Fig. 2 is a cross-sectional view thereof.

This invention has relation to improvements in straightway steam and waste cocks; and it consists in combining with a barrel or casing, having tapering interior walls and opposite inlet and outlet apertures in line with each other and eccentric to the axis of said barrel, of a tapering plug, conforming to the taper of the barrel, having a water-way extending through it adapted to register with the said apertures, and provided with an axial stem carrying a hand-wheel or handle that extends through a rabbeted screw-cap applied to the open end of the barrel—that is, adjustable relative to said barrel—and is provided with a wrench-seat for facilitating said adjustment and taking up the wear, all as hereinafter more fully set forth.

In the annexed drawings, the letter A designates a metallic barrel for a steam or water cock, that is open at one end, and provided upon its open edge with an inside screw-threaded portion, *b*. It also has in its sides, opposite to each other, a screw-threaded inlet and outlet, lettered B B', that are eccentric to the axis of the barrel. The latter has tapering inside walls *a a*, the form of its hollow being a frustum of a cone. C represents a metallic plug having a form to fit snugly in the barrel, and provided with a water-way, *c*, bounded at its upper and lower ends by disks *d d'*, the first of which rests snugly upon the

bottom of the barrel. The plug C has an axial stem, D, of suitable length, upon the end of which an operating handle or wheel, E, is applied. This stem extends through and has its bearings in a metallic cap-plate of the same diameter as the larger end of the barrel. The plate F has upon one of its faces a screw-threaded rabbet, *k*, that engages the threaded part *a* of the barrel, and upon its remaining face a prismatic wrench-seat, G, by means of which the cap is conveniently applied to the barrel. The stem aforesaid extends through the wrench-seat G centrally, and it is thus afforded a more extended and durable bearing. When the cap-plate is forcibly set up its under side will come in forcible contact with the end of the plug before its flange *i*, formed by the rabbet *k*, reaches the edge of the barrel. By this means, as the plug is worn away by long use upon its sides and ends and a leak occurs, the lost motion may be taken up by simply applying a wrench to the wrench-seat and giving the cap-plate a slight turn. By this means I am able to dispense with all and every packing appliances.

My improved cock is applicable to steam and water pipes, to steam-coils for heating purposes, and to any and all devices, wherein such appliances are customary or useful.

What we claim as new, and desire to secure by Letters Patent, is—

In a water or steam cock, the combination with the barrel A, having a conical hollow, and inlet and outlet B B', upon one side of the center of the case, of the tapering plug C, having end disks *d d'*, forming a water-way, *c*, the rabbeted screw-cap F, having the wrench-seat G, and a stem extending through said cap and seat, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

AUGUSTUS GUILD.
BRAINARD S. LEWIS.

Witnesses:

D. C. TYLER,
ELDON B. BIRDSEY.