J. HARLIN & J. YULE.

Locking Device for Stop-Cock.

No. 211,400. Patented Jan. 14, 1879.

Fig 1.

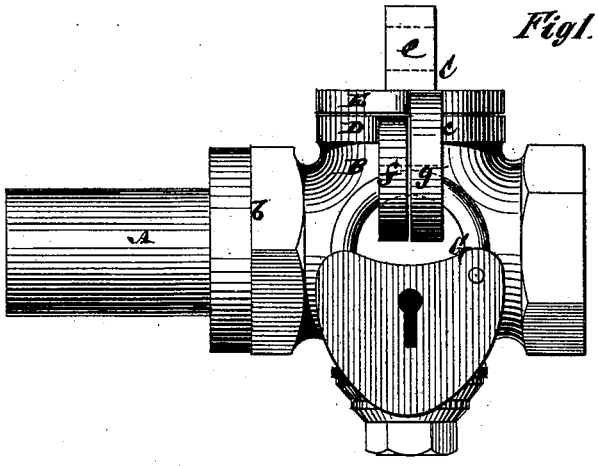


Fig 2.

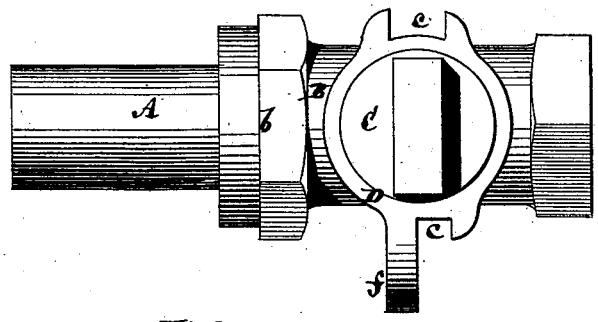
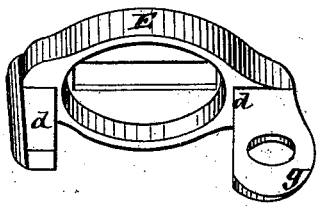


Fig 3.



Witnesses:

Fred. Haynes

Edw. P. Jessup.

Inventors

John Harlin

John Yule

by their Attorneys

Brown & Brown

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN HARLIN, OF NEW YORK, N. Y., AND JOHN YULE, OF PATERSON, NEW JERSEY, ASSIGNORS TO McNAB & HARLIN MANUFACTURING COMPANY, OF NEW YORK, N. Y.

IMPROVEMENT IN LOCKING DEVICES FOR STOP-COCKS.

Specification forming part of Letters Patent No. **211,400**, dated January 14, 1879; application filed December 10, 1878.

To all whom it may concern:

Be it known that we, JOHN HARLIN, of the city and State of New York, and JOHN YULE, of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Locking Devies for Stop-Cocks, of which the following is a description, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to means for securing stop-cocks of gas, water, and steam pipes from being opened, turned, or removed without unfastening or removing a lock specially applied to the cock for keeping or holding it closed, whereby fraudulent or improper use of the fluid passing through the pipes is prevented.

Our invention, however, is more particularly intended to be applied to the connecting-pipes of gas and water meters, for the purpose of keeping the supply of said fluids shut off, and rendering unnecessary the removal of the meter when the supply is stopped. To these ends it has before been proposed to provide the cock and the sleeve or shell of the latter with perforated collars, flanges, or lugs arranged to register with each other when the cock is closed, in order that a padlock may be applied to or through said collars, flanges, or lugs to secure the cock when closed. The locking collar, flange, or lug on the cock, however, has usually been a permanent attachment, and it in numerous cases is an unnecessary appendage, as use for it in many meter-connections never occurs, and in others is only occasionally necessary.

One object of our invention is to provide the stop-cock with a detachable locking flange or device, which is only applied when it is required to secure the cock from being opened, and so that said locking flange or device may be used for any one of a number of stop-cocks, as occasion requires, thus doing away with the expense and inconvenience of a separate locking-flange for each cock.

The invention accordingly consists in a detachable locking flange or collar constructed to engage both with the cock and its shell when the cock is closed, and serving, by the use of a padlock in connection therewith, to lock the cock in its closed position.

The invention also consists in certain peculiar constructions and combinations of a detachable locking flange or collar and fast flange or collar applied respectively to the cock and its shell, whereby a firm attachment of the detachable flange or collar when in place is secured and other advantages are obtained.

Figure 1 is a longitudinal view of a stop-cock and connecting-pipe, in part, with the invention applied. Fig. 2 is a further longitudinal view, in a plane at right angles to Fig. 1, with the detachable flange or collar removed; and Fig. 3 is a perspective view of the detachable locking flange or collar.

A is the supply or connecting pipe, to which the stop-cock is attached. B is the shell of the cock, connected by a screw-nut, *b*, with the pipe A. C is the cock proper, fitted to the shell, and forming, in connection with the latter, the entire "stop-cock," so termed.

The shell B is provided at the larger end of the cock proper with a fast flange or collar, D, having opposite grooves *c c* in it.

E is the detachable locking flange or collar, constructed to fit over the key end of the cock proper, and formed with opposite projections *d d*, which, when the cock C is closed, enter within the grooves *c c* in the collar D of the shell, thus acting as a check to the turning of the cock proper on both or opposite sides of its axis. After the detachable locking-flange E has been thus fitted to engage both with the cock proper and with the shell of the cock when the cock proper is closed, it is secured in position by a padlock, G, the lower end of which is either arranged to pass through a hole, *e*, in the key fitting end of the cock outside of the detachable flange or collar E, or through perforated projections or ears *f g* on the flanges or collars D E of the shell and cock proper.

We claim—

1. A locking flange or collar constructed to engage both with the key which operates the valve of a stop-cock and with the shell or casing thereof when the cock is closed, and serv-

ing to lock the closed cock by the use of a padlock, said locking flange or collar being capable of ready removal or detachment from the key and shell, substantially as and for the purpose described.

2. The combination, with the cock proper, C, and with the flange or collar D of the shell B, having opposite grooves *c c* in it, of the detachable locking flange or collar E, constructed to engage with said cock, and having projections *d d* arranged to engage with the grooves *c c* in the flange or collar of the shell when the cock is closed, essentially as described.

3. The combination, with the cock proper, of the detachable flange or collar E, constructed to engage with said cock, and provided with projections *d d* on opposite sides of the axis of the cock, the shell B having opposite grooves *c c*, arranged to receive the projections *d d* when the cock is closed, and the perforated ears or projections *f g* on said shell and detachable cock flange or collar, for reception of the padlock which secures the closed cock, substantially as specified.

JOHN HARLIN.
JOHN YULE.

Witnesses to signature of John Harlin:
T. J. KEANE,
E. V. JESSUP.

Witnesses to signature of John Yule:
J. W. SHIPPEY,
EDWARD FIFIELD.