No. 836,606. PATENTED NOV. 20, 1906.

W. N. PYNES.

GAS COCK.

APPLICATION FILED AUG. 29, 1905.

Fig. 1.

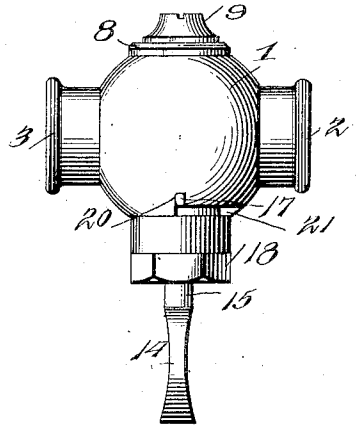


Fig. 2.

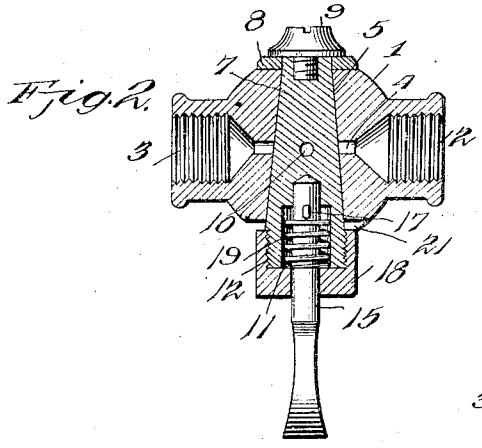


Fig. 4.

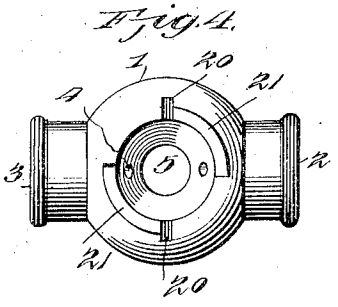
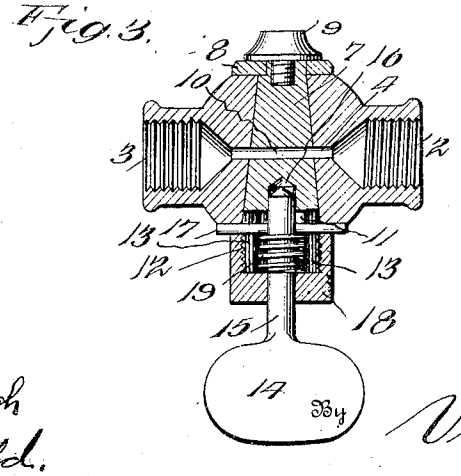


Fig. 3.



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GAS-COCK.

No. 836,606. Specification of Letters Patent. Patented Nov. 20, 1906.

Application filed August 29, 1905. Serial No. 276,264.

To all whom it may concern:

Be it known that I, WILLIAM N. PYNES, a citizen of the United States of America, residing at Waterford, in the county of Saratoga and State of New York, have invented new and useful Improvements in Gas-Cocks, of which the following is a specification.

The invention relates to an improvement in gas-cocks, and particularly to means for holding the barrel-valve thereof in adjusted position.

The main object of the present invention is the production of means whereby the valve is locked in a closed position, the construction being such that a movement of the thumb-piece lengthwise of the valve is necessary before said valve may be turned to open position.

The preferred details of construction of the present invention will be described in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a view in side elevation, illustrating my invention. Fig. 2 is a vertical central section of the same, the thumb-piece and stem being shown in elevation and the valve in closed position. Fig. 3 is a similar view showing the valve in open position, and Fig. 4 is a bottom plan view of the casing or body.

Referring to the drawings, wherein like parts are indicated by similar reference-numerals, the improved gas-cock comprises a body 1, formed with the usual threaded coupling 2 for connection with the service-pipe and with a coupling 3 for connection with the burner-tube. The body is provided with the usual port 4, communicating with the bores of the coupling and nipple and with a transverse conical opening 5, breaking the continuity of the port 4 and designed to receive the usual barrel-valve 7.

The valve 7 is mainly of the usual construction, being secured at the upper end by the lock-washer 8 and a set-screw 9 and formed intermediate its length with an opening or port 10, designed to be alined with the respective portions of the port 4 to provide for an uninterrupted flow of gas therethrough.

The lower end of the barrel is interiorly cored at 11 for a portion of its length and exteriorly threaded at 12 on the outer surface of the wall of said cored portion. The wall of the cored portion is formed with diametrically opposite slots 13, preferably terminating coextensive with the cored portion, as shown in Fig. 3. The thumb-piece 14 for operating the valve is provided with a vertically-extending stem 15, designed to seat within the cored portion of the valve, a recess 16 being formed in the upper wall of the cored portion to receive the upper end of the stem and to prevent undue looseness of parts in operation. The stem is provided with a transversely-arranged pin 17, designed to seat within the slots 13 in the wall of the valve, said pin being of a length to project beyond the surface of the valve when the parts are assembled. A securing-nut 18, formed with an opening to receive the stem, is designed to engage the threaded portion 12 of the core, thereby securing the parts in operative position. A coiled spring 19 encircles the stem within the cored portion of the valve, said spring bearing at one end against the pin 17 and at the opposite end against the lower wall of the nut.

The surface of the body 1 adjacent the outlet or lower end of the opening 5 is provided with diametrically opposite notches 20 and with concentric ribs 21, extending circumferentially from the notches in the same direction and terminating at diametrically opposite points at right angles to the notches. The notches 20 are so arranged that when the parts are properly assembled and the valve in closed position a spring 19 operates to force the pin 17 in said notches, thereby locking the valve against rotation. The valve may be moved to open position only by a downward pull upon the thumb-piece to disengage the projecting ends of the pin 17 from the notches 20, after which the valve is free to move in a direction to open the valve. In this connection it will be noted that the ribs 21, depending below the surface of the casing, prevent movement of the valves in one direction, thereby insuring said valves against complete rotation and precluding the possibility of the valve being turned from open position to closed position and beyond and opening the valve after the gas is extinguished, as upon the movement of the valve to closed position the projecting ends of the pins 17 will be automatically projected into the notches 20, thereby locking the valve closed. Aside from the notches the terminals of the ribs 21 will stop the movement of the valve when it has reached closed position, and the only possibility of opening the valve after

the gas is extinguished is by returning the valve in an opposite direction, as there is no possibility of turning the valve to closed position and beyond in the same motion.

The invention is simple and inexpensive and will readily prevent the accidental turning on of gas after the same has been extinguished.

Having thus described the invention, what is claimed as new is—

1. A gas-cock including a valve formed with a longitudinally-arranged recess, the wall of the recess being formed with diametrically-opposed slots, a thumb-piece freely movable longitudinally of the valve within the recess, means connecting the thumb-piece and valve to prevent independent rotation of either, and means formed on the valve to receive the connecting means at predetermined points in the movement of the valve

2. A gas-cock comprising a body portion, a valve revolubly mounted therein, the lower end of the valve being formed with a longitudinally-extending recess, the wall of the recess being formed with diametrically-opposed slots, a thumb-piece freely movable longitudinally of the valve, a pin passed transversely through the thumb-piece and projecting through and beyond the slots in the valve to secure the valve and thumb-piece against independent rotation, and means secured to the body portion to engage the projecting ends of the pin to lock the parts in determined position.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM N. PYNES.

Witnesses:
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