

(Model.)

J. & J. H. DUTTON.

SAFETY KEY FOR GAS BURNERS.

No. 332,648.

Patented Dec. 15, 1885.

Fig. 1.

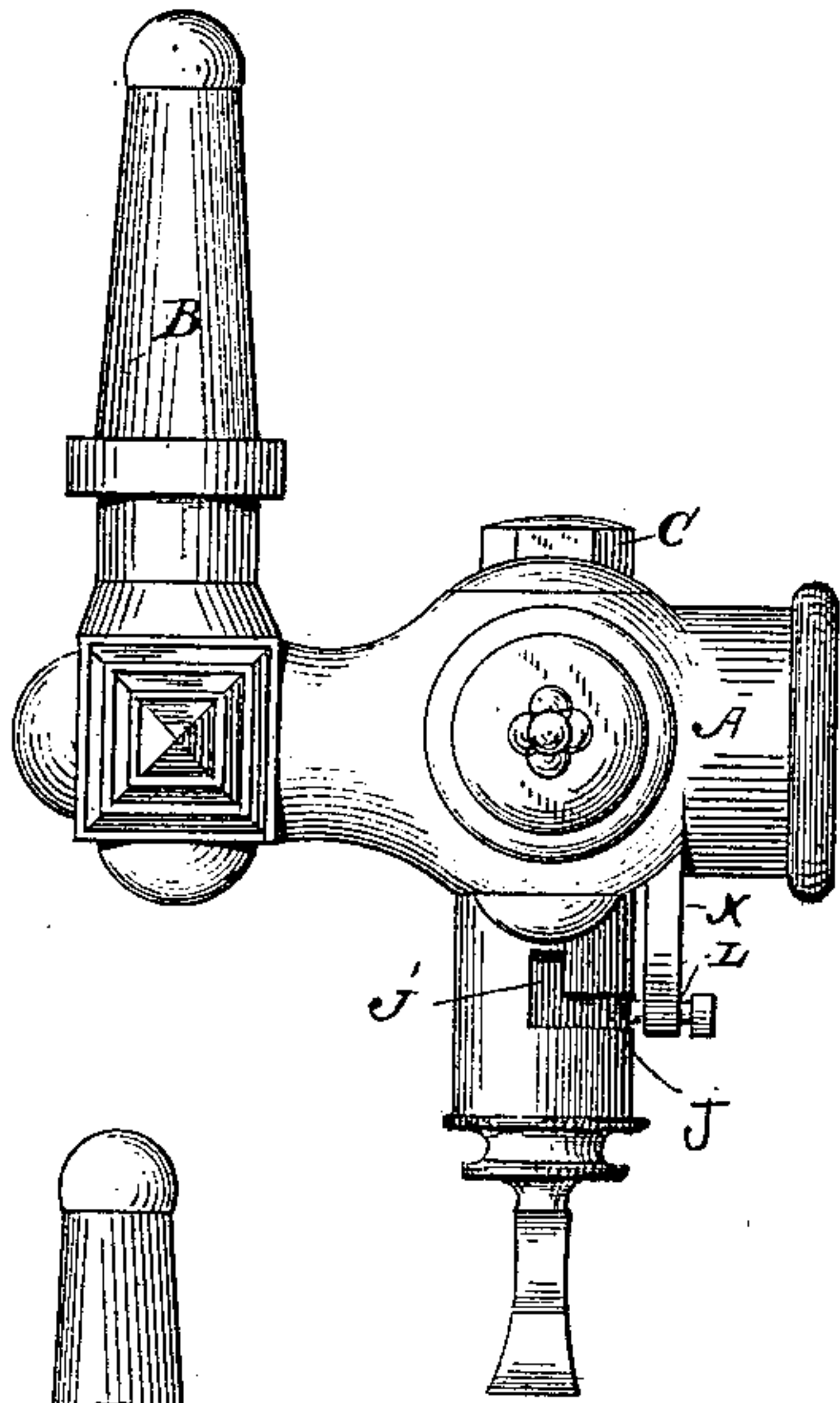


Fig. 2.

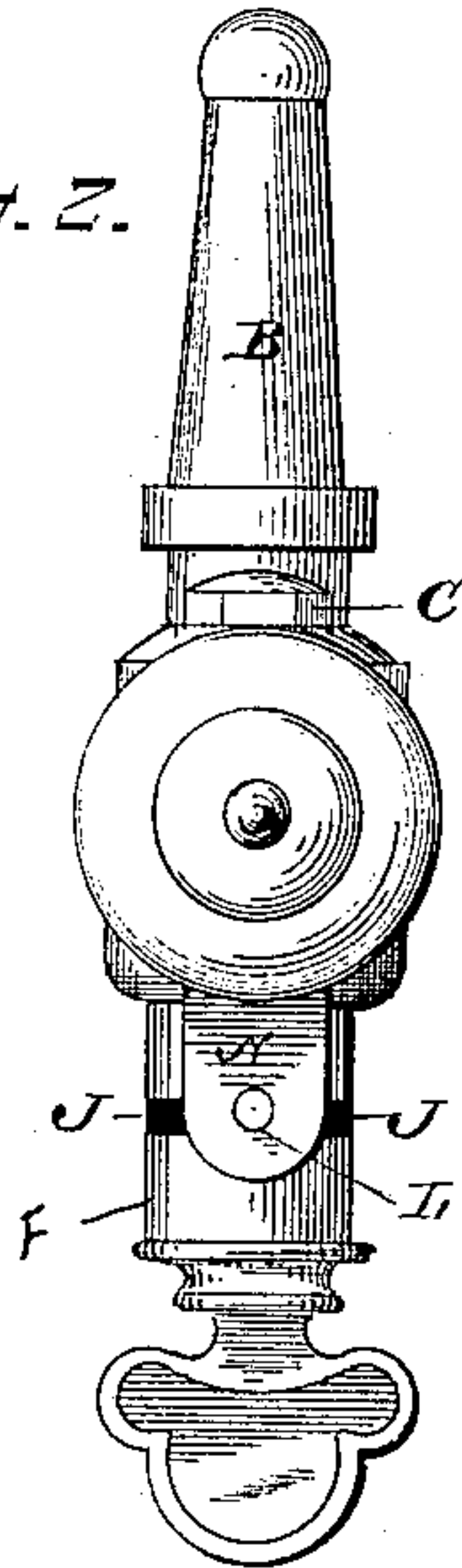


Fig. 3.

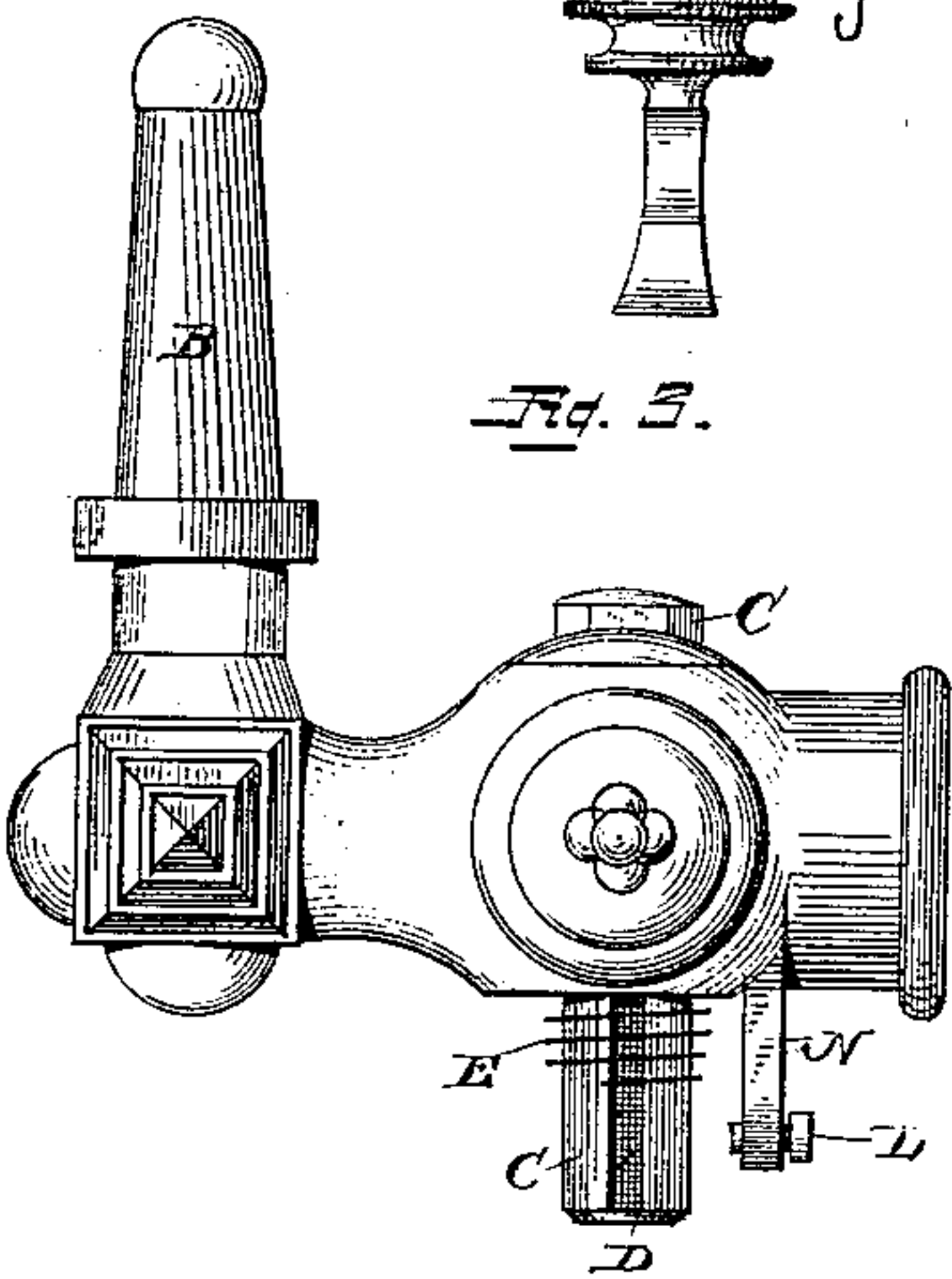


Fig. 4.

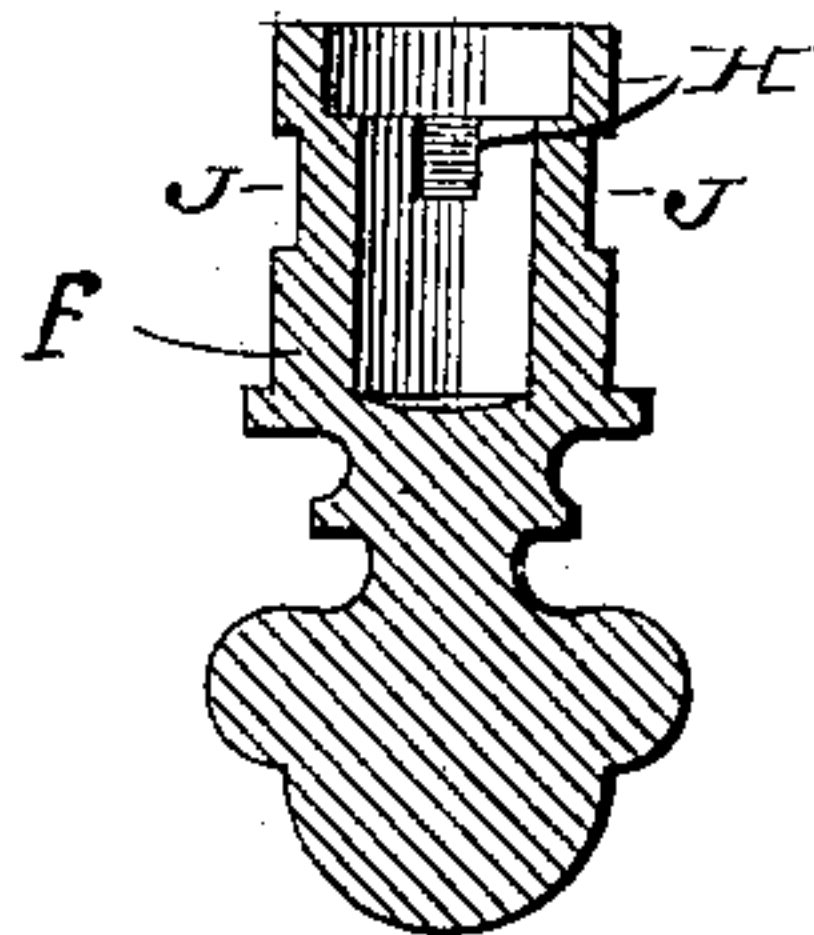


Fig. 5.

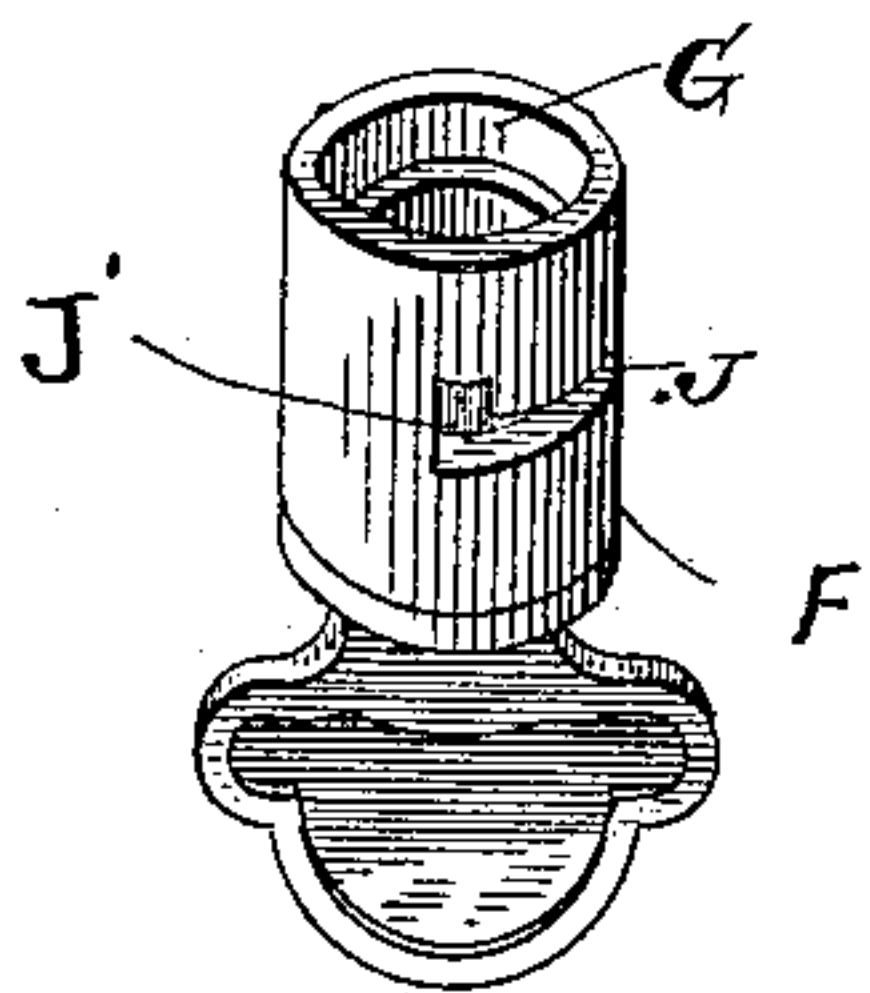
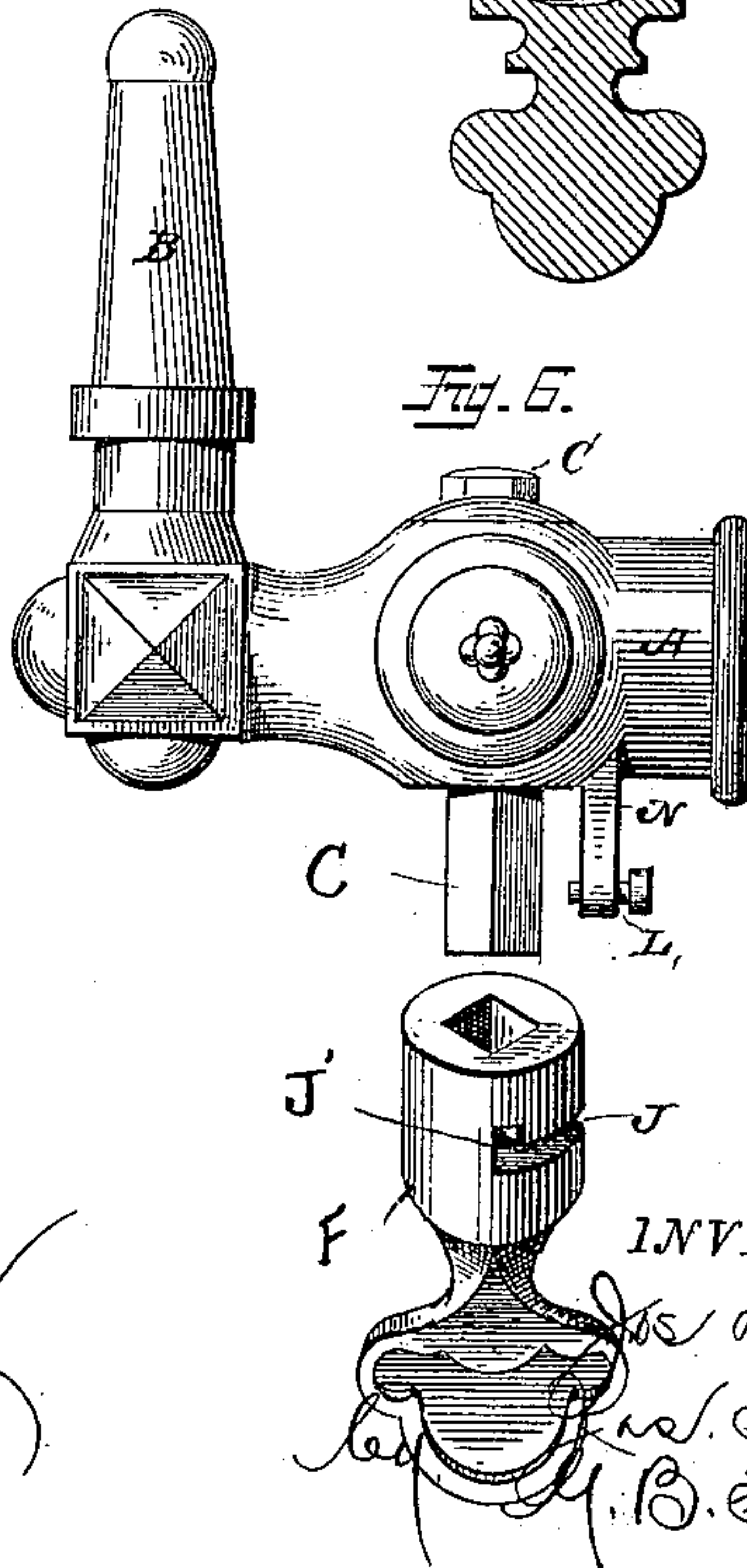


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH DUTTON AND JAMES H. DUTTON, OF SAN FRANCISCO, CALIFORNIA.

SAFETY-KEY FOR GAS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 332,648, dated December 15, 1885.

Application filed July 1, 1884. Serial No. 136,509. (Model.)

To all whom it may concern:

Be it known that we, JOSEPH DUTTON and JAMES H. DUTTON, citizens of the United States, residing in the city and county of San Francisco and State of California, have invented a new and useful Safety-Key for Turning On and Off Gas-Burners, of which the following is a specification.

Our invention relates to improvements in gas-burners; and it consists in certain devices for preventing the escape of gas by being partially turned off or by the key being turned on by being accidentally hit, as has often occurred. It will be more readily understood by the letters marked thereon.

Figure 1 is a side and Fig. 2 an end elevation of a gas-pipe and burner with our improvement attached. Fig. 3 is a side elevation of the same with the key removed. Fig. 4 is a perspective view of the key, and Fig. 5 is a sectional view of the same. Fig. 6 is a modification.

A is the gas-pipe, B the burner, and C the plug. The said plug C is provided at its lower end with a vertical groove or channel, D.

E represents a spiral spring, which is located on the post C, and which is adapted to bear against an interior shoulder, G, on the key F when the same is engaged with the plug C. The said key F is provided with an inwardly-extending nib or lug H, which is adapted to engage the channel or groove D on the plug, so that when the key is turned the plug will be moved therewith to turn the gas on or off.

Depending from the pipe A is a plate, N, in which works a pin or screw, L, the end of which is adapted to engage a slot, J, in the key F, said slot having communication with vertical slots J', located at the ends of the slot J.

The following is the operation of the same: In Fig. 1 the gas is turned full on, and it may be turned around either way, gradually turn-

ing the gas to any degree until it arrives at the vertical end of the slot J on either side, when it drops down and is securely held from turning, the gas being entirely turned off.

The spring E may or may not be employed; but it insures a more ready action in case the key fits closely, although it is intended to fit loosely, and drop down readily when the vertical part of the slot is reached by the set-screw and guide-pin L.

We do not confine ourselves to the exact form of key-post for turning the plug C, as the same effect may be produced by constructing the key-post upon the lower end of the valve-plug C square, with a key conforming to the same, and fitting similarly to the ordinary clock-key in its application to the key-post of a clock.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with the pipe A and plug C, of the key F, having a slot, J, and vertical slots J' at the ends of slot J, the plate N, having an opening, and the pin L, working therein, for the purpose set forth.

2. The combination, with the pipe A and plug C, having the groove or channel D, of the key F, having an inwardly-extending nib, H, slots J J' in the key, the plate N, and pin working therein, for the purpose set forth.

3. The combination, with the pipe A, a plug, C, and a spiral spring fitting thereon, of the key having an interior shoulder to bear against said spring, slots J J' in the key, the plate N, and pin working therein, for the purpose set forth.

In testimony whereof we have hereunto set our hands.

JOSEPH DUTTON.
JAMES H. DUTTON.

Witnesses:

JOHN H. REDSTONE,
L. E. REDSTONE.