

J. TOLHURST & A. WAIT.
GAS COOK.

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1,048,764.

Patented Dec. 31, 1912.

Fig.1.

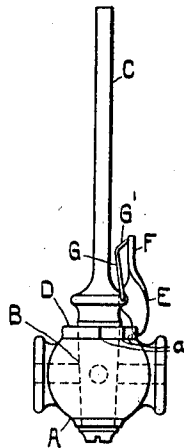


Fig.2.

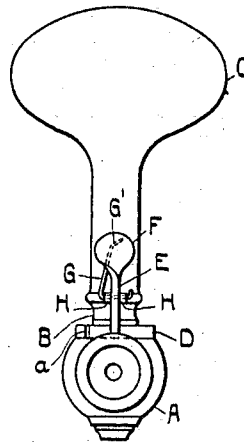


Fig.3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH TOLHURST AND ALFRED WAIT, OF HAMILTON, ONTARIO, CANADA.

GAS-COCK.

1,048,764.

Specification of Letters Patent.

Patented Dec. 31, 1912.

Application filed April 25, 1912. Serial No. 693,196.

To all whom it may concern:

Be it known that we, JOSEPH TOLHURST, a citizen of the Dominion of Canada, residing at 44 Picton street east, and ALFRED WAIT, a citizen of the Dominion of Canada, residing at Mount Hamilton, both in the city of Hamilton, in the county of Wentworth, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Gas-Cocks, of which the following is a specification.

This invention relates to an improvement in gas cocks whereby an economical and effective means is provided to lock any kind of a gas cock in such a manner that the gas cannot be turned on by accident, but only with the full knowledge of the person using it—thereby preventing the accidental turning of the valve to allow gas to escape when not so required.

The invention consists in a notched ring or washer attached to the body portion, the plug portion passing through the ring, and containing a flat thumb piece for operating the plug. A pawl made to engage with the notched ring. Said pawl being flattened at the outer end as a thumb piece to operate it, a spring to operate the pawl. The outer end of the spring terminates in an upward spring arm to keep the pawl into engagement with the ratchet to lock the valve in the body portion.

The details of the invention will be more fully shown hereinafter. Reference being had to the accompanying drawing, in which,—

Figure 1, is a side view of a gas cock with safety device attached. Fig. 2, is an end view of the same. Fig. 3, is a view of the ratchet ring detached.

Similar letters refer to similar parts throughout the several views.

The improved gas cock comprises a body portion, A, and a plug portion B, the latter containing a flat thumb piece C, which must be elongated to a sufficient distance away from the operating parts for turning the plug portion or valve, and to prevent the accidental use of the thumb piece F; a ring or washer D, is formed on the body portion A, provided with notches *a*, cut in the proper place to shut off gas at the very point where the light goes out and before the gas key has turned the full distance required to bring the thumb piece C, at right angles to the gas

opening in the cock body, that is, before it is completely shut off, and also a notch to secure it when the full one-quarter turn of the gas key or valve is completed. The said ring D, may be made of brass, iron, steel, or other material, and hardened if necessary in order to secure good wearing qualities. The said ring is fastened securely to the body A, by being forced onto it and also secured by a pin J, so that there is no possibility of its turning around. It may further be stated that the notches in the said ring are so arranged as to make it impossible to turn the gas key past the points where the cock is fully closed, or fully opened.

The latch or pawl E, with thumb attachment, is made of one piece of material (which like the ring D, may be made of brass, iron, steel or other material, and hardened if necessary) and receives a twist to bring the outer end of it into a proper position for a thumb piece F, to operate the pawl end. The pawl E, is secured to the gas key C, (which has a groove cut in it or lugs H, H,) by means of a wire spring G, which is bent upward at the outer end G', and made to press upward against the under side of the thumb piece F, to keep the pawl in proper contact with the notched ring D; the said spring therefore has two uses, viz: to retain the pawl and to keep it in engagement with the notches of the ratchet ring D, as shown. It will further be seen that the notched ring D, may be cast into the body A, either by placing the ring, if made of iron or steel, into the mold, or by simply putting the notches *a*, on the pattern, and casting in the usual manner.

From the above description it will be seen that the safety device, while being quite easy to operate, cannot be unlocked by accident. The gas may be turned off automatically without using the latch and one unacquainted with it may do so, but if wishing to turn the gas on again, will be prevented by the latch.

As the working parts of the locking device can be plainly seen by a person standing in front of it, one glance being sufficient to show the necessity of placing the thumb on the latch to release it, and how to turn the plug without stooping or turning to examine the rear of gas cock as many of the gas cocks have the stop at the rear end of the body which is a great disadvantage.

Having thus described our invention and its advantages, what we claim as novel and desire to secure by Letters Patent, is:—

A gas cock comprising a body portion and
 5 a plug portion, said plug portion comprising
 a flattened thumb piece, a ratchet formed
 upon the body portion, an outstanding horizontal
 flange carried by said plug portion, a
 10 pair of outstanding ears formed upon said
 flange, a pawl mounted between said ears
 and comprising a ratchet engaging portion
 and a flattened thumb piece which lies parallel
 with the flattened thumb piece of the
 15 plug portion and a wire member comprising
 a horizontally disposed portion which
 passes through said ears and said pawl and

at its terminal end bears upon said flange,
 and a vertical extension having a terminal
 end which bears against the flat inner face
 of the thumb piece of the pawl whereby 20
 said wire spring member serves the double
 function of pivoting the pawl to the plug
 and holding said pawl into engagement with
 said ratchet.

Signed at Hamilton, Ontario, Canada, 25
 this 20th day of April, 1912.

JOSEPH TOLHURST.
 ALFRED WAIT.

In the presence of—

MAUD GUEST,
 GERTIE NICHOLSON.