

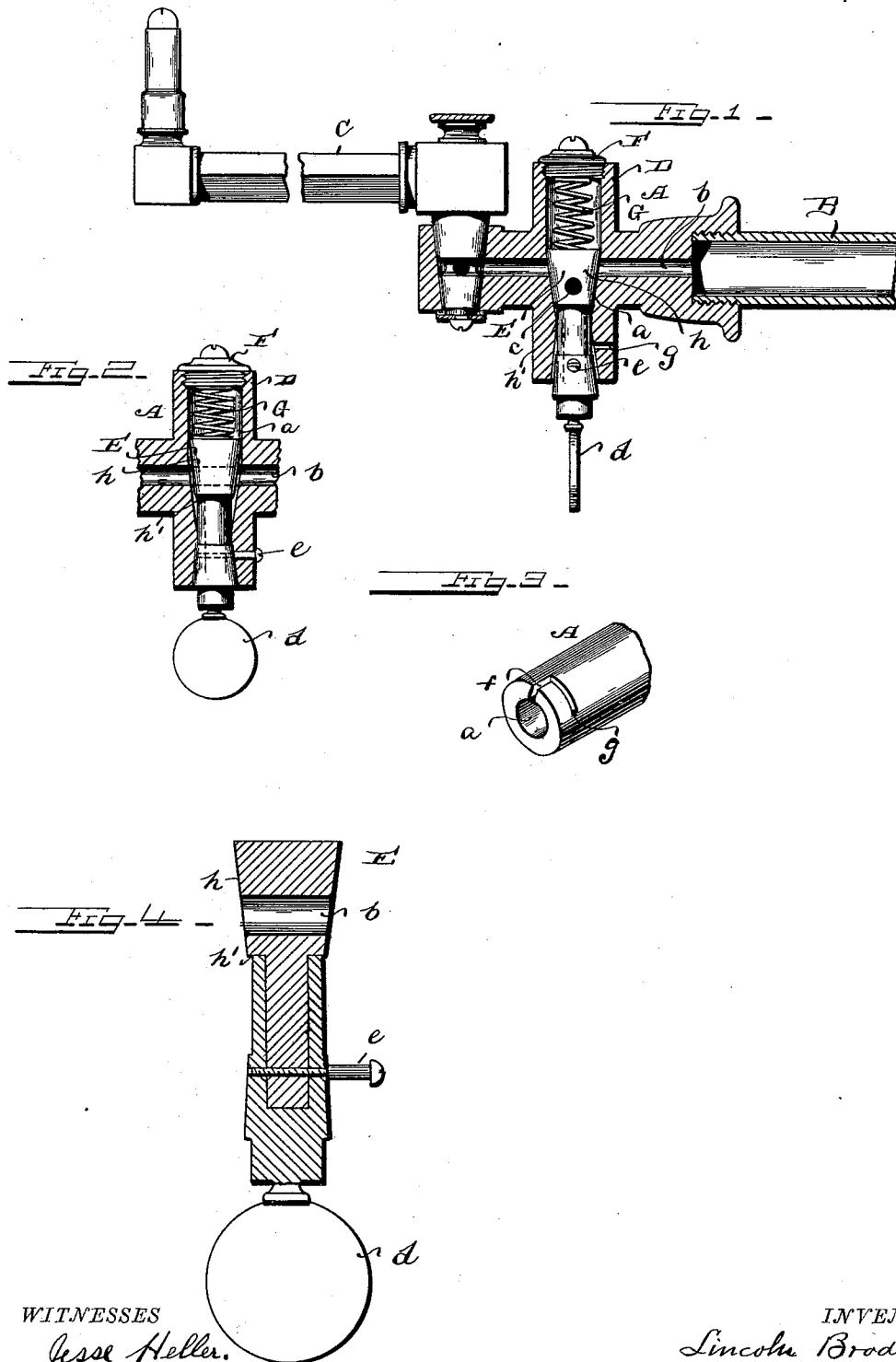
(No Model.)

L. BRODT.

SAFETY STOP COCK FOR GAS FIXTURES.

No. 508,275.

Patented Nov. 7, 1893.



WITNESSES

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UNITED STATES PATENT OFFICE.

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SAFETY STOP-COCK FOR GAS-FIXTURES.

SPECIFICATION forming part of Letters Patent No. 508,275, dated November 7, 1893.

Application filed March 11, 1893. Serial No. 465,511. (No model.)

To all whom it may concern:

Be it known that I, LINCOLN BRODT, a citizen of the United States, and a resident of West Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Safety Stop-Cocks for Gas-Fixtures; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a view in elevation partly in section showing the invention as applied with the cock closed. Fig. 2 is a detail sectional view of the invention with the cock open. Fig. 3 is a detail perspective view of portion of the fixture and Fig. 4 is a detail sectional view of the cock or valve.

This invention has relation to certain new and useful improvements in safety stop cocks for gas fixtures, and it consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the claims.

The object of the invention is to provide a stop cock of this character with a simple and efficient safeguard against its being accidentally turned, as frequently happens with the old style of cocks, the escaping gas often causing fatal results.

Referring to the accompanying drawings, the letter A designates that portion of a gas fixture which contains the seat *a* for the cock or valve; B designates the feed pipe connection, and C the burner arm, said connections being made in the usual or in any well known manner.

In the particular form of fixture illustrated, the seat *a* for the cock or valve is formed through the vertical arm or portion D of the fixture, and intersects the gas passage *b* at right angles.

E designates the cock or valve which has a rotary and a vertical movement in said seat, and is formed with a horizontal aperture *c* therethrough, which when the cock is in the closed position shown in Fig. 1, is in a position substantially at right angles to the gas pas-

sage *b*, and considerably below the plane thereof. The projecting stem of said cock at the lower end carries the usual finger piece *d*. Said stem also carries a projecting pin *e*, which when the cock is closed lies between the walls of a narrow vertical slot *f* cut in the arm D from its lower edge, this engagement of the pin and slot normally preventing the rotary movement of the cock. Seated upon the upper end portion of the cock is a coiled spring G, which at its upper end bears against a screw plug F, seated in the upper portion of the seat *a*. The vertical slot *f* at its upper end has a horizontal extension *g*, and in order to open the cock, it is first necessary to press the stem upwardly against the tension of the spring G sufficiently to bring the pin *e* into alignment with said horizontal extension, and this vertical movement also brings the aperture *c* to the plane of the gas passage *b*. When in this position, the cock may be rotated sufficiently to bring said aperture and passage into alignment, the end wall of said slot extension serving as a stop to prevent its being rotated beyond the point of alignment. The position of the parts with the cock open is shown in Fig. 1.

In order that the cock may form a tight joint with its seat for the purpose of preventing the escape of gas around it, its upper portion is formed with a downward taper or conical portion *h*, as shown, having an offset, and reduced portion at *h'*, the seat at this point having a corresponding form. It will be apparent that the vertical movement against the spring required in order to bring the cock into position to permit its rotation, forms an efficient safeguard against said cock being opened in any accidental manner.

It will be understood that I do not wish to limit myself to the application of my improvement to the particular form of fixture shown and described, as it is evident that I may adapt it to other forms of fixture without departing from the spirit and scope of the invention.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with the fixture having the seat therein, the vertical slot in the lower wall of said seat, and the horizontal extension

at the upper end of said seat, of the valve or cock capable of a vertical and a rotary movement in said seat, the spring bearing on the upper end portion of said cock or valve, and
5 the pin projecting from the stem of said valve and normally engaging said vertical slot, substantially as specified.

2. The combination with the fixture having the gas passage therethrough, the seat intersecting said passage, and the slot in the lower
10 wall of said seat, said slot having a horizontal extension at its upper end, of the valve or cock having a rotary and a vertical movement in said seat, a gas aperture therethrough normally below the plane of said gas passage, and
15 out of alignment therewith, a pin projecting from the stem of said valve or cock and normally in engagement with said vertical slot, the spring seated on the upper portion of said
20 valve or cock, and the screw plug against

which the upper end of said spring bears, substantially as specified.

3. The combination with the fixture having the gas passage therethrough, and the seat intersecting said passage, of the valve or cock
25 having a vertical and a rotary movement in said seat and means for normally preventing said rotary movement, said valve or cock having a tapered or conical portion, normally fitting a similarly-shaped portion of the seat, and
30 a gas opening through said plug, said opening being below the plane of the gas passage through the fixture when the plug is closed, substantially as specified.

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

LINCOLN BRODT.

Witnesses:

OTTO NIEHAUS,
W. E. BOYER.