

(No Model.)

2 Sheets—Sheet 1.

H. LAUDE.

SAFETY ATTACHMENT FOR GAS COCKS.

No. 324,123.

Patented Aug. 11, 1885.

Fig. 1

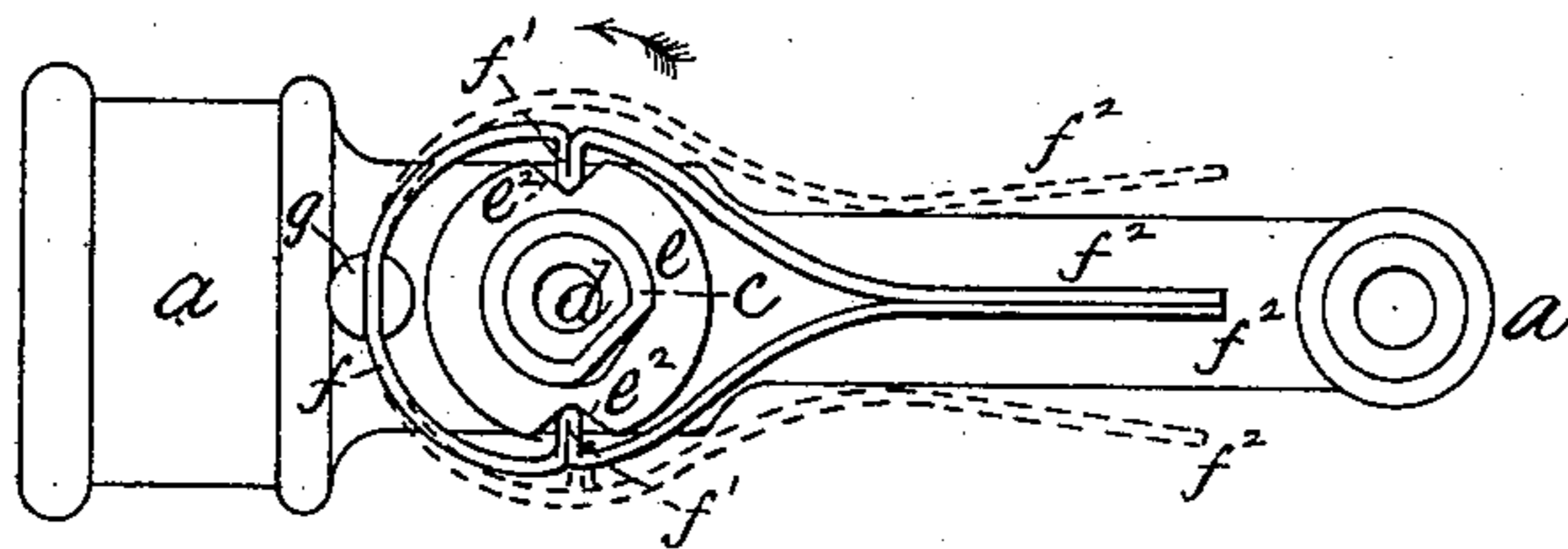
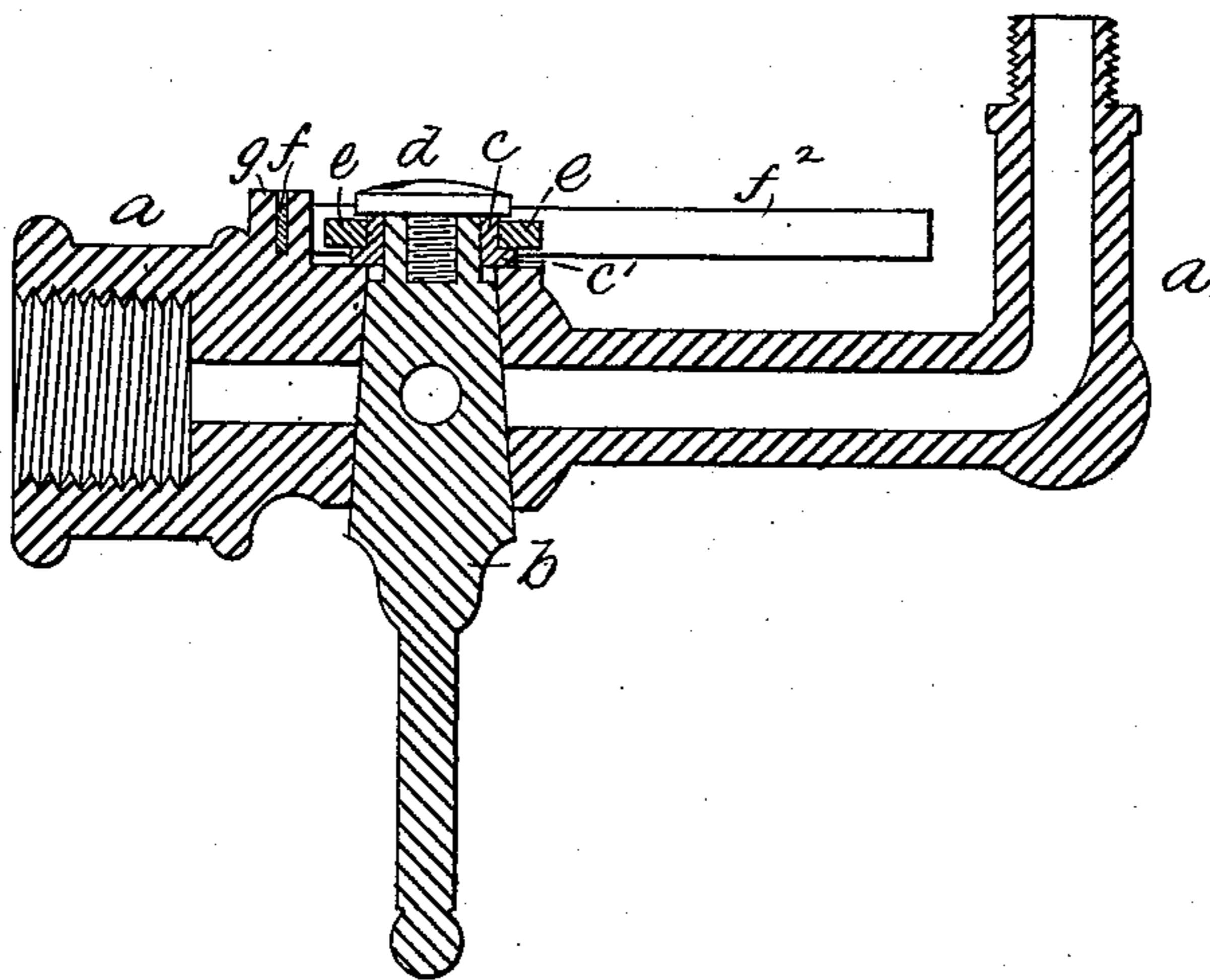


Fig. 2



Witnesses

H. D. Williams

Chas. E. Mott

Hester Laude,

Inventor

per Alfred Hedrick
Att'y

(No Model.)

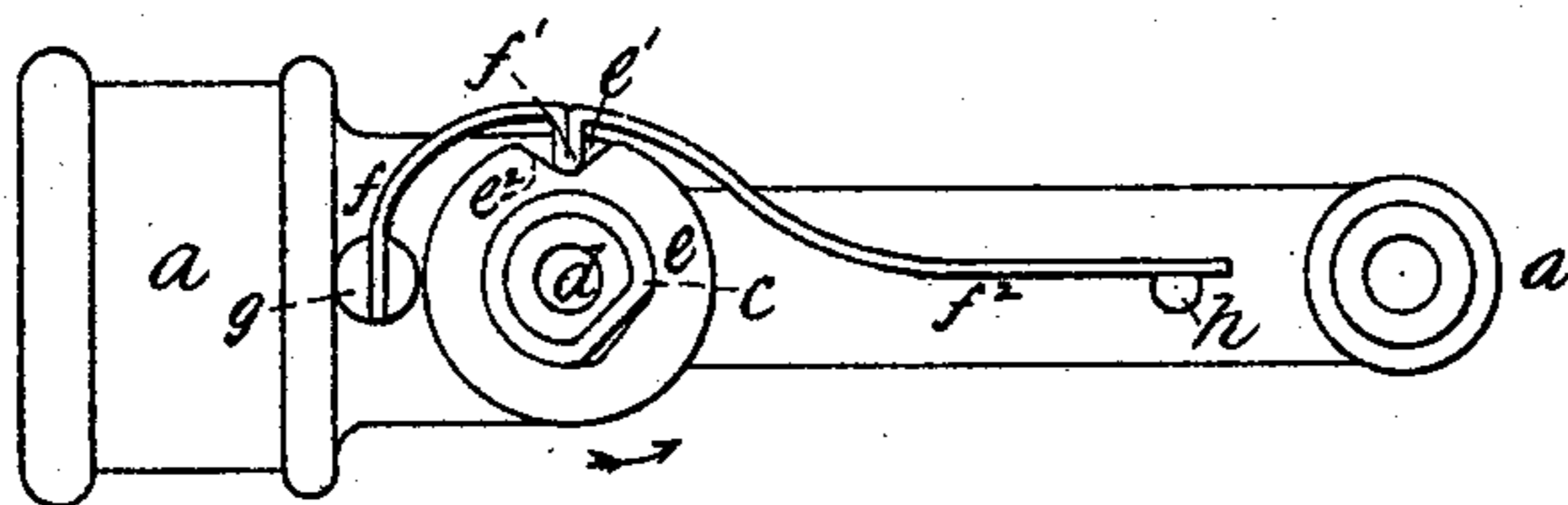
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Fig. 3



Witnesses.

H. D. Williams
Chas. L. Watson

Hester Laude
Inventor
per Alfred Hedlock
Atty.

UNITED STATES PATENT OFFICE.

HESTER LAUDE, OF NEW YORK, N. Y.

SAFETY ATTACHMENT FOR GAS-COCKS.

SPECIFICATION forming part of Letters Patent No. 324,123, dated August 11, 1885.

Application filed June 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, HESTER LAUDE, a citizen of the United States, and a resident of New York, county and State of New York, have invented a certain new and Improved Safety Device for Gas-Cocks, of which the following is a specification.

The cocks of gas-burners after being in use a short time generally become so loose that unless care be exercised in closing them they are apt to be turned back, so as to allow the gas to escape after being extinguished.

Now, this invention has for its object to provide a simple and effective means for insuring the complete closing of gas-cocks and holding them in closed position, and giving audible notice at the time of such action; and it consists in the application of a spring fixed to the body, and bearing against a disk on the end of the plug of the cock, the disk having notches into which catch projections on the spring when the gas is shut off, which offer sufficient frictional resistance to prevent the accidental turning of the plug. The free ends of the spring, which extend some distance beyond the disk, are so constructed as to vibrate and emit a sound as they come in contact, which they do when the projections fall into the notches of the disk, thus clearly indicating that the cock is properly closed. To insure the sharp quick action of the spring to cause it to produce a clear distinct sound, the disk is fitted on the plug with a certain amount of rotary freedom, so that it is pushed forward when the projections of the spring pass over the edges of the notches, thus allowing the spring to react quickly, even though the plug be turned very slowly in shutting off the gas; but to describe my invention more particularly, I will now refer to the accompanying drawings, in which—

Figure 1 is a plan view of a gas burner and cock provided with my safety device. Fig. 2 is a longitudinal section of the same. Fig. 3 is a view similar to Fig. 1, showing a modification in the same.

In applying my new safety device to gas-cocks no material changes are made in the construction of the body *a* and plug *b* of the same. The washer *c* has a flange, *c'*, which bears on the top of the body *a*, and it is fitted on the end of the plug *b*, so as to turn with it—that

is, by the formation of a flat on the side of the stud on which it fits—and is held in place by the screw *d*, in the ordinary manner. On the outside of the washer *c*, which is also flat on one side, is fitted the disk *e*, between the flange *c'* and the head of the screw *d*. This disk *e* is free to partly rotate on the washer *c*, but is moved around with it when the plug is turned. The locking and sonorous spring *f* is held at its central part in the lug *g*, attached to or forming a part of the body *a*. It is bent, as shown, with the projections *f' f'* arranged to embrace the disk *e*, and with its two ends *f² f²* close together when the projections *f' f'* are in the notches *e' e'* of the disk *e*, as shown in Fig. 1, in which the plug *b* is represented closed, and the screw *d* is removed to more clearly show the disk *e*. When in this position the spring, by the projections *f' f'* being in the notches *e'* of the disk *e*, offers sufficient resistance to prevent any accidental turning of the plug *b*; but the projections *f' f'* ride up the sides of the notches onto the periphery of the disk *e* when the gas is turned on, and separate the ends *f² f²* of the spring, as shown by the dotted lines. The sides of the notches are so inclined as to allow of the movement of the plug *b* in either direction.

Now, in turning the plug *b* so as to shut off the gas—say, in the direction indicated by the arrow—the edges *e² e²* of the notches of disk *e* come under the projections *f' f'* of the spring just after the gasway is fully closed, and these projections throw the disk forward, as shown by the space between the flat in the disk and that on the washer, which allows the spring to react quickly, so that its two ends *f² f²* are brought sharply together and produce a clear and distinct sound.

It is evident the notched disk *e* may be connected, so as to be moved by the plug *b*, and have a certain amount of play thereon in other ways, and also that a spring with but one branch may be used, as shown in Fig. 3, by allowing its free end to strike a fixed stud, *h*, projecting from the body *a*, when its projection *f'* falls into the notch of the disk *e*. So I do not wish to confine myself to the particular construction shown; but,

What I claim, and desire to secure by Letters Patent, is—

1. The combination, with the body and plug

of a gas-burner, of a notched disk carried by the plug, and a spring secured at one end to the body, operated by the notched disk and extending some distance beyond the same, substantially as and for the purpose set forth.

2. In a safety gas-cock, in combination, the plug *b*, notched disk *e*, and spring *f*, having projections *f'* *f'* and extended ends *f*² *f*², substantially as and for the purpose set forth.

3. In combination, the plug *b*, flanged washer *c*, fitted to rotate therewith, the holding-screw *d*, the notched disk *e*, fitted in the wash-

er *c* so as to partly rotate thereon, and the spring *f*, secured to the body *a* and actuated by the disk *e*, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand, at New York, county and State of New York, this 17th day of June, A. D. 1884.

HESTER LAUDE.

Witnesses:

ALFRED SHEDLOCK,
H. D. WILLIAMS.

It is hereby certified that the name of the patentee of Letters Patent No. 324,123, granted August 11, 1885, for an improvement in "Safety Attachments for Gas-Cocks," should be read *Hester Lande* instead of "Hester Laude"; and that the said Letters Patent should be read with this correction therein to make it conform to the corrected files and records of the case in the Patent Office.

Signed, countersigned, and sealed this 18th day of August, A. D. 1885.

[SEAL.]

H. L. MULDROW,
Acting Secretary of the Interior.

Countersigned:

M. V. MONTGOMERY,
Commissioner of Patents.