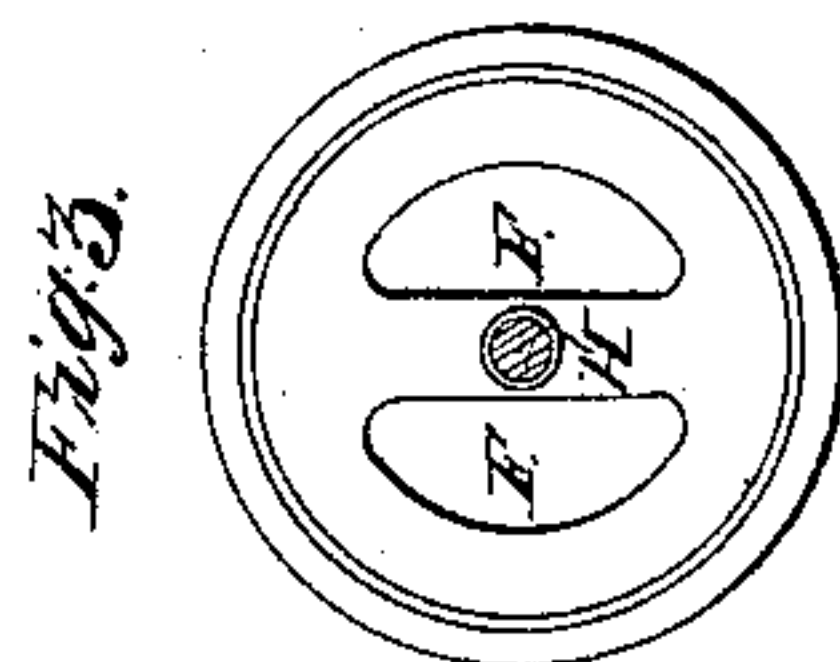
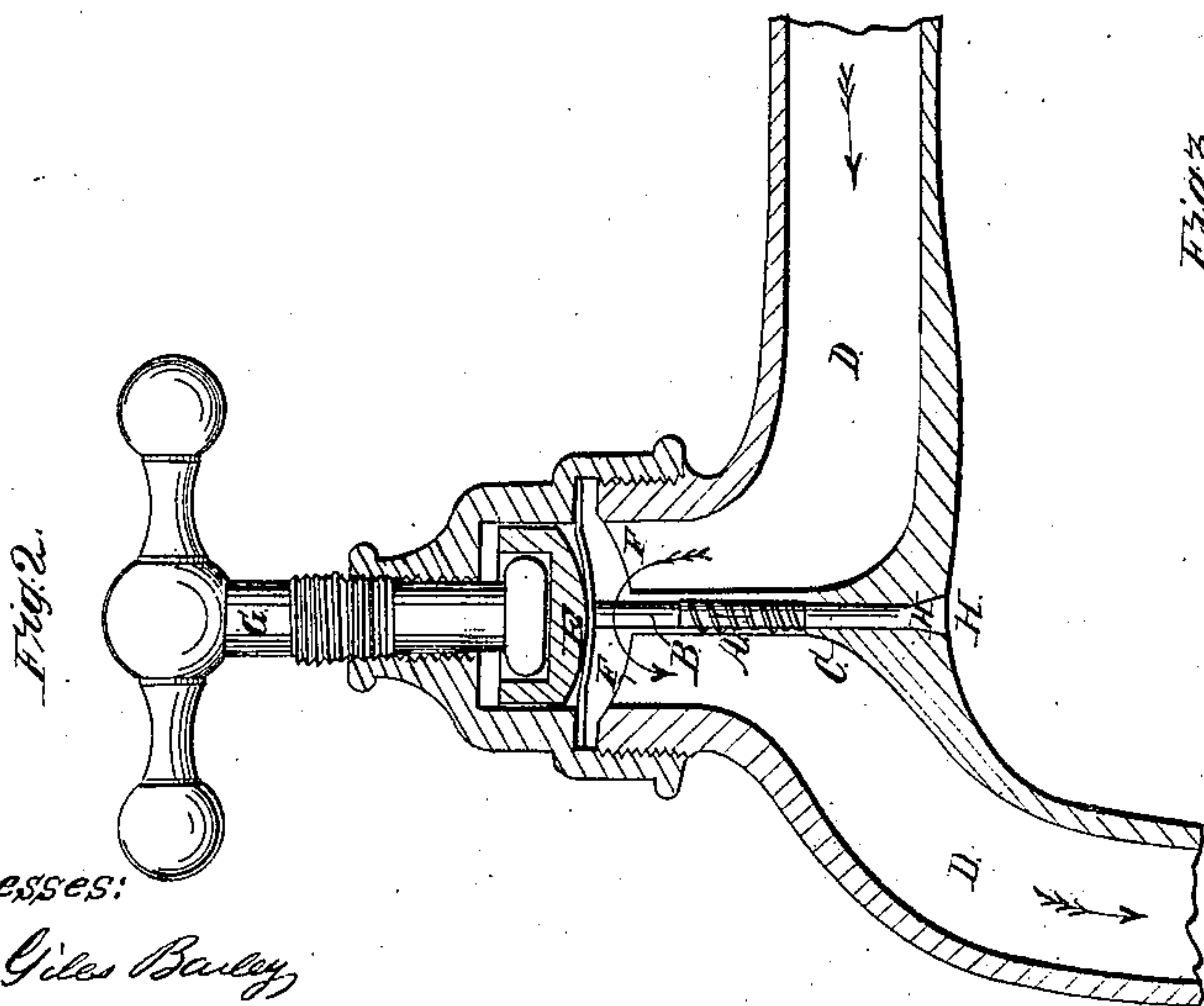
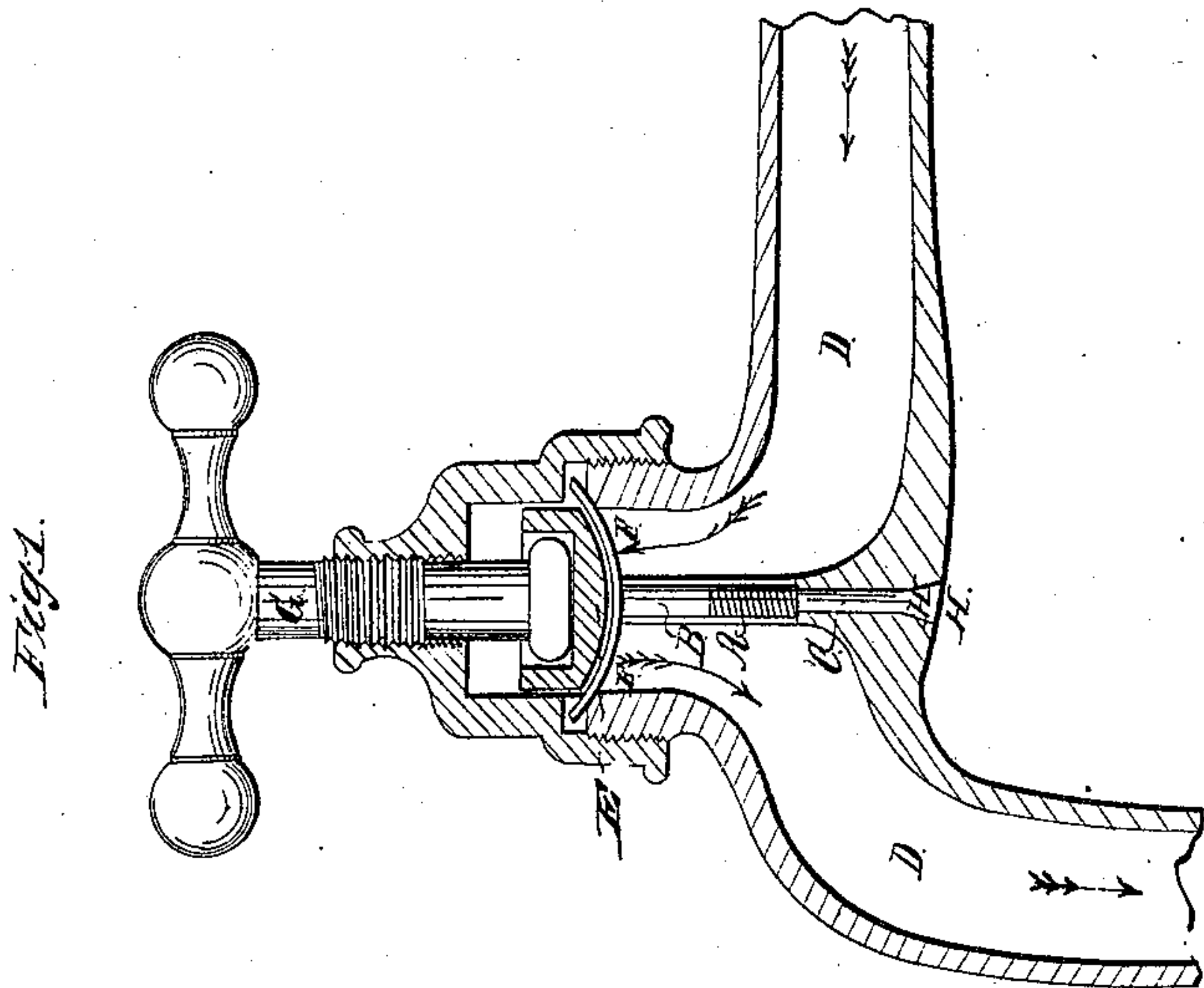


*I. C. Tate,*  
*Cock,*  
*No 24,416.*      *Patented June 14, 1859.*



*Witnesses:*  
*Giles Bailey,*  
*Beth Smith.*

*Inventor:*  
*Isaac C Tate.*

# UNITED STATES PATENT OFFICE.

ISAAC C. TATE, OF NEW LONDON, CONNECTICUT.

## STOP-COCK.

Specification of Letters Patent No. 24,416, dated June 14, 1859.

*To all whom it may concern:*

Be it known that I, ISAAC C. TATE, of the city of New London, county of New London, and State of Connecticut, have invented a  
5 new and useful Improvement in the Mode of Constructing Compression Bib-Cocks; and I do hereby declare that the following is a correct description of the same, reference  
10 being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in the application of a spring or its equivalent placed in the center division, to raise the  
15 packing or valve from its seat.

To enable others skilled in the art to make and use my invention, I will proceed to describe the construction and operation.

The drawing Figure 1 is a side view of the cock, (part sectional) and showing the  
20 spring arrangements &c. when closed. Fig. 2 a side view (part sectional) with the packing raised for the fluid to pass. Fig. 3 a plan view of the double water course openings.

25 The general construction of this compression bib cock as described in the specification and application, is substantially the same as are now in general use.

My improvement is in the application of  
30 the spring A and pin B, inserted in and to operate freely, in the center of the cross division C of the water course or flowing passage D.

35 The division C being solid, I drill a hole of the proper size to receive the spiral spring

A or its equivalent as shown in plan Figs. 1 and 2, this spring I make of a sufficient tension to lift up the flexible or other packing E, from the apertures F, F, by forcing up  
40 the pin B against the bottom of the packing E and relieving the same from its bed when it gets set, or sticks to the same by means of the compression of the spindle, and other causes, and the pressure of the fluid is not  
45 sufficient to raise it.

The compression upon the loose flexible packing E is caused by the actuating screw spindle G, which turns right handed to compress, and left handed to relieve, the packing  
50 from the openings, F, F. It is in this case where the utility of my invention becomes apparent, for after the spindle has been turned left handed to relieve the packing and allow the water to flow through the openings  
55 F, F, the packing will be found to have such an adhesion to the seat, that the water will not have sufficient force to raise the same, which the spring A will accomplish at all times—the vertical holes H H under the  
60 spring are to allow the escape of the water that may accumulate around the spring.

What I claim as my invention and desire to secure by Letters Patent, is—

The application of the spring A, in the manner substantially as herein set forth and  
65 described, and for the purpose described.

ISAAC C. TATE.

Witnesses:

GILES BAILEY,  
SETH SMITH.