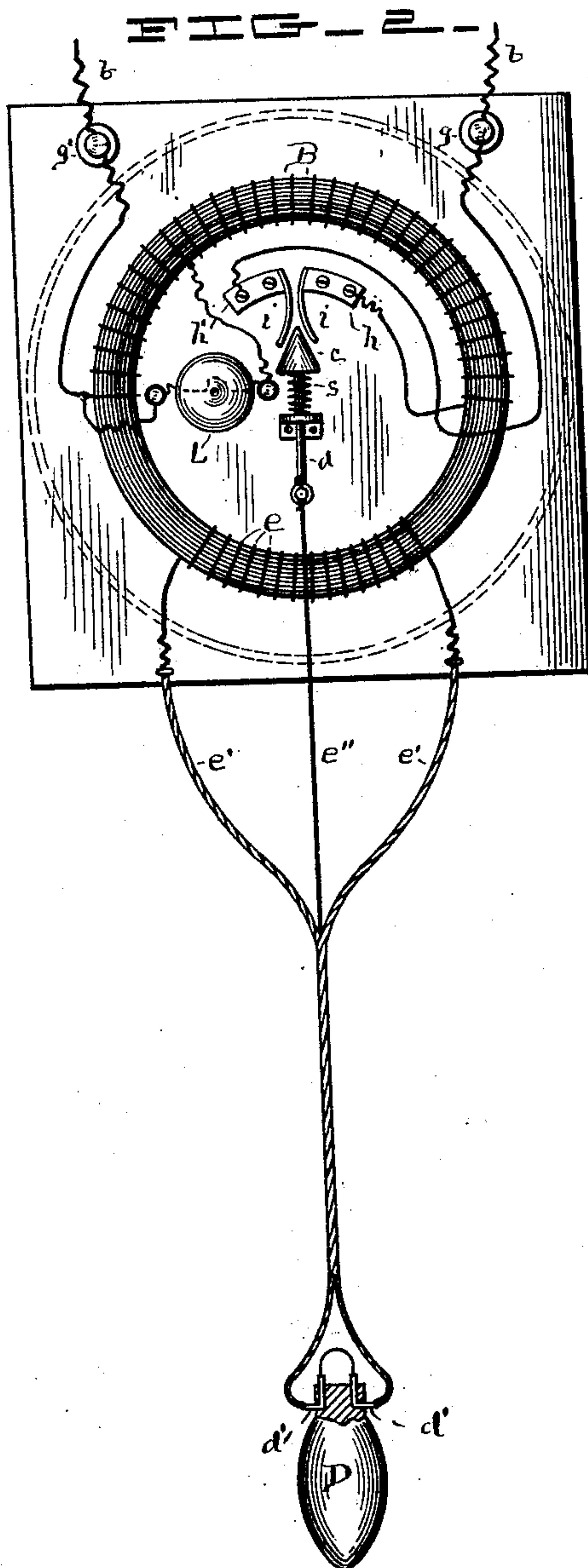
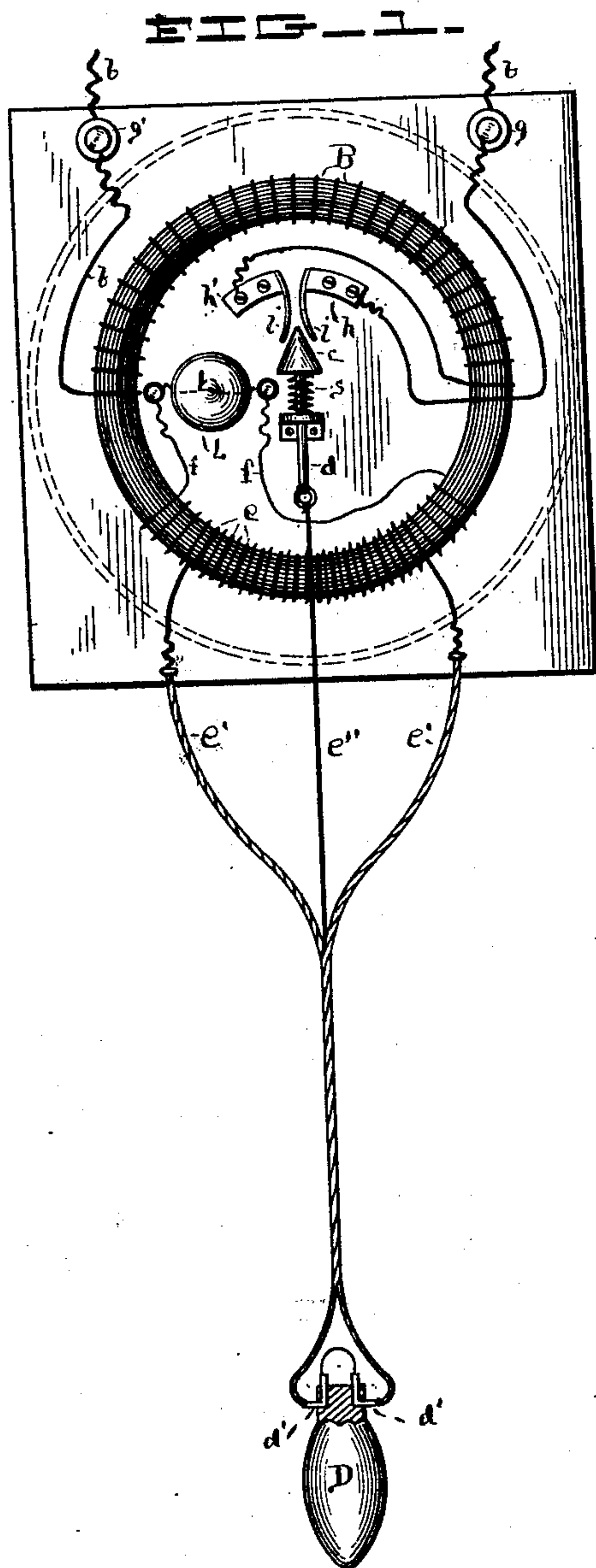


(No Model.)

C. J. JENNE & C. E. WILLEY.
ELECTRIC CIGAR LIGHTER.

No. 509,085.

Patented Nov. 21, 1893.



Witnesses

H. B. Nealy.
W. Q. Lyon

Inventors
Christian J. Jenne
Charles E. Willey
By Attorney J. H. Gibbs

UNITED STATES PATENT OFFICE.

CHRISTIAN J. JENNE AND CHARLES E. WILLEY, OF LOUISVILLE, KENTUCKY,
ASSIGNORS TO WILLIAM CARTER, JOHN W. DAWSON, AND JOSEPH MEY-
RICK, OF SAME PLACE.

ELECTRIC CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 509,085, dated November 21, 1893.

Application filed April 5, 1893. Serial No. 469,237. (No model.)

To all whom it may concern:

Be it known that we, CHRISTIAN J. JENNE and CHARLES E. WILLEY, of Louisville, in the county of Jefferson and State of Kentucky, have invented new and useful Improvements in Electric Cigar-Lighters, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to devices intended especially for use as cigar lighters and advertising means and consists in certain peculiarities hereinafter more fully described and specifically pointed out in the claims.

In the annexed drawings similar letters of reference denote corresponding parts in both the views in which—

Figure 1 is a view representing the face of the device with the case, or covering, removed, and Fig. 2 is a similar view of a modified form of arrangement.

—A— is a suitable base of wood or other suitable material, on which are the binding posts —g'—g— and a converter or inductorium —B—. A primary high tension alternating current is passed around the inductorium —B— by means of the conductors —b—b— of the primary circuit which passes from the binding post —g'— around the inductorium —B— to the base-block —h'— of the switch—composed of the parts —h'—h—, spring arms —i—i— and point —c—. The primary circuit is held normally open by means of the weighted holder —D— by gravity contracting the spring —s— on the stem —d— of the contact point —c— through the medium of the connected hanger or cord —e'—, the weight of the holder —D— being sufficient to overcome the retractile power of said spring —s—. On raising the holder —D— the spring —s— exerts its influence to project said point —c— between and into contact with the spring arms —i—i— to close the primary circuit, permitting it to pass through said switch and completing the primary circuit.

Wound around the converter —B— is a secondary coil —e— which connects through the conductors —e'— with the retaining strips —d'—d'— of the holder —D— and connected

at its ends with said strips —d'— is a strip of incandescing material —k—, completing such secondary circuit.

Thus far the two devices are identical, but, in Fig. 1 is shown a secondary coil —f—f— wound around the inductorium in circuit with the incandescent lamp —L—, while in Fig. 2 the lamp —L— is in a shunt circuit with the primary coil —b— and only enough of the primary circuit is utilized to raise its filament to incandescence, while the main circuit is utilized in conjunction with the converter to induce the required secondary circuit for the filament —k—, to raise it to the required degree of incandescence. In both instances the main, or primary high tension, current is normally broken through the switch connections and the secondary, or induced low tension current, connections are completed, so that closing the primary circuit will of necessity raise the body —k— and lamp filaments to a point of incandescence, and it will be apparent that either style of modification may be used separately or in conjunction for one or more lighting points —k— and lamps —L—L— if desired without departing from the spirit of our invention.

The operation of the device is as follows: The normal position of the parts is as shown in the drawings, but in practice the device is suspended at such an elevation that the holder —D— will be raised for convenience in use, when the weight of the same will be withdrawn from the cord —e'— and spring —s— whereupon said spring will force the point —c— into contact with the spring arms —i—i—, thus closing the primary high tension current. This being accomplished will produce a low tension current in the conductors —e'—, thus raising the body —k— to the point of incandescence and lighting the lamp —L—, whereupon any transparent substance interposed between the observer and said lamp will be lighted up and printed characters or other matter on said transparent substance will become distinctly visible.

Having described the invention, what is claimed as new is—

1. In a device of the described character, a

primary high tension circuit, normally open, an inductorium, a primary coil around said inductorium, a pair of secondary coils, a lamp in circuit with one coil and an incandescing body in circuit with the other coil, a switch in the primary circuit, a weighted holder suspended therefrom and a retractile spring adapted to close said primary circuit on raising the said weighted holder, all combined substantially as specified.

2. In a device of the described character, a primary circuit, normally open, a switch in said primary circuit, a secondary circuit, an incandescing body in said secondary circuit, an incandescent lamp normally out of circuit, a weighted holder connected to said switch and holding the same normally open, and means for closing said switch on elevation of said weighted holder, all combined substantially as specified.

3. In a device of the described character, a primary alternating circuit, a switch in said primary circuit, a converter or inductorium, a primary coil around said inductorium, a pair of secondary coils around said inductorium, a lamp in circuit with one of said secondary coils, a body capable of incandescence in cir-

cuit with the other secondary coil, a weighted holder carrying said incandescing body, a connected hanger carrying said weighted holder from a switch, and a spring adapted to close said switch on raising the weighted holder, all in combination substantially as specified.

4. In a device of the described character, a primary alternating circuit, a switch in said primary circuit holding the same normally open, an inductorium with the primary coil around the same a secondary coil also wound around said inductorium, an incandescing body in said secondary circuit, a weighted holder carrying said incandescing body, a lamp in the primary circuit and connections between the weighted holder and switch adapted to close said switch and primary circuit on elevation of said weighted holder, all combined substantially as specified.

In testimony whereof we have hereunto set our hands this 14th day of February, 1893.

CHRISTIAN J. JENNE.
CHARLES E. WILLEY.

Witnesses:

FREDERICK H. GIBBS,
G. J. DREWRY.