

No. 747,446.

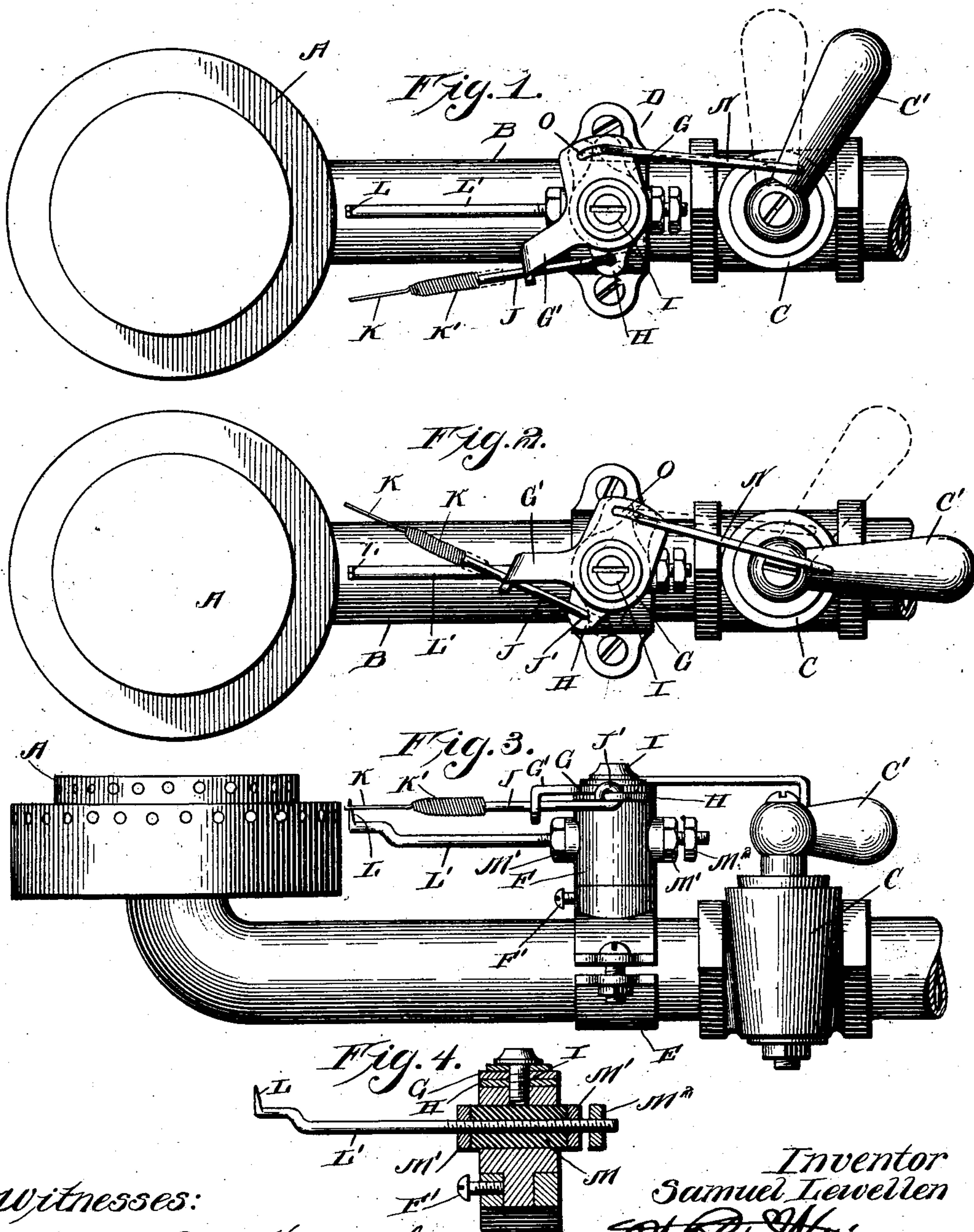
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ELECTRIC LIGHTING ATTACHMENT FOR GAS STOVES.

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NO MODEL.



Witnesses:

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UNITED STATES PATENT OFFICE.

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ELECTRIC LIGHTING ATTACHMENT FOR GAS-STOVES.

SPECIFICATION forming part of Letters Patent No. 747,446, dated December 22, 1903.

Application filed December 9, 1902. Serial No. 134,524. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL LEWELLEN, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Electric Lighting Attachments for Gas-Stoves, of which the following is a specification.

My invention relates to a new and useful improvement in electric lighting attachments for gas-stoves, and has for its object to provide an electric lighting attachment which may be attached to gas-stoves and whereby the gas will be ignited as soon as the valve is open; and a further object of my improvement is to so construct the attachment that upon the return movement or when the gas is turned off a spark will not be formed.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of my attachment applied to a gas-stove, showing the valve in its closed position; Fig. 2, a similar view to Fig. 1, showing the valve open and the electric attachment in the position it would assume after the spark has been made; Fig. 3, a side elevation of my device applied to a gas-stove; Fig. 4, a vertical section through the electric lighting device.

A represents the burner of the gas-stove; B, the supply-pipe leading thereto.

C is the valve for controlling the gas-supply, and C' is the valve-handle.

D is the electric lighting attachment, which may be secured in any suitable manner to the gas-stove. In the drawings it is shown attached by means of a clip E, secured around the supply-pipe B. Arising from the clip E is a standard F, which is journaled in the clip, so that the standard can be turned to any position in a horizontal plane and set in position by means of a set-screw F'. Upon the upper end of the standard are pivoted two

plates G and H. A central screw I, threaded into the standard, forms the pivot. These two plates are one below the other, the plate G being on top.

J is the movable contact-arm, which is pivoted to the plate H at the point J'. This contact-arm J passes through an opening formed in the outer end of an arm G', extending outward from the plate G. Upon the outer end of the contact-arm J is secured the wire K, coiled at the point K', so as to form a flexible end upon the contact-arm, which is usually used in all electric lighting attachments.

L is a stationary contact-point which is formed upon the outer end of an arm L', which is secured in the standard by passing through an insulating-sleeve M, held in the standard, and this contact-arm is threaded, so as to make the same adjustable, and is secured in place by nuts M', threaded upon the same and binding against each end of the sleeve M. A nut M², threaded upon the extreme outer end of the arm L', serves as a binding-post to contact one of the electric wires, the other electric wire being connected to some portion of the stove or attachment.

N is a rod pivoted to the plate H upon the opposite side of the pivot from the point where the contact-arm J is pivoted. This rod N passes upward through a concentric slot O, formed through the plate G, and then the rod N is bent at right angles and extends to the handle C' of the valve C and is connected to said handle in any suitable manner, so that when said handle is moved so as to open or close the valve proper motion will be communicated through the rod N to operate the electric lighting attachment.

The operation of the device is as follows: When the valve C is closed, the parts of the electric lighting attachment are in position, as shown in dotted lines in Fig. 1, and in opening the valve the first movement, as shown in Fig. 1, from the dotted position to the position shown in full lines will only move the under plate H, as the rod N will travel in the slot O, and in moving this under plate the contact-arm J will be forced outward through the arm G', and as soon as the rod N reaches the end of the slot O further movement of the handle C' toward the open position will rotate both the plate G and H in

unison, and this will so move the contact-arm J as to cause the flexible end K to come in contact with the stationary contact-point L and snap past the same, so as to generate
 5 a spark in the well-known manner, and by the time the spark has been formed the valve is open and the gas flowing through the burner will thus be ignited. In turning off the gas it is obvious that no spark would be required,
 10 and it would only be a waste of electrical energy if a spark was generated at this time. Therefore the first movement to close the valve from the position shown in Fig. 2 from full lines to dotted lines will only move the
 15 bottom plate H, the rod N traveling in the slot O, and this movement of the bottom plate H will draw the contact-arm J backward through the arm G', so that when the rod N reaches the end of the slot O and the plate G
 20 is rotated, so that the arm J is caused to travel toward its normal position, the flexible end K will then pass inside of the contact-point L without touching the same, and in this manner no spark is generated when
 25 the gas is turned off.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from the spirit of my invention.

30 Having thus fully described my invention, what I claim as new and useful is—

1. The combination of a gas-burner, supply-pipe, gas-controlling valve and valve-handle, with electric lighting attachment consisting of a stationary contact-point secured
 35 to but insulated from the gas-stove, two plates pivoted between one pivot to the gas-stove, a flexible end contact-arm pivotally connected to the lower plate and adapted to
 40 slide through an opening formed through the end of an arm of the upper plate, a connection pivoted to the lower plate at one end and to the handle of the gas-valve at the other end, the upper plate being provided with a
 45 slot through which said connection passes, as and for the purpose specified.

2. In combination with a gas-burner, supply-pipe, gas-controlling valve and valve-handle, with electric lighting attachment consisting of a vertical standard secured to the
 50 gas-supply pipe, a stationary contact-point

arranged in juxtaposition to the burner and secured to but insulated from the standard, two plates pivoted upon the same pivot, one
 55 above the other upon the upper side of the standard, a flexible end movable contact-arm pivoted at its inner end to the lower plate, an arm extending outward from the upper
 60 plate through which said movable contact-arm passes and is adapted to slide, a rod pivoted at one end to the lower plate and extending upward through a slot provided in
 65 the upper plate, then passing to the handle and so secured to the handle that proper movement will be communicated to the electric lighting attachment when the handle is
 70 moved so as to open or close the valve, as and for the purpose specified.

3. In an electric lighting attachment, a standard adjustable in a horizontal plane, a
 75 set-screw for holding said standard stationary, said standard being in connection with one terminal of the source of electricity, a stationary contact-point formed upon the
 80 outer end of a screw-threaded rod, a sleeve of insulation passing through the standard, a screw-threaded rod passing through said sleeve and being secured in position by a
 85 lock-nut upon either end, said screw-threaded rod being in connection with the other terminal of the source of electricity, two plates pivoted upon the same pivot, one above the
 90 other upon the upper end of the standard, a flexible end movable contact-arm pivoted upon its inner end to the lower plate, an arm extending outward from the upper plate
 95 through which the movable contact-arm passes and is adapted to slide, an actuated rod pivoted to the lower plate upon the opposite side of the pivot from the point where
 the movable contact-arm is pivoted, said rod extending upward through a concentrically-formed slot provided in the upper plate, said rod then bent at right angles, as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

SAMUEL LEWELLEN.

Witnesses:

J. OSCAR GENTHER,
 J. C. GENTHER.