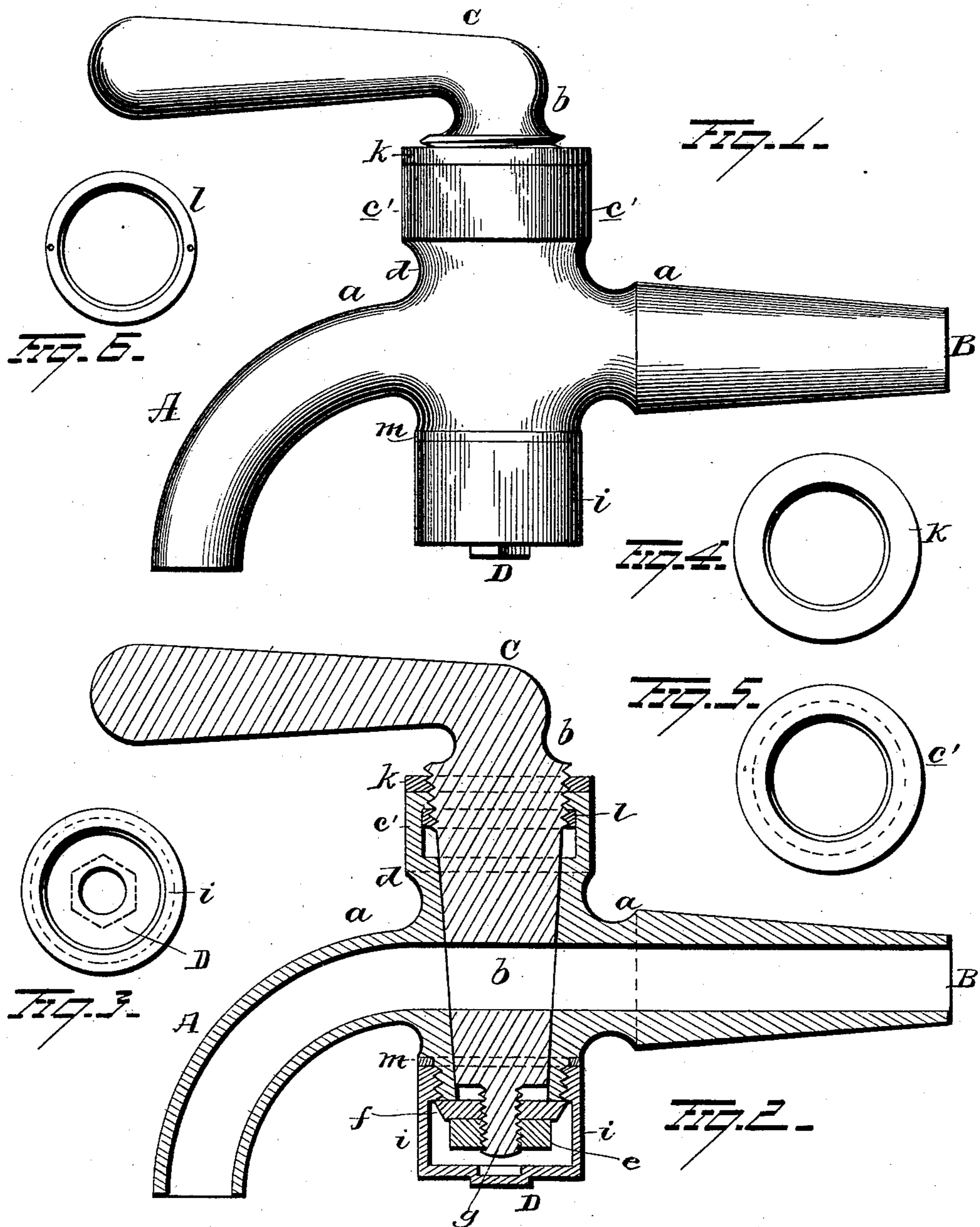


(No Model.)

W. W. MOORE.  
FAUCET, STOP, OR VALVE.

No. 452,188.

Patented May 12, 1891.



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM WALLACE MOORE, OF PHILADELPHIA, PENNSYLVANIA.

## FAUCET, STOP, OR VALVE.

SPECIFICATION forming part of Letters Patent No. 452,188, dated May 12, 1891.

Application filed December 11, 1888. Serial No. 293,319. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM WALLACE MOORE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Faucets, Stops, or Valves; 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 letters of reference marked thereon, which form a part of this specification.

My invention relates specially to improvements in "turning-plug" bibs, cocks, valves, and stops for liquids, steam, or gases, whereby I reduce the wear on the working-surfaces and prevent leakage. I attain this object by the mechanism illustrated in the accompanying drawings, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical longitudinal elevation of a plug-bib fitted with one form of my improvement. Fig. 2 is a vertical longitudinal sectional view, at A B C D of Fig. 1. Fig. 3 is a plan view of upper binding-nut *k* of Figs. 1 and 2. Fig. 4 is a plan view of adjustable shoulder *c'* of Figs. 1 and 2. Fig. 5 is a plan view of lower binding-nut *l* of Figs. 1 and 2. Fig. 6 is a plan view of drip-cup *i* of Figs. 1 and 2.

In turning-plug bibs, cocks, valves, and stops the conical plug and tube or seat in which it turns wear very rapidly, more particularly in cases where they cannot be frequently lubricated or where the material passing through is gritty, like muddy water, or is very volatile, as in case of alcohol, kerosene, gasoline, &c., as the plug must be fitted in very tightly to prevent it from leaking, making it difficult to turn and wearing both working-surfaces very rapidly, so that the tapered turning-plug is soon worn so much smaller and its seat so much larger as to leak and to require frequent tightening or adjustment, drawing the turning-plug so far into its seat that the "way" is below the passage, rendering the bib or stop useless. It may also wear unevenly, requiring frequent re-

grinding to make it fit tightly, which also wears it rapidly.

In my invention to reduce wear of the working-surfaces the bib, cock, valve, or stop *a*, Figs. 1 and 2, has its turning-plug *b* fitted with an adjustable bearing *c'*, arranged to rest on the top *d* of the bib *a* when the turning-plug *b* is fitted or ground into its place for use, and so prevent the turning-plug *b* from being drawn too tightly into its seat or so tightly that it will wear too rapidly, as the strain caused by the nut *e*, washer *f*, and screw-bolt *g* will be transferred to the shoulder *c'* and the top *d*, on which it rests, so that the turning-plug *b* cannot be drawn down any faster than the shoulder *c'* and top *d*, on which it rests, wear away. This shoulder *c'*, fitting tightly on the top *d*, will also prevent leakage at the top of the turning-plug *b*.

In order that the shoulder may be readily adjustable, I prefer to make it as shown at *c'* in Figs. 1, 2, and 4, in which it is screwed on the turning-plug *b* to its proper position and kept in place by the upper *k* or lower *l* screw binding-nuts or other similarly-acting device, which are screwed tightly against the shoulder *c'* or fastened into or through it. The seat *d*, on which the shoulder or bearing *c'* rests, is made tapering or conical, as clearly shown in Fig. 2, and the lower edge of the shoulder or bearing *c'* is correspondingly shaped. By this arrangement of parts the plug *b* is centered by the contact-faces of the parts *d* and *c'*, all wear is taken up by said parts, and all lateral movement of the plug absolutely prevented.

I screw on the lower part *h* of the bib *a* a drip-cup *i*, either with packing *m* or without packing, as may be preferred, for the purpose of retaining any material that may leak from the lower part or screw end of the turning-plug *b*, which may also be readily removed and replaced at any time for the purpose of tightening or adjusting the nut *e*, washer *f*, and turning-plug *b*.

The shoulder *c'*, nuts *k* *l*, and drip-cup *i* may be faceted, roughened, or corrugated to enable them to be screwed easily by hand or a wrench.

A further advantage which my adjustable or fixed shoulder or bearing possesses is that by its use the turning-plug is prevented from

being "set" or jammed into the "barrel" of the faucet, so "springing" and injuring it.

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

- 5 1. In a faucet, stop, or valve, the combination, with a casing having a circular tapering bearing thereon, of a plug fitted in an opening in the casing, and an adjustable shoulder on the plug, the lower face of which corre-  
10 sponds in shape with the bearing on the casing, nuts for holding said shoulder in place, and nuts or equivalent means for retaining the plug in its seat, substantially as set forth.
2. In a faucet, stop, or valve, the combina-

tion, with a casing and a plug fitted therein, 15 the latter having an opening therein of greater diameter than the bore of the casing, of an adjustable shoulder on the plug, nuts for holding the shoulder in place, and nuts on the plug for retaining it in position in its seat, 20 substantially as set forth.

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

WILLIAM WALLACE MOORE. [L. S.]

Witnesses:

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H. R. SHULTZ.