

G. R. CHAMBERLAIN & A. G. SCHROEDER.
GAS FIXTURE.

APPLICATION FILED OCT. 6, 1911.

1,019,132.

Patented Mar. 5, 1912.

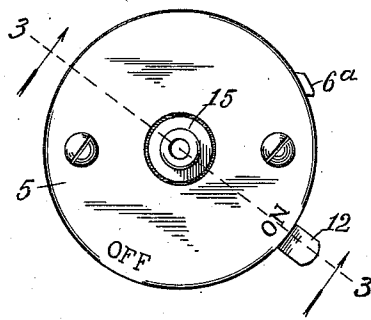


Fig. 1.

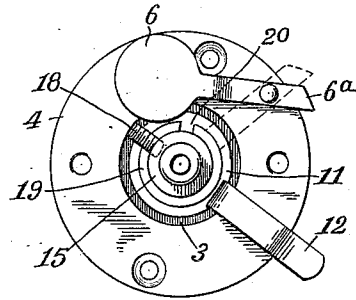


Fig. 2.

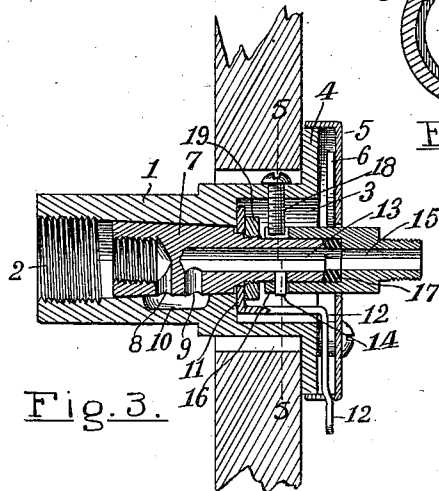


Fig. 3.

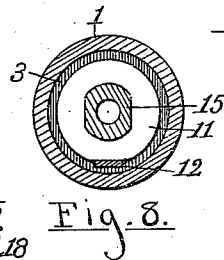


Fig. 4.

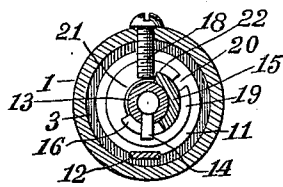


Fig. 5.

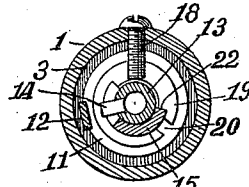


Fig. 6.

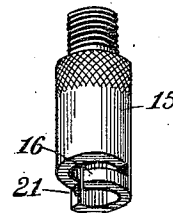


Fig. 7.

Witnesses
Harold C. Van Antwerp.
Mae Rausch

Inventors
Glenn R. Chamberlain
Albert G. Schroeder
By Luther V. Moulton
Attorney

UNITED STATES PATENT OFFICE.

GLENN R. CHAMBERLAIN AND ALBERT G. SCHROEDER, OF GRAND RAPIDS, MICHIGAN.

GAS-FIXTURE.

1,019,132.

Specification of Letters Patent.

Patented Mar. 5, 1912.

Application filed October 6, 1911. Serial No. 653,166.

To all whom it may concern:

Be it known that we, GLENN R. CHAMBERLAIN and ALBERT G. SCHROEDER, citizens of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Gas-Fixtures; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in gas fixtures and more particularly to improvements in the device shown in our co-pending application, Serial No. 581,484 filed Sept. 12, 1910, and its object is to provide means whereby when the valve is opened the coupling will be securely locked thereon; to provide improved means for grinding in and tightening the valve; to provide improved means for attaching the coupling and forming a tight joint between the same and the valve and to provide the device with various new and useful features hereinafter more fully described and particularly pointed out in the claims reference being had to the accompanying drawings, in which:—

Figure 1 is a front elevation of a device embodying our invention; Fig. 2 the same with the cap removed therefrom; Fig. 3 a longitudinal section of the same on the line 3—3 of Fig. 1; Fig. 4 the same with the valve closed and the coupling detached therefrom; Fig. 5 a vertical section on the line 5—5 of Fig. 3, showing the parts in position with the valve open; Fig. 6 the same with the parts in position to close the valve; Fig. 7 a perspective detail of the coupling detached; and Fig. 8 a transverse section showing the manner of connecting the lever to the plug to turn the same.

Like numbers refer to like parts in all of the figures.

1 represents the body of the valve having an axial opening therethrough the inner end of which opening is provided with a screw thread for attaching a gas pipe, the middle portion of this body being tapered to fit the tapered plug being largest at the inner end and having a lateral recess 10, and the outer portion of the body enlarged and provided with a chamber 3 in which is the outer end of the plug 7.

The plug is ground to fit the tapered por-

tion of the opening through the body and its larger inner end is provided with a screw threaded opening whereby a suitable tool may be attached to the plug for grinding the same to its seat. From this opening a lateral opening extends to communicate with the recess when the plug is in open position. The outer end of the plug is also provided with an axial opening which by a lateral opening 9, also communicates with the recess 10 when the plug is so adjusted. There is thus a channel for escape of gas through the plug when the lateral openings 8 and 9 are opposite the recess 10 and the channel is closed when these lateral openings are turned away from the recess. The plug is also provided at its outer end with a nipple 13 to receive a coupling and at the base of the nipple 13 the plug is flattened on opposite sides as shown in Fig. 8 and a washer 11 having an opening to fit thereon engages the bottom of the chamber 3 and is engaged by a nut 19 screw threaded on the plug whereby the latter is held and adjusted to its seat. Extending from this washer 11 is a lever 12 for manually rotating the plug to open and close the valve. Projecting from one side of the nipple is a pin 14 and a slot 20 is cut through the nut to permit the pin to pass therethrough when the nut is taken off.

A coupling 15 is provided with an axial opening therethrough enlarged at the inner end to receive the nipple and the coupling is held in place by a bayonet joint being recessed at one side as at 21 to receive the pin 14. Extending from this recess is a circumferential recess 16 to receive the pin whereby the coupling is held in place on the nipple. This recess is preferably slightly spiral whereby the coupling is drawn closely to place upon the nipple and between the end of the nipple and the end of the enlargement of the opening in the coupling is a packing 17 to form a tight joint. This recess 21 is of sufficient width to also receive a stop 18 preferably formed of a screw inserted in the side of the body and extending with its end close to the nipple 13. The pin 14 and stop 18, however can both enter the recess 21 or be removed therefrom only when the valve is in closed position with the pin 14 turned toward the stop 18. After the coupling has been rotated to carry the pin into the slot 16 the valve can be turned to open position which brings a shoulder 22 at one

side of the recess in the nipple close to the stop 18. This stop thus also serves to properly determine the open position of the plug. While the parts are in this position the coupling cannot be detached, the stop 18 preventing any further rotation of the coupling in the direction necessary to detach it. Consequently, when the valve is in open position the coupling is locked in place until the valve is turned to closed position as clearly illustrated in Figs. 5 and 6.

To improve the appearance of this device when in operative position on the wall of a room or in like places and to facilitate attaching it to said wall we have provided a circular flange 4 on the outer end of the body 1 and integral therewith. A detachable cap 5 is mounted on, and covers this flange, and is spaced apart therefrom. A central opening is provided in the cap 5 through which the coupling 15 is inserted when the fixture is in use. In order to present a smooth and neat outer appearance to the device when not in use we have provided a closure 6 arranged beneath the cap 5 this closure being mounted on an arm 6^a which is pivoted in the flange 4 near its periphery. The outer end of the arm 6^a extends beyond the periphery of the flange and through a recess provided for it in the rim of the cap 5 so that it may be manually operated to swing the closure 6 from the opening to admit the coupling 15.

What we claim is:—

35 1. A gas fixture, comprising a body having an opening therethrough, a rotative plug to close said opening, a coupling connected to the plug by a bayonet joint and a stop to engage a shoulder on the coupling and lock the same in place on the plug when the latter is turned to open position.

45 2. A gas fixture, comprising a body having an opening therethrough, a rotative plug to close said opening, a coupling connected to the plug by a bayonet joint and a stop inserted in the body and projecting into the slot of said joint to lock the coupling in place on the plug.

50 3. A gas fixture, comprising a body having an outwardly tapered axial opening and a lateral recess, a tapered plug in said open-

ing having a divided axial passage and lateral openings communicating with said recess, when the plug is turned to open position, a nipple on the outer end of said plug, a coupling attached to said nipple by a bayonet joint and a stop inserted in the body and projecting into the slot of the bayonet joint to lock the said joint when the plug is in open position. 55 60

4. A gas fixture, comprising a body having an outwardly tapered axial opening, screw threaded at the inner end and also provided with a chamber in the outer end and a lateral recess in the tapered part, means for closing said chamber, a plug rotative in the tapered part of said opening to close the same and having a divided axial passage screw threaded at the inner end, and also having lateral openings communicating with the said recess, a washer engaging the bottom of the recess longitudinally movable and non-rotative on the plug, a lever projecting from the washer outside of the chamber and a nut on the plug engaging the washer to hold the plug to its seat. 65 70 75

5. A gas fixture, comprising a body having an outwardly tapered axial opening, a chamber in the outer end and a lateral recess, a flange surrounding the outer end of the chamber, a cap having a central opening mounted on the flange, a movable closure for the said opening, a rotative plug in the tapered opening having a divided axial passage and lateral openings to communicate with the recess, a washer engaging the bottom of the chamber and non-rotative on the plug, a nut engaging the washer, a lever projecting from the washer between the flange and cap, a nipple on the plug, a coupling attached to the nipple by a bayonet joint and a screw inserted in the body and projecting into the said joint to lock the coupling in place when the plug is in open position. 80 85 90 95

In testimony whereof we affix our signatures in presence of two witnesses.

GLENN R. CHAMBERLAIN.
ALBERT G. SCHROEDER.

Witnesses:

PALMER A. JONES,
MAE RANKIN.