

(No Model.)

J. O. DAHLGREN.
ELECTRIC GAS LIGHTER.

No. 515,397.

Patented Feb. 27, 1894.

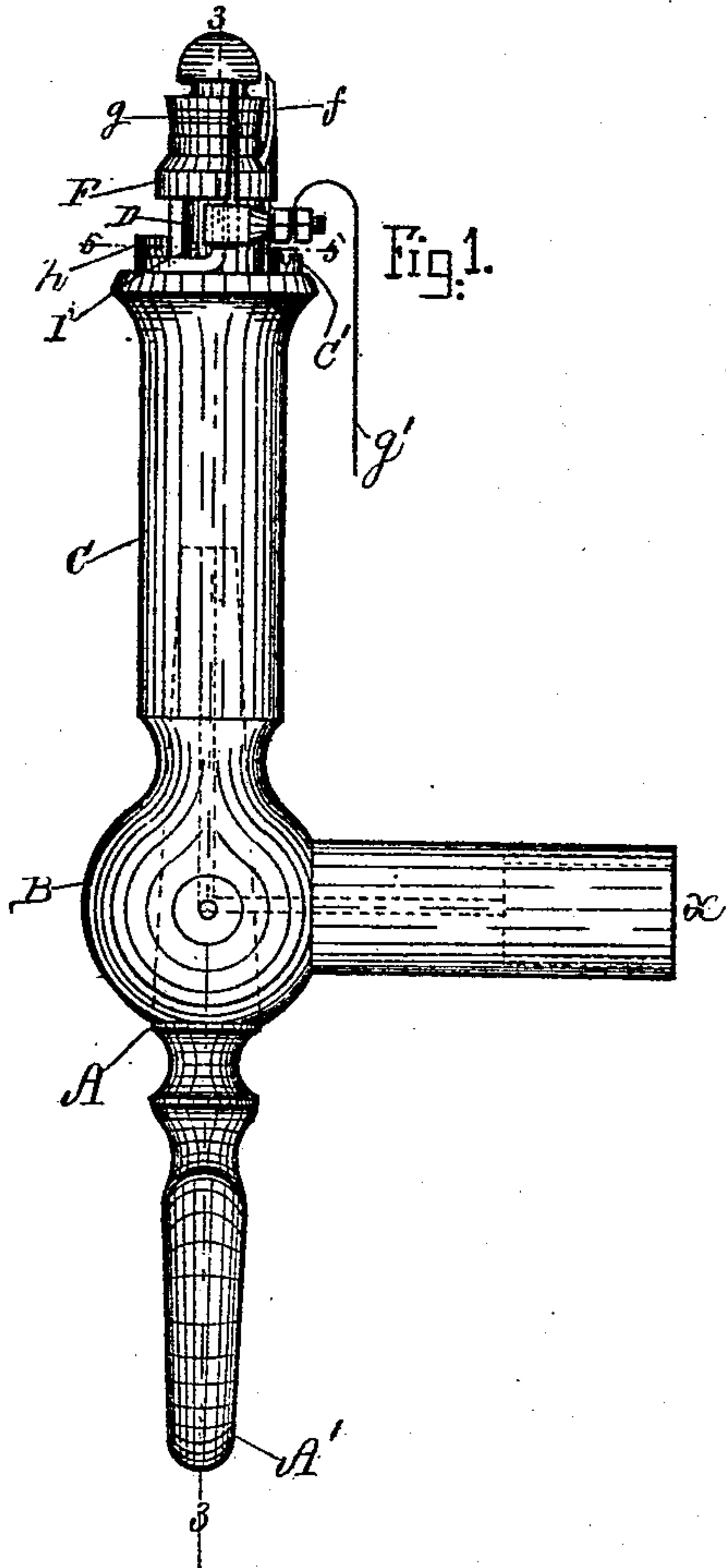


Fig. 1.

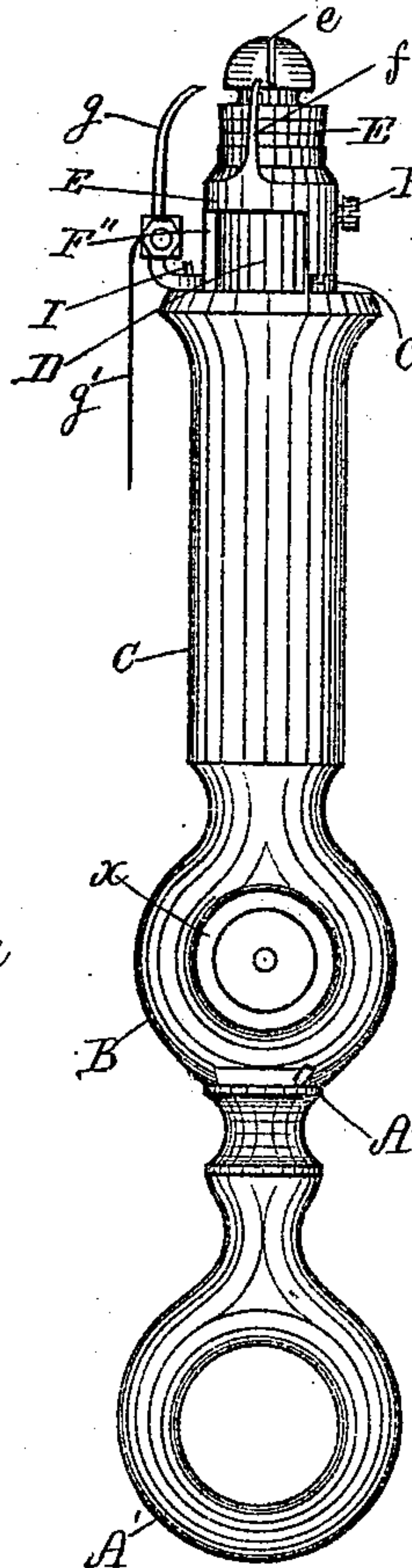


Fig. 2.

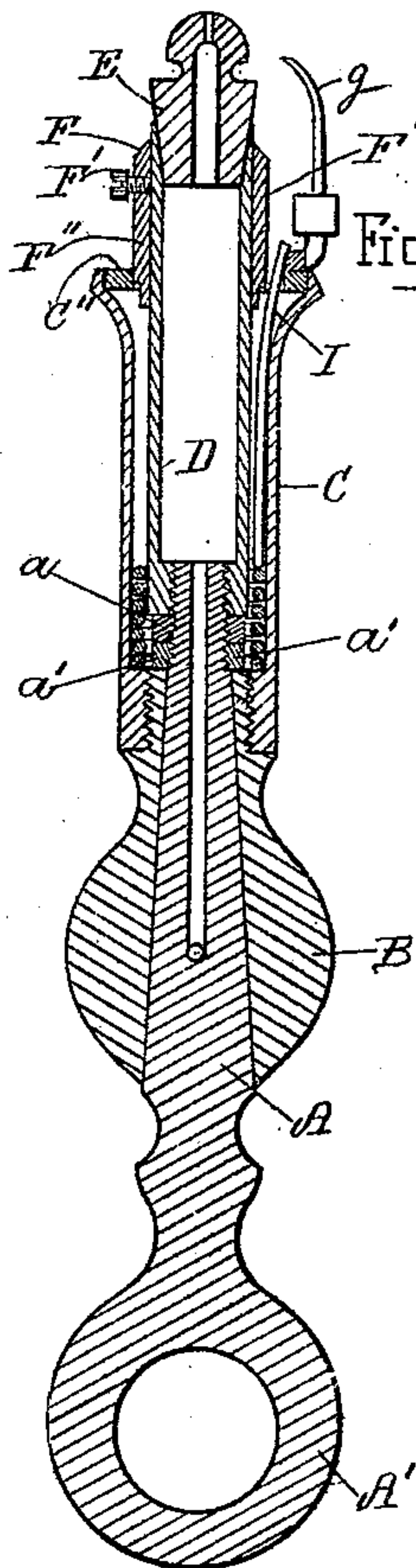


Fig. 3.

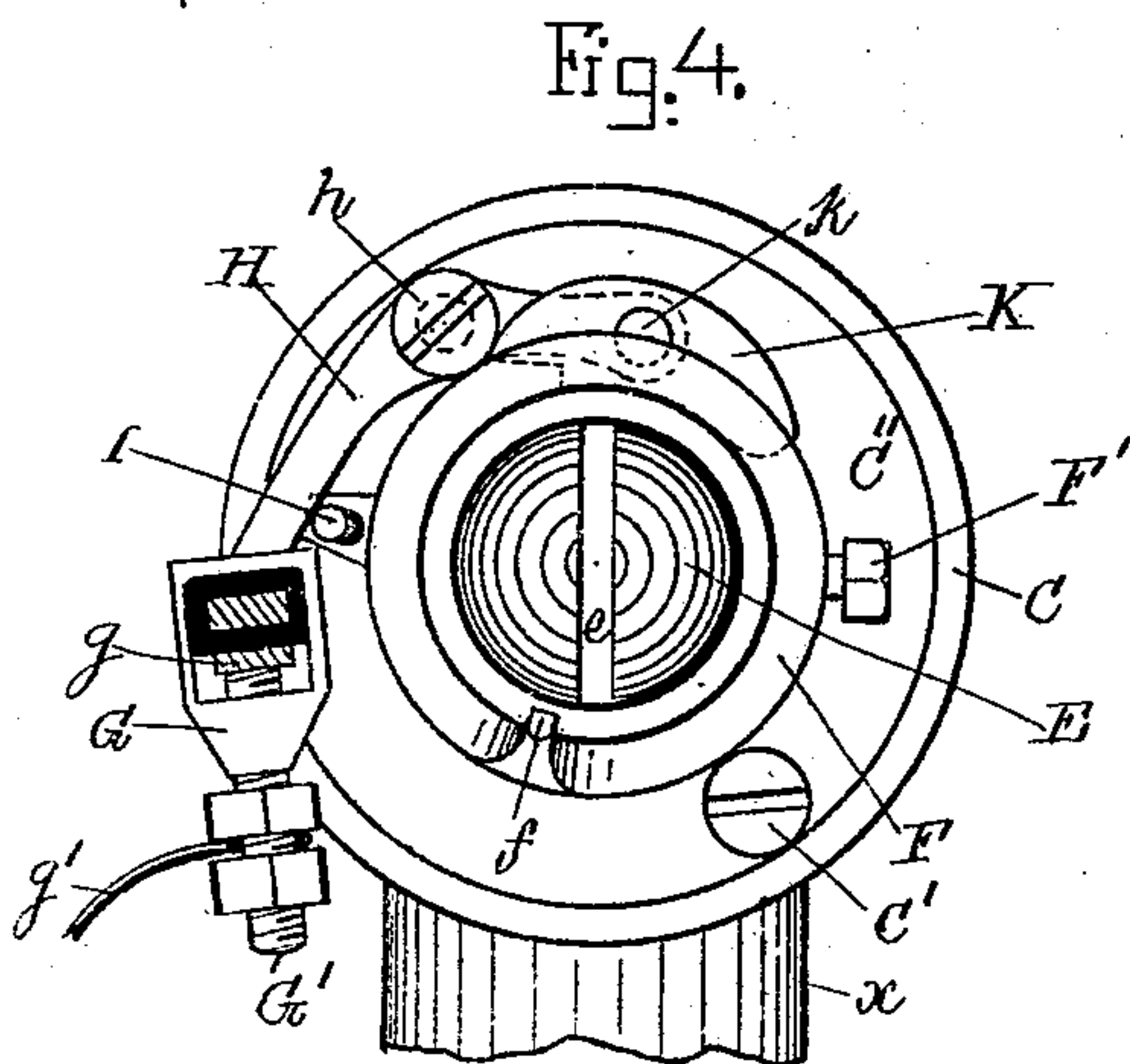


Fig. 4.

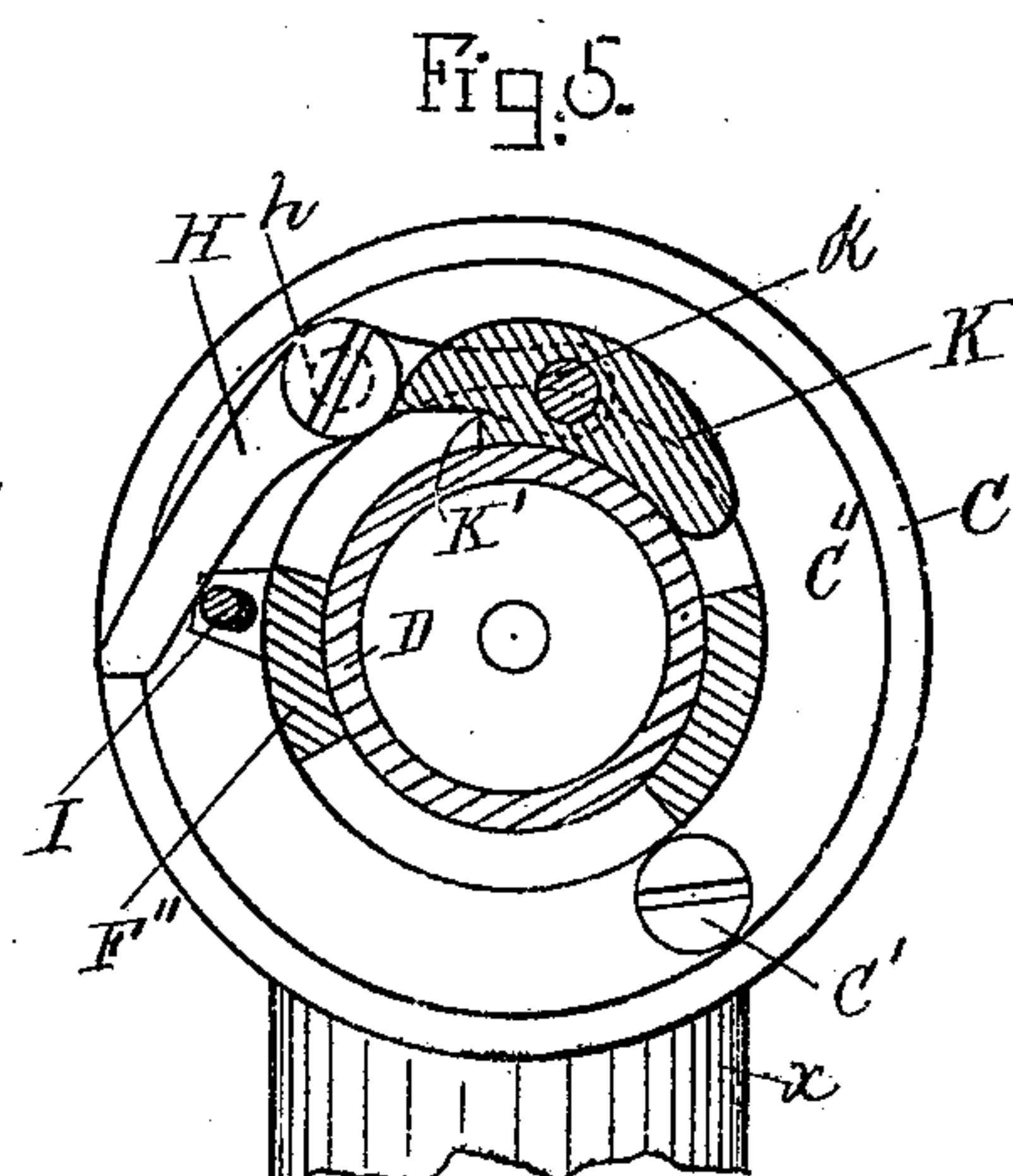


Fig. 5.

Witnesses.

Lauritz N. Moller.
Mary C. Moller.

Inventor

John O. Dahlgren
by *Alban Freden*
his atty.

UNITED STATES PATENT OFFICE.

JOHN O. DAHLGREN, OF BOSTON, MASSACHUSETTS.

ELECTRIC GAS-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 515,397, dated February 27, 1894.

Application filed December 30, 1893. Serial No. 495,233. (No model.)

To all whom it may concern:

Be it known that I, JOHN O. DAHLGREN, a subject of the King of Sweden and Norway, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Electric Gas-Lighters, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in electric gas lighters and it is carried out as follows, reference being had to the accompanying drawings wherein—

Figure 1, represents a side elevation of the invention showing the cock closed. Fig. 2, represents an end elevation seen from X in Fig. 1. Fig. 3, represents a central longitudinal section on the line 3—3 shown in Fig. 1. Fig. 4, represents an enlarged top plan view partly shown in section; and Fig. 5, represents an enlarged cross section on the line 5—5 shown in Fig. 1.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

A represents the tapering gas cock or plug journaled in the shell B and adapted to be turned therein between stops from open to shut positions as is common in gas cock devices.

A' is the handle of the plug A in the usual manner.

The upper end of the shell B is preferably screw threaded as shown in Fig. 3 and to it is detachably, but firmly secured the upwardly projecting tubular casing C to the upper end of which is preferably secured by means of a screw C' the ring C'' as shown in the drawings. The upper end of the cock A is also screw threaded and provided with the nut and washer a a' for the purpose of retaining said cock within its shell as shown in Fig. 3.

To the upper end of the cock A is secured the metal gas tube D provided with a tip or burner E as shown, the latter having a slitted opening e as is common in gas burners. To the upper end of the tube D is secured in an adjustable manner, preferably by means of a set screw F' the metal ring F having a projection F'' adapted to actuate the insu-

lated electrode g so as to bring it in contact with the electrode f secured to or forming a part of the metal ring F during the opening movement of the cock A as will hereinafter be more fully shown and described. The electrode g is secured in an insulated manner to a lever H pivoted at h to the ring C'' or upper end of the casing C and is normally held in the position shown in the drawings by the influence of a suitable spring I arranged between the tube D and casing C and I wish to state that any suitable or desirable form of spring may be used for this purpose as may be most convenient.

In practice I prefer to secure the electrode g in an insulated manner to the clamping socket G by means of a set screw G' to which one of the circuit wires g' leading from the battery is secured, the other pole of the battery being metallically connected to the gas pipe as is usual in electric gas lighting devices.

To the spring pressed lever H is pivoted at k a pawl K having a tooth K' adapted to be brought in contact with the projection F'' on the sleeve F when the gas cock is being turned from a closed to an open position.

The operation of this my improved electric gas lighter is as follows: By turning the cock A from closed to open position the projection F'' attached to the tube D comes in contact with the tooth K' on the pivoted pawl K by which the lever H is caused to swing on its fulcrum sufficiently to cause the electrode g to be brought in metallic contact with the electrode f and to be released therefrom as the said projection F'' passes by the tooth K' on pawl K causing a spark to be emitted between the electrodes by which the gas flowing from the tip of the burner is ignited. When the gas is ignited the electrodes are held at one side of the flame so as to not become unnecessarily heated. The electrode g is returned to its normal position shown in the drawings during the movement of the gas cock A from its open to its closed position.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

In an electric gas lighter the combination of a gas cock having attached to its plug an

electrode adjacent to the slit in the burner
and having a projection attached to said plug
or its connections combined with a station-
ary inclosing case, a spring pressed lever piv-
5 oted thereto and having in one end an insu-
lated electrode and in the other end a piv-
oted pawl adapted to be actuated by the pro-
jection on the gas cock substantially as and
for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 23d day of December, A. D. 1893.

JOHN O. DAHLGREN.

Witnesses:

ALBAN ANDRÉN,
KITTIE M. HANSON.