

JAMES F. BRIEN.

Taps for Water-Mains.

No. 126,869.

Patented May 21, 1872.

Fig. 1.

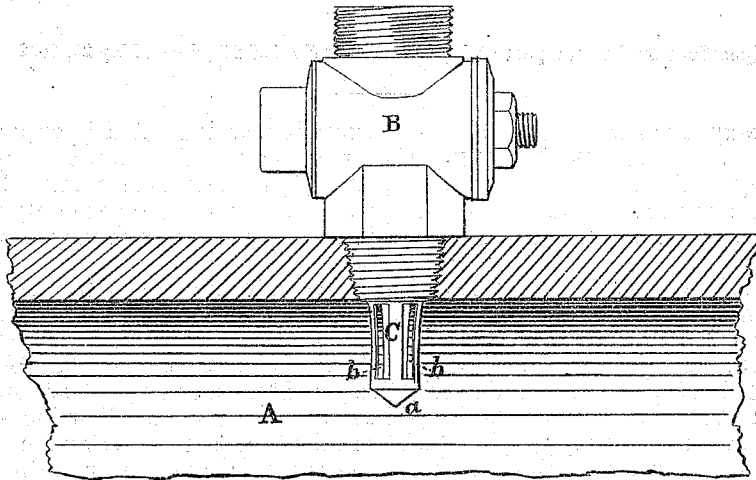


Fig. 2.

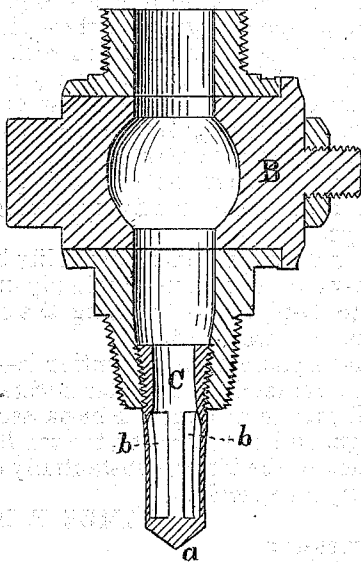


Fig. 5.



Fig. 3.

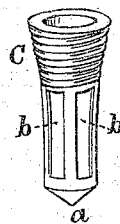
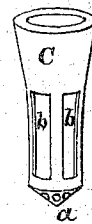


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES F. BRIEN, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN TAPS FOR WATER-MAINS.

Specification forming part of Letters Patent No. 126,869, dated May 21, 1872.

To all whom it may concern:

Be it known that I, JAMES F. BRIEN, of Washington City, in the District of Columbia, have invented certain Improvements in Taps for Water-Mains, of which the following is a specification:

My invention relates to improvements in the ordinary taps in use for tapping city water-mains; and it consists in providing such taps with a strainer of peculiar construction, whereby fish, leaves, and other obstructive materials which may find their way into the mains are prevented from entering the supply-pipes and choking them up, and whereby all danger of such obstructions accumulating around the strainer itself and preventing the water entering the supply-pipe is obviated.

In the accompanying drawing, Figure 1 is a view of a tap or water-cock, shown in position, having my strainer attachment. Fig. 2 is a vertical section of the same. Figs. 3, 4, and 5 are separate views of the strainer, showing modifications of form with and without screw-threads.

A represents the water-main; B, the water-cock or tap. C is the strainer, constructed of a hollow conical shape, with a solid or perforated end or point, *a*. It is cut with a number of longitudinal slots, *b*, or otherwise provided with suitable openings, which will allow the water to pass through freely, though sufficiently small to prevent the passage of any extraneous or obstructive matter. The open part of the strainer may also be made in basket form, as shown by Fig. 5. This strainer is made to fit into the water-cock or tap, as shown, its upper end fitting truly with the inner periphery of the tap by screw-thread or otherwise, and its lower or open end extending into the water-main.

In tapping mains the usual process is to first drill the main pipe nearly but not quite through the metal. The tap is then inserted and se-

cured in position. A drill or punch is then inserted through the tap and the remaining portion of the main drilled out. As the drill is withdrawn the valve of the tap is turned, and in this way the main is tapped without the escape of any water.

With my improved tap, after the foregoing operation is completed the strainer is inserted into the tap, the point resting on the closed valve. A drill or other suitable tool is then inserted into the strainer and tap and the stop-cock opened so as to allow the strainer to descend to the position shown in the drawing, where it is secured by the drill or other tool, which is then withdrawn and the valve turned as before.

From the construction of my improved strainer and its position, projecting from and at right angles to the side of the main, it is obvious that when the water is not passing into the supply-pipe it will flow through the openings of the strainer in a line with the main, and by its force wash away any obstructive substance that may come against it; and when the water is flowing into the supply-pipe any such extraneous matter which may be borne along with the current will be stopped by the strainer and prevented from entering the supply-pipe.

My improved strainer can readily be applied to tap-valves now in use by simply uncoupling the supply-pipe and inserting the strainer in the manner described.

What I claim as my invention is—

The strainer C, constructed substantially as described, and arranged to be passed into and through, and be secured to, the tap B after the insertion of the latter, substantially as and for the purpose specified.

JAMES F. BRIEN.

Witnesses:

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