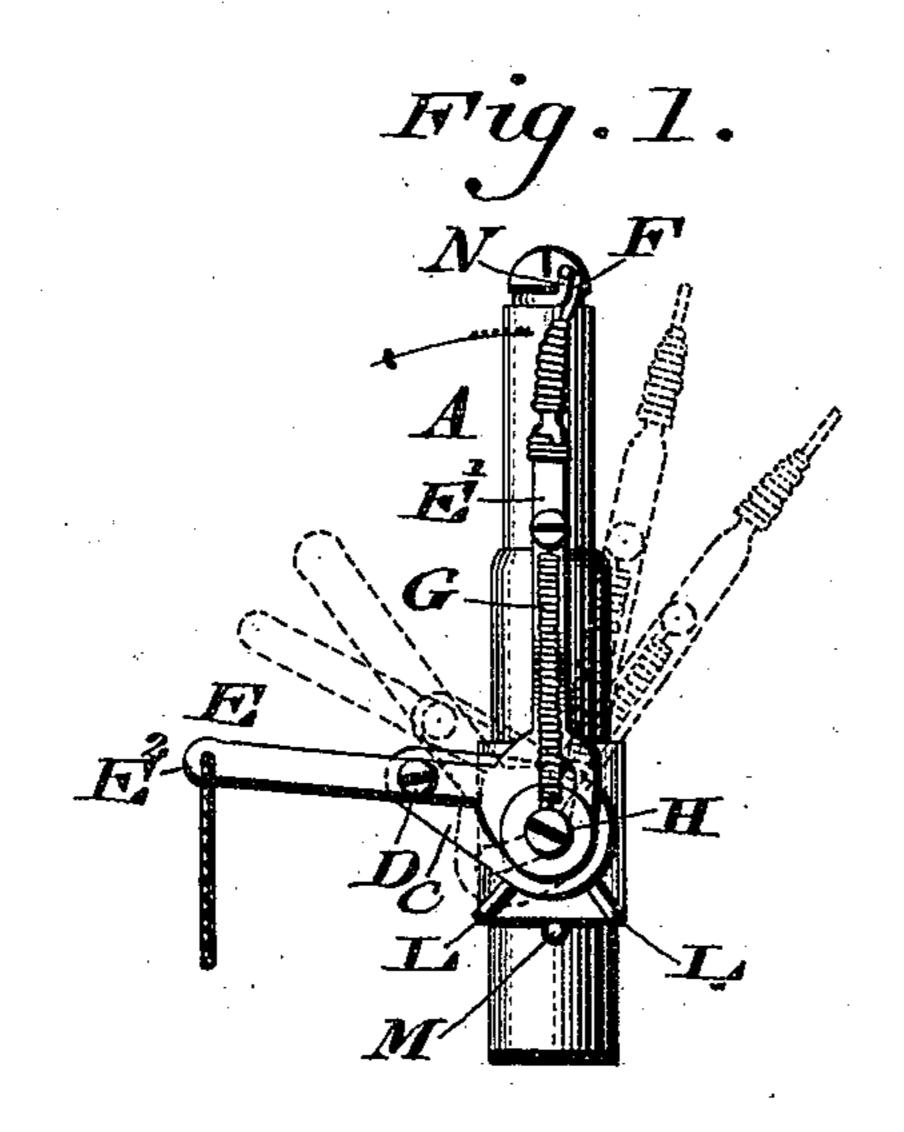
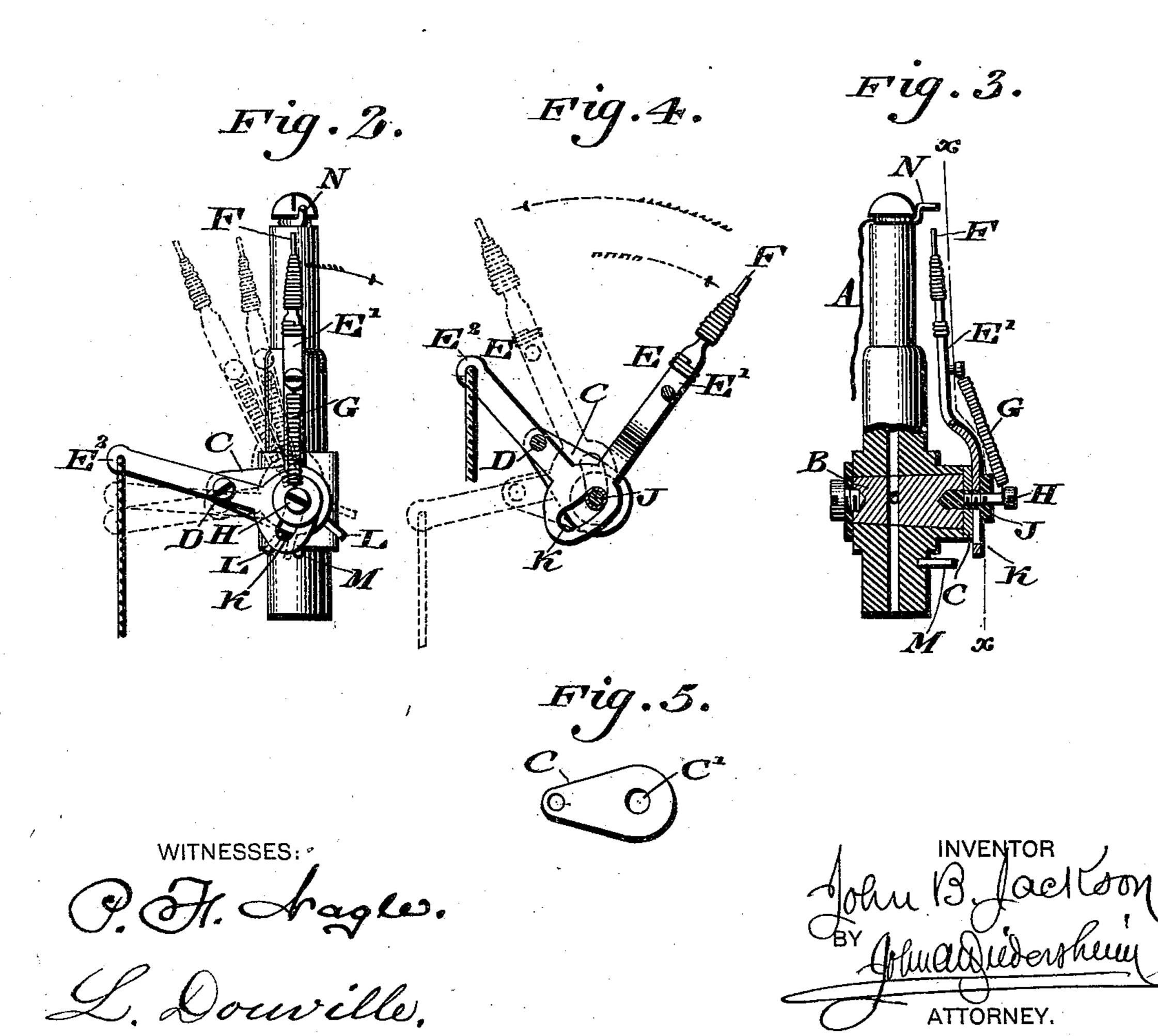
(No Model.)

## J. B. JACKSON. ELECTRIC GAS LIGHTING DEVICE.

No. 556,189.

Patented Mar. 10, 1896.





## United States Patent Office.

JOHN B. JACKSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO ELLIS STOKES, JR., TRUSTEE, OF SAME PLACE.

## ELECTRIC GAS-LIGHTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 556,189, dated March 10, 1896.

Application filed August 15, 1895. Serial No. 559,336. (No model.)

To all whom it may concern:

Be it known that I, John B. Jackson, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Electric Gas-Lighting Devices, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an improvement in a gas-lighting device embodying a carrier for the movable electrode, so devised that said electrode on its return motion is removed from the path of the fixed electrode on the burner, whereby it is not subjected to the flame on said motion, and short-circuiting is prevented.

Figures 1 and 2 represent side elevations of an electric gas-lighting device embodying my invention. Fig. 3 represents a partial vertical section and partial side elevation at a right angle to Figs. 1 and 2. Fig. 4 represents a vertical section of a portion of a section on line x x, Fig. 3. Fig. 5 represents a front view of an arm employed for supporting the carrier of the movable electrode, the same being attachable to the gas-cock.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a gas-burner, and B designates the cock thereof.

Cdesignates an arm which is firmly secured to one end of the cock and has eccentrically mounted on it by the screw or pin D the el-35 bow-lever E, one limb, E', of which carries the electrode F and has secured to it the restoring-spring G, one end of which is connected with the hook, eye, pin, or screw H on the head of the screw J, which passes 40 through the opening C' in the arm C for securing the latter to the cock B, it being noticed that the angle position of the lever E has in it a segmental slot K, and that the shank of the screw J passes freely through 45 said slot, so that the lever may be oscillated without interference of said screw, limited, however, by the upper and lower walls of said slot.

In order to limit the opening and closing 50 motions of the gas-cock B, the same has at-

tached to it on opposite places of the side thereof the radiating pins L, either of which is adapted to abut against the pin M, which projects outwardly from the portion of the burner adjacent to said pins L. Said pin M, 55 acting as a stop to prevent further motions of the pins L and of the cock, is necessary for the opening and closing of the latter.

The limb E<sup>2</sup> of the lever E, which is pivoted to or mounted upon the arm C, is pro- 60 vided with a cord, wire or other handle, so that said lever may be operated, it being noticed that when said limb is depressed the limb E' is raised and carried forward, in the present case to the left, whereby the electrode 65 F is brought into contact with the fixed or stationary electrode N on the burner at the tip thereof, and the lighting-spark is produced. When the limb E<sup>2</sup> is released, the spring G lowers the limb E', whereby the electrode F 70 is also lowered, and when the gas is turned off, partly or entirely, by the motion of the lever, in the present case to the right, the electrode F moves below the electrode N and consequently does not contact with the same, the 75 effect of which is evident, thus avoiding the objections hereinbefore noted.

When the limb E<sup>2</sup> of the lever is raised, the gas may be turned down or entirely cut off.

Having thus described my invention, what 80 I claim as new, and desire to secure by Letters Patent, is—

1. In an electric gas-lighting device, an arm adapted to be rigidly secured to the cock of a gas-burner, an elbow-lever having one of its 85 limbs pivotally secured to the outer end of said arm, and having its other limb provided with an electrode, and a spring secured to said latter limb and to a pin on said arm, said elbow-lever having in its angle a segmental 90 slot in which said pin is located, said parts being combined, substantially as described.

2. In an electric gas-lighting device, a burner, with the arm C firmly secured to the cock B of said burner, the elbow-lever E eccentrically mounted on said arm C, and having the segmental slot K in its angle, the screw J secured to said arm C and having its shank in said slot, an electrode carried by the limb E' of said elbow-lever, and the spring 100

G secured to said limb E', and to a pin H in said screw J, said parts being combined, sub-

stantially as described.

3. In an electric gas-lighting device, an arm connected with a gas-cock, a lever pivotally mounted on said arm, an electrode on said lever and a restoring-spring connected with said lever, said arm and lever being adapted to turn with said cock, and said lever being adapted to rise and fall independent of the turning motion of the cock, said parts being combined substantially as described.

4. A gas-burner provided with an electrode, in combination with an elbow-lever, mounted eccentrically on said cock, of the burner, and having a slot which receives a screw or pin on the cock for limiting the motions of said lever, and a restoring-spring for said lever

connected with the latter and with the cock, said lever being adapted to turn with the 20 cock and rise and fall independent thereof, said parts being combined substantially as described.

5. In a gas-lighting device, a burner with a cock having a radial arm thereon, an elbow-25 lever having one of its limbs pivoted to said arm, and provided with a slot at its angle the axial pin of said lever working in said slot and an electrode carried by the other limb of said lever, said parts being combined sub-30 stantially as described.

JOHN B. JACKSON.

Witnesses:
JOHN A. WIEDERSHEIM,
WM. C. WIEDERSHEIM.