E. VAN WICKLE.

SAFETY GAS COCK.

APPLICATION FILED NOV. 4, 1907.

959,090. Patented May 24, 1910.

Fig. 1.

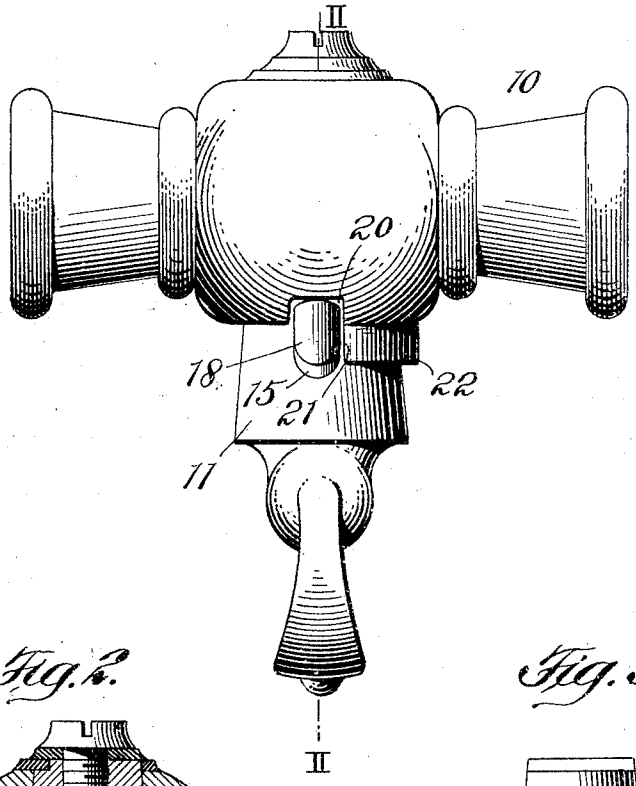


Fig. 2.

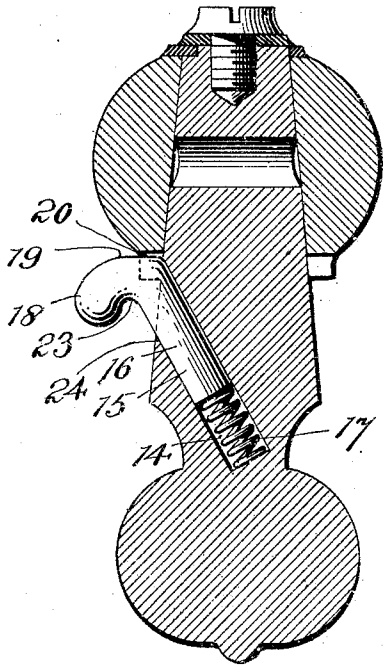
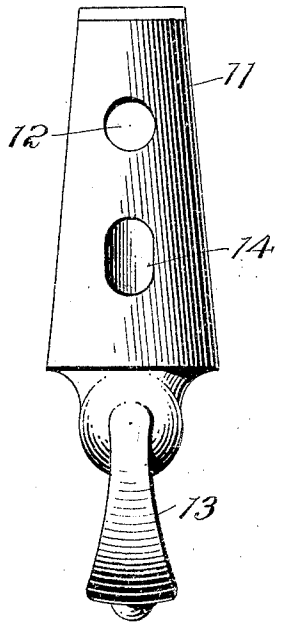


Fig. 3.



WITNESSES

Julius H. Smith

H. Lineham

INVENTOR

E. Van Wickle

BY

Criswell & Criswell

ATTORNEYS

UNITED STATES PATENT OFFICE.

EDWARD VAN WICKLE, OF NEW YORK, N. Y.

SAFETY GAS-COCK.

959,090. Specification of Letters Patent. Patented May 24, 1910.

Application filed November 4, 1907. Serial No. 400,620.

To all whom it may concern:

Be it known that I, EDWARD VAN WICKLE, a citizen of the United States, and a resident of New York, county and State of New York, have invented certain new and useful Improvements in Safety Gas-Cocks, of which the following is a full, clear, and exact description.

This invention relates more particularly to a safety gas cock to be used in connection with the gas fixtures of houses.

The primary object of the invention is to provide simple and efficient means whereby the cock of the gas fitting, whatever its nature, may be positively and automatically locked against accidental rotation when the gas is shut off and which requires a part of the cock to be positively operated before the gas can be turned on, thereby preventing the escape of gas resulting from the accidental turning of the plug, which often results in loss of life from asphyxiation.

A further object of the invention is to do away with the present dangerous and objectionable pin ordinarily used in connection with gas fixtures, and to substitute therefor a device which makes the cock safe at all times; which is simple in construction, and does not easily get out of order; which is inexpensive, ornamental, and useful, and which is automatic in its action, and positive in results.

The invention will be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and will then be pointed out in the claims at the end of the description.

In the drawings, Figure 1 is a side elevation of one form of gas cock or fixture embodying my invention. Fig. 2 is a vertical transverse section taken on the line II—II of Fig. 1; and Fig. 3 is a detail elevation of the plug or valve.

The valve casing 10 may be arranged to connect with the source of gas supply in the usual way. Rotatably held in the casing is the plug or valve 11, and said plug is provided with the usual aperture 12 through which the gas may pass from the source of supply to the burner or other point, and has a handle 13 by which the plug may be rotated, all of which may be of the usual or of any preferred construction.

To displace the usual pin, and to prevent as little change as possible to the ordinary form of fitting, as well as to positively lock the plug or valve against accidental rotation to turn on the gas, I form an aperture or recess 14 in the plug, which extends from a point adjacent to the casing inward and downward toward the handle 13, and at an angle to the axis of said plug. In this recess is arranged a locking device or bolt 15, which has its shank or body portion 16 fitting in the recess 14, and which is adapted to move upward toward the casing, and below the end of the bolt 15 is a spring 17 located within the recess which normally forces the bolt or locking device outward. The outer end 18 of the bolt provides means whereby the latter may be engaged by the finger or hand, so as to be manually forced downward when it is desired to rotate the plug. The end 18 may be of any desired length to provide a suitable handle, and has a straight part 19 arranged at an angle with respect to the body portion 16 of the bolt, and which is adapted to engage a recess or notch 20 on opposite sides of the casing when forced outward by the spring 17. The notches 20 are the only changes made in the usual casing, and these can be easily made by extending the abutment walls 21 of the usual projecting flange 22, which limits the throw of the plug by engagement in this case with the bolt 15 instead of the usual pin. As will be seen the bolt 15 not only serves as a safety device in locking the plug when the gas is turned off, but it also takes the place of the usual pin, which often becomes broken or detached from the plug, and that by reason of the bolt being arranged at an angle to the axis of the plug, it is prevented from rotary movement to an extent which would prevent it from engaging either of the notches 20 of the casing at the proper time. It will be seen that when the bolt 15 is pressed downward to release the end 19 from either of the notches 20, the surface 23 will rest upon a shoulder or edge 24 of the plug, and thereby prevent further downward movement of said bolt. This shoulder 24 is so located that should the spring 17 break or become useless the said shoulder will still hold and sustain the bolt above the lower edge of the projecting flange 22 of the casing, and in any case will prevent the complete rotation of the plug as it is always in position to engage the abutments 21 of the casing. Instead of two notches 20 one or more may be employed.

From the foregoing it will be seen that an efficient safety device is provided for the usual or any preferred form of gas cock; that said device is simple in construction, and automatic in action; that it is inexpensive and requires very little change to the usual cocks, and that it is ornamental, useful and positive in its results.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. A locking device for gas cocks having in combination with a valve casing provided with notches on its edge, a plug provided in its body portion with a diagonal passage, one of whose ends open adjacent to said notches, and a movable pin slidable in said passage and normally engaging one of said notches, and adapted to be manually moved from such engagement to permit the movement of the plug within the valve casing.

2. A safety lock for a gas valve, comprising a valve casing having notches located at selected positions along a part thereof, a valve plug engaging therein, said plug being provided with an obliquely inclined passage having one end adapted to register with one of said notches when the valve is in fully opened or closed position, a pin slidably engaging through said passage and adapted to enter the notch opposite which the end of the passage lies and thereby to lock the same from unintended movement in either direction, and a spring for forcing the pin outward, substantially as described.

This specification signed and witnessed this first day of November A. D. 1907.

EDWARD VAN WICKLE.

Witnesses:
A. C. TURNER,
H. LINEHAN.