

(No Model.)

W. S. LOVELAND.
COCK.

No. 486,533.

Patented Nov. 22, 1892.

Fig. 1

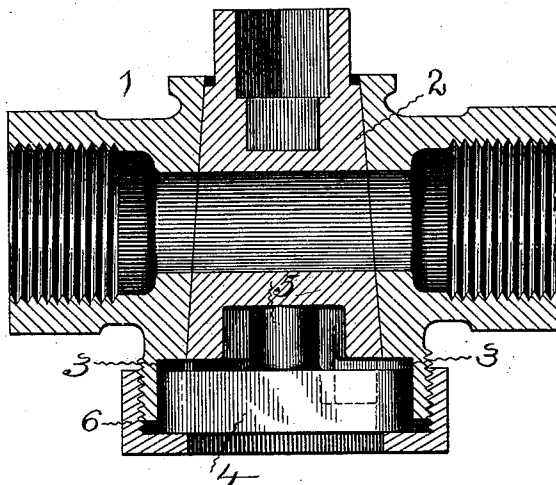
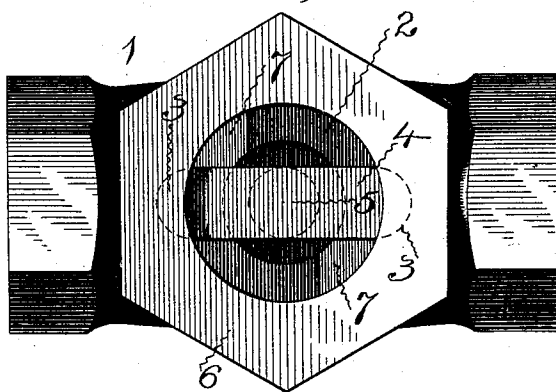


Fig. 2



Witnesses:
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by
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att'y

UNITED STATES PATENT OFFICE.

WALTER S. LOVELAND, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE
STANDARD MANUFACTURING COMPANY, OF SAME PLACE.

COCK.

SPECIFICATION forming part of Letters Patent No. 486,533, dated November 22, 1892.

Application filed May 7, 1892. Serial No. 432,157. (No model.)

To all whom it may concern:

Be it known that I, WALTER S. LOVELAND, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Cocks, of which the following is a full, clear, and exact specification.

The invention relates to the class of cocks commonly known as "stop" and "waste" cocks, the object being to provide a simple and cheap cock of this class in which the plug is readily placed in position and there held so that it can be rotated easily without becoming loosened, and quickly tightened at any time to take up wear and prevent leakage.

To this end the invention consists in a cock having a body with a tapering-plug chamber, a tapering plug in the chamber, a bridge for holding the plug in place, and a cap for holding the bridge in position, as more particularly hereinafter described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a central vertical section of the cock; and Fig. 2 is a view, looking at the bottom of the same.

In the views 1 indicates the body of the cock, which may be cast to shape, of brass, iron, bronze, or other metal, with a tapering-plug chamber, a cap end, and pipe ends, which may be screw-threaded, as shown, or flanged, as desired, for making the connections of the cock. Fitted in the plug-chamber is a plug 2, having a round water-way and one end squared or provided with a rectangular opening for a wrench or key, by which it may be rotated, while the opposite or larger end of the plug may be flat or provided with a recess, as shown. Sockets 3 are milled, bored, or otherwise cut in the body of the cock at the cap end and set into these sockets, and extending across the opening is a bridge-piece 4, which either rests directly against the larger end of the plug or is provided with a hub 5, that projects against the end of the plug or into the recess formed therein. A cap or flanged ring 6 is

screwed upon the cap end of the body, so as to bear against the bridge and hold it in place in the sockets with its hub against the plug, and the tightness with which the plug is held in place in the chamber depends upon the hardness with which the cap is screwed against the bridge-piece.

Although to keep the plug tight the bridge-piece must be forced hard against the end, the plug will rotate easily, as the bearing-surface on the end of the hub projecting from the bridge is small and will not cause much friction. As the plug rotates against the hub on the bridge, which does not rotate, the plug cannot in any way loosen itself in rotation by unscrewing the cap and releasing the bridge. Projecting from the larger end of the plug upon each side of the bridge are lugs 7, the edges of which are cut so as to come in contact with the bridge and stop the plug in its rotation, so that it will stand either fully open or closed.

This cock is cheap and simple in construction, the water-way may be made round, (the preferred form,) and the plug, which is easy to rotate, is tightly held in place and at any time can be tightened to take up wear and prevent leakage by a simple means.

I claim as my invention—

1. A cock consisting of a body with a tapering-plug chamber, a plug held in said chamber, a bridge extending across the body with its ends in sockets in the walls, having a projecting hub bearing against the larger end of the plug, and a cap screwed on the body against the bridge, substantially as specified.

2. A cock consisting of a body with a tapering-plug chamber, a plug held in said chamber, a bridge projecting across the end of the plug, a cap on the body bearing against the bridge, and lugs projecting from the end of the plug and adapted to come into contact with the bridge, substantially as specified.

WALTER S. LOVELAND.

Witnesses:

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