

J. H. RHODES.

Plugs for Arresting the Flow of Stop-Cocks.

No. 129,168.

Fig. 1.

Patented July 16, 1872.

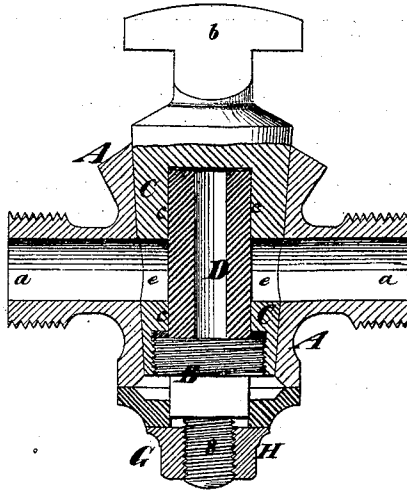
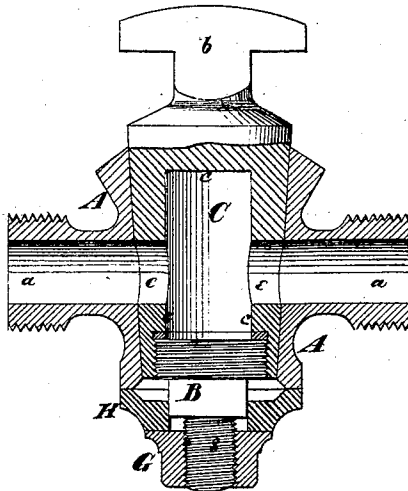


Fig. 2.



Witnesses:

George B. Brainerd.
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JOHN H. RHODES, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PLUGS FOR ARRESTING THE FLOW OF STOP-COCKS.

Specification forming part of Letters Patent No. 129,168, dated July 16, 1872.

Specification of an Improved Stop-Cock, invented by JOHN H. RHODES, of Brooklyn, in the county of Kings and State of New York.

This invention is more especially designed for application to those stop-cocks which are used in the service-pipes of dwelling-houses and other buildings, for the purpose of shutting off the supply of water or gas from the street-main; in which application its object is to provide for cutting off the supply absolutely without disconnecting the service-pipes, as has heretofore been the practice in case of the failure of the truant to pay the tax, or in case of the building being unoccupied. The improvement is, however, applicable to stop-cocks used for shutting off the flow of any liquid or aeriform bodies. It consists in a novel construction of the key of the cock with an internal cavity, and in the provision of a movable or adjustable plug or stopper of India rubber, metal, or other suitable material, to be inserted into said cavity for the purpose of stopping up the passage or ways in the key, so that although the key may be turned no fluid can pass through the cock.

In the accompanying drawing, Figure 1 is a central longitudinal section of my stop-cock with a plug in place within the key, and Fig. 2 is a similar view with the plug removed.

Similar letters of reference indicate corresponding parts in both figures.

The barrel or shell A of the cock is of ordinary form, and, as usual, is provided with branches *a a*, for connection with the service-pipe of a house or other building. Its key is made in two pieces, B and C. The piece C, which constitutes the taper body, is fitted to the seat in the usual manner, and is furnished with a handle or thumb-piece, *b*, by which to turn it, and provided, opposite the branches *a a* in the barrel, with the usual water-ways *e e*; and the said piece has formed centrally within it the cavity *c c* for the reception of the removable plug D, the said cavity being open at the smaller end of the key except when closed by the said piece B, which screws into the said end. The piece B has formed on its outer end the screw-threaded shank or stem *s*,

which receives the washer H and nut G, by means of which the key is secured within the barrel or shell A. A washer, *i*, of lead or other soft material, is applied within the key C around the cavity *c*, for the end of the piece B to seat itself against and make a perfectly tight joint. The plug D, represented, which may be of India rubber or other suitable material, is of cylindrical or other form to fit snugly within the cavity *c c* in the key of the cock, as shown in Fig. 1, and so close the ways *e e* and prevent any water from passing through the cock, no matter to which position its key is turned.

While it is intended that the cock shall be used, the removable plug D is omitted from the key, and the cock operates like an ordinary stop-cock; but when it is desired to shut off the water or other fluid absolutely, the key of the cock is first turned to shut off the water; the nut G of the cock is then unscrewed and the washer H removed, and the piece B is next taken out and the plug D inserted into the cavity *c c*. The piece B, the washer, and the nut are then replaced. After this, no turning of the key of the cock will allow the water or other fluid to pass.

Instead of making the plug or stopper removable it may be permanently inserted, and of such form or construction that, by turning it or shifting the position, or by inflation, it may be made to close the ways of the key.

Claims.

1. A movable internal stop-plug or stopper, in combination with a cavity in the key of a stop-cock, substantially as and for the purpose herein set forth.
2. The plug, constructed of two pieces, C B, with a cavity arranged in the piece C, as described, in combination with the removable stop-plug D, substantially as and for the purpose herein specified.

JOHN H. RHODES.

Witnesses:

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