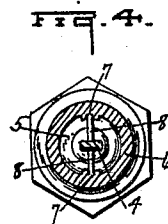
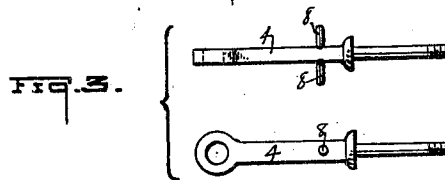
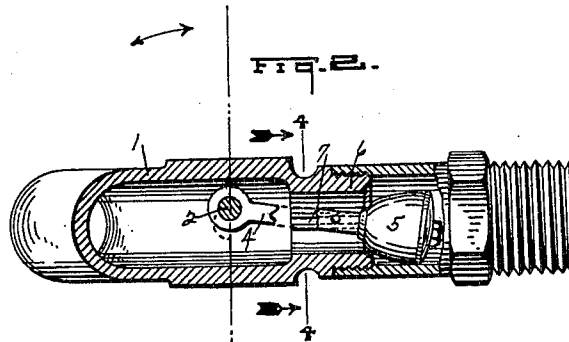
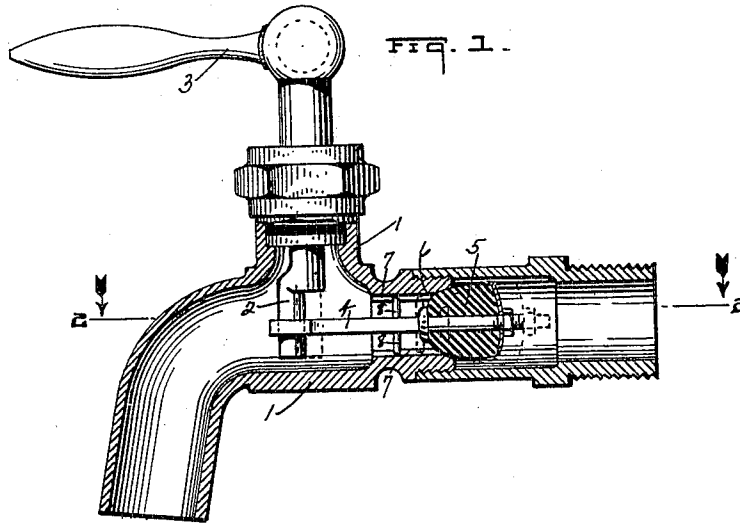


No. 819,944.

PATENTED MAY 8, 1906.

J. A. STEVENSON.  
BIB COCK.  
APPLICATION FILED DEC. 19, 1904.



Witnesses:  
*J. P. Hoffman,*  
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# UNITED STATES PATENT OFFICE.

JAMES A. STEVENSON, OF NEW CASTLE, PENNSYLVANIA.

## BIB-COCK.

No. 819,944.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed December 19, 1904. Serial No. 237,586.

*To all whom it may concern:*

Be it known that I, JAMES A. STEVENSON, a citizen of the United States, residing at New Castle, in the county of Lawrence and State of Pennsylvania, have invented certain new and useful Improvements in Bib-Cocks; and I do 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 figures of reference marked thereon, which form a part of this specification.

My invention relates to a new and useful improvement in bib-cocks; and it consists of the novel construction and arrangement of parts whereby the vibration or rattling is entirely obviated, thus providing a cock of this character that will overcome a well-known defect in such devices.

In the accompanying drawings, forming a part of this specification, I have illustrated my device by several views, in which—

Figure 1 is a longitudinal section view. Fig. 2 is a sectional view taken on line 2 2 of Fig. 1. Fig. 3 shows two views of the operating-rod, and Fig. 4 is a cross-sectional view taken on line 4 4 of Fig. 2.

Throughout the several views the numeral 1 represents the body portion of the cock, in which is operatively seated an eccentric-stem 2, controlled by a lever 3. Connected to the eccentric is a reciprocating rod 4, to the outer end of which is secured a valve 5, having its seat in the part 6. Formed in this part 6 are horizontal grooves 7 7, adapted to receive the ends of the wings 8 8, formed on the rod 4.

The main and essential idea involved in my invention being to overcome the well-known defect of rattling common to cocks of this character and construction, I have provided a means whereby this objection is obviated and the device made absolutely noiseless under all conditions.

My invention then really consists in providing grooves or guideways in that part of the cock in which the reciprocating valve-rod 4 operates. These grooves receive the ends

of the wings 8 8, formed on said rod, and when the valve is open and it is desired to close the same by simply giving the lever 3 a quarter-turn to the right or left the valve will be drawn into the position shown in Fig. 2. This will give the valve a firm purchase against one side of the seat 6 and permit the water to still flow through the opening left at the opposite side. It is at this point that the rattling occurs in the devices of this character now in use on account of the rod 4 not having sufficient rigidity during the opening and closing period, the volume of water being forced around all sides of the valve, causing said rod to vibrate very rapidly and giving the rattling effect I desire to dispense with. A further quarter-turn of the lever 3 will draw the valve 5 fully into its seat, thus closing up the space at one side of the same left open at the first quarter-turn. In this way the force of water at the back of the valve will be gradually shut off, while at the same time the valve will retain a firm purchase on one side of the opening during the closing and opening period and prevent any jar or rattle in the device.

Having thus fully shown and described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a bib-cock, a body portion, a valve movable therein, a valve-stem connected with the valve, the body portion being formed with horizontal guides, a pin arranged transversely to and extending beyond the valve-stem, the ends of said pin seating in the horizontal guides, said pin being connected to the stem wholly forward of the valve, and means for operating the valve-stem to move said stem on the pin as a pivot, whereby the valve is reciprocated and moved to one side of the body at the limit of its opening movement.

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

JAMES A. STEVENSON.

Witnesses:

ERRETT E. PHILLIPS,  
ALEX. McCLELLAND.