A. L. BOGART.

ELECTRIC GAS-LIGHTING ATTACHMENT.

No. 180,832. Patented Aug. 8, 1876.

Fig. 1.

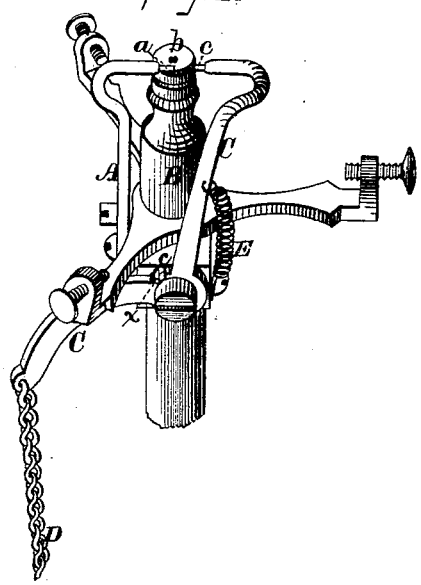
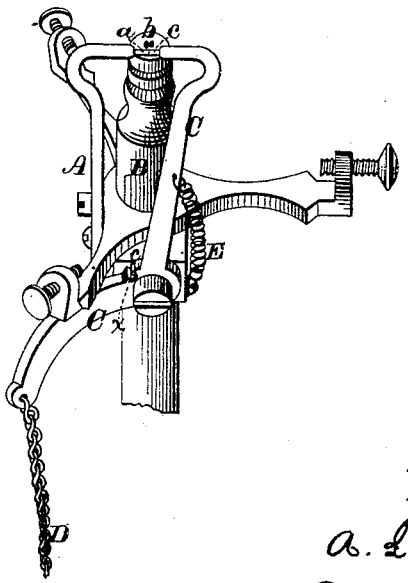


Fig. 2.



WITNESSES:
Jas. R. Hutchinson
John R. Young

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A. L. Bogart, by
Prindle and Lay his Attys

UNITED STATES PATENT OFFICE.

ABRAHAM L. BOGART, OF NEW YORK, N. Y.

IMPROVEMENT IN ELECTRIC GAS-LIGHTING ATTACHMENTS.

Specification forming part of Letters Patent No. **180,832**, dated August 8, 1876; application filed July 21, 1876.

To all whom it may concern:

Be it known that I, ABRAHAM L. BOGART, of New York city, in the county of New York, and in the State of New York, have invented certain new and useful Improvements in Apparatus for Lighting Gas by Electricity; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a perspective view of a gas-burner having attached thereto my improved lighting apparatus, the circuit being open; and Fig. 2 is a like view of the same with circuit closed.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to render more easy the manipulation of electric gas-lighting apparatus used in connection with chandeliers, hall-lights, and other fixtures which depend from ceilings; and to this end it consists, as an improvement in electric gas-lighting apparatus, in combining with a burner an insulated fixed arm, a pivoted vibratory arm, and a chain or cord secured to and depending from the latter, by means of which the electric circuit may be closed and opened by pulling downward and then releasing said cord, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents an arm, which, at its lower end, is secured upon and insulated from a burner, B, and at its upper end extends in a curve outward, upward, and thence inward, and ends in a point, *a*, (preferably platinum,) that occupies a position near the orifice *b* of said burner, in exact range with the current of gas, when the latter is permitted to escape therefrom. Pivoted upon one side of the burner B is a bar, C, which has the form shown, and at its upper end is the counterpart of the arm A, said part being provided at its end with a platinum point, *c*, that, by the vibration of said bar, may be brought into or removed from contact with the point *a*. Below its pivotal bearing the bar or vibratory arm C extends downward and to one side, and has attached to its lower end a chain or cord, D, which hangs downward, with its lower end within convenient reach of the hand of a person standing beneath, and enables the electric circuit to be closed, as seen in Fig. 2, by a downward pull upon said chain, after which, by releasing the latter, said arm will be returned to its normal position, as shown in Fig. 1, and said circuit broken, so as to produce a spark and ignite the gas, by means of a spring, E, which is attached at one end to the burner B, and at its opposite end to the upper portion at the outer side of said arm, C. A stop, *x*, upon the side of the burner B near the pivotal bearing of the arm C, engages with a shoulder, *c'*, formed upon the latter, and limits the outward motion of its upper end. By the construction described, any desired number of sparks may be produced, so as to render certain the ignition of the gas, the circuit closing and breaking devices being entirely independent of the mechanism used for controlling the flow of said gas.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

As an improvement in electric gas-lighting apparatus, the insulated fixed arm A, the pivoted arm C, and the chain or cord D, secured to and depending from the latter, in combination with each other and with the burner B, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of July, 1876.

A. L. BOGART.

Witnesses:

WM. H. RIBLET,

E. E. BOGART.