

(No Model.)

W. FISHER.
ELECTRIC CIGAR LIGHTER.

No. 559,939.

Patented May 12, 1896.

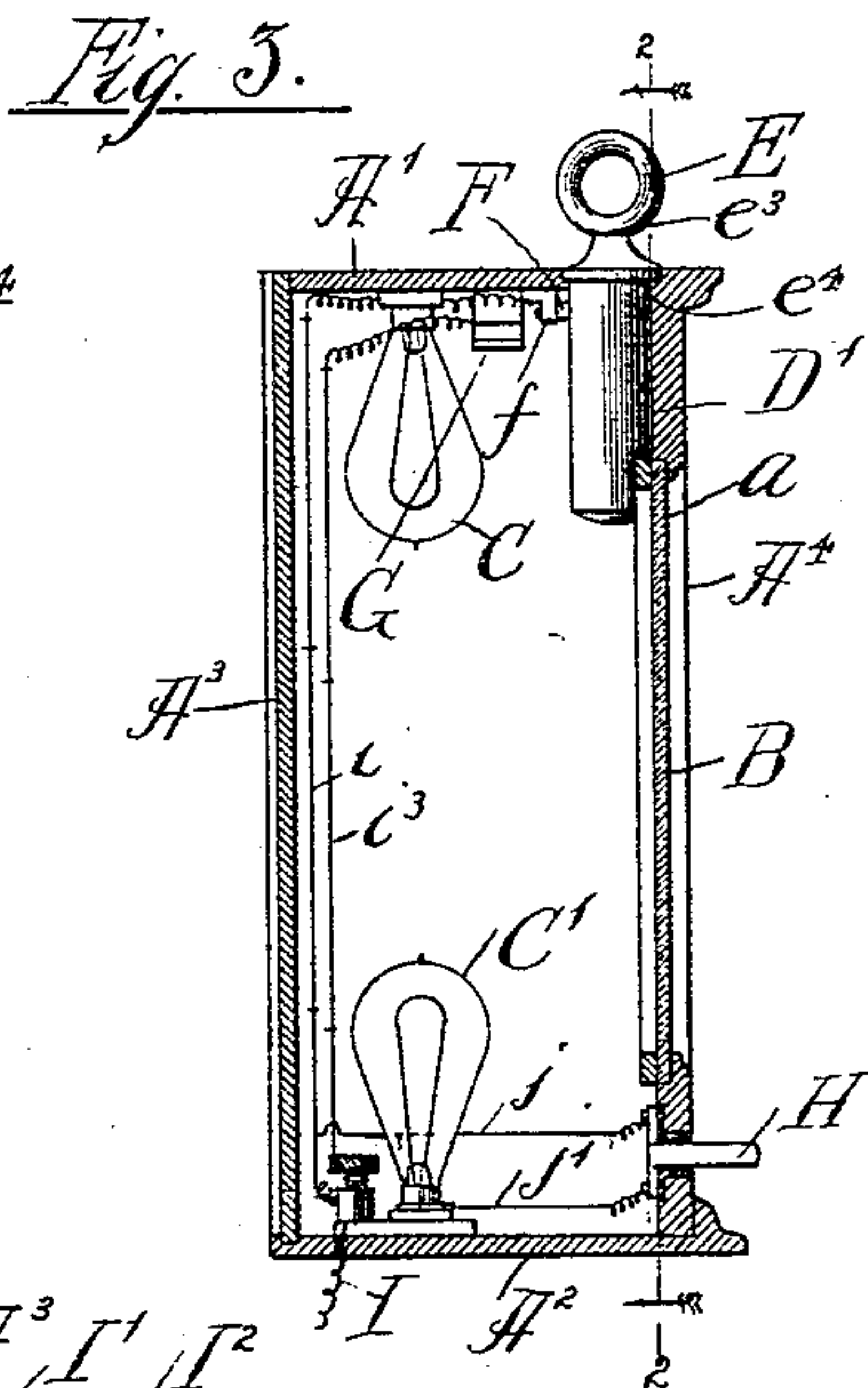
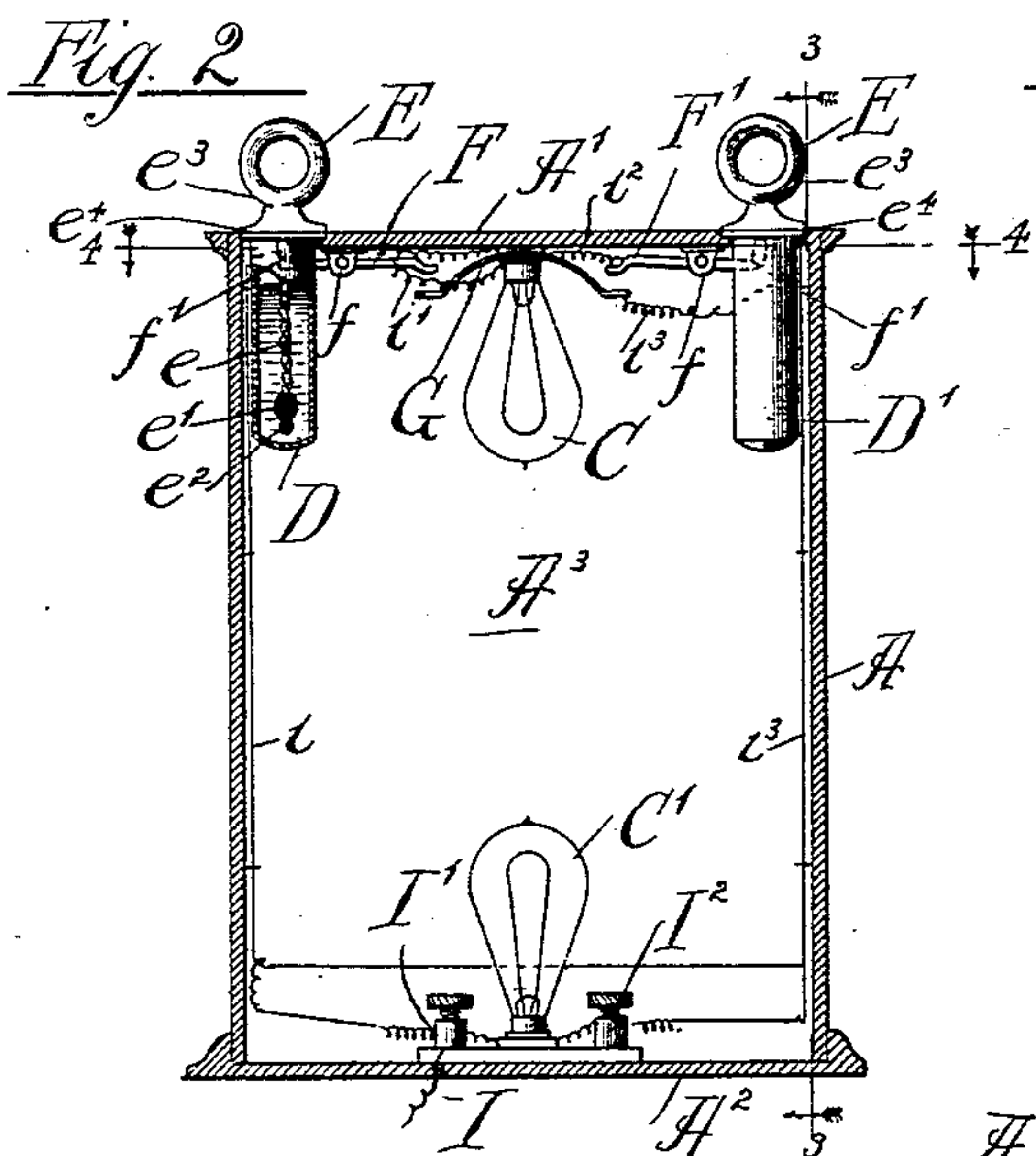
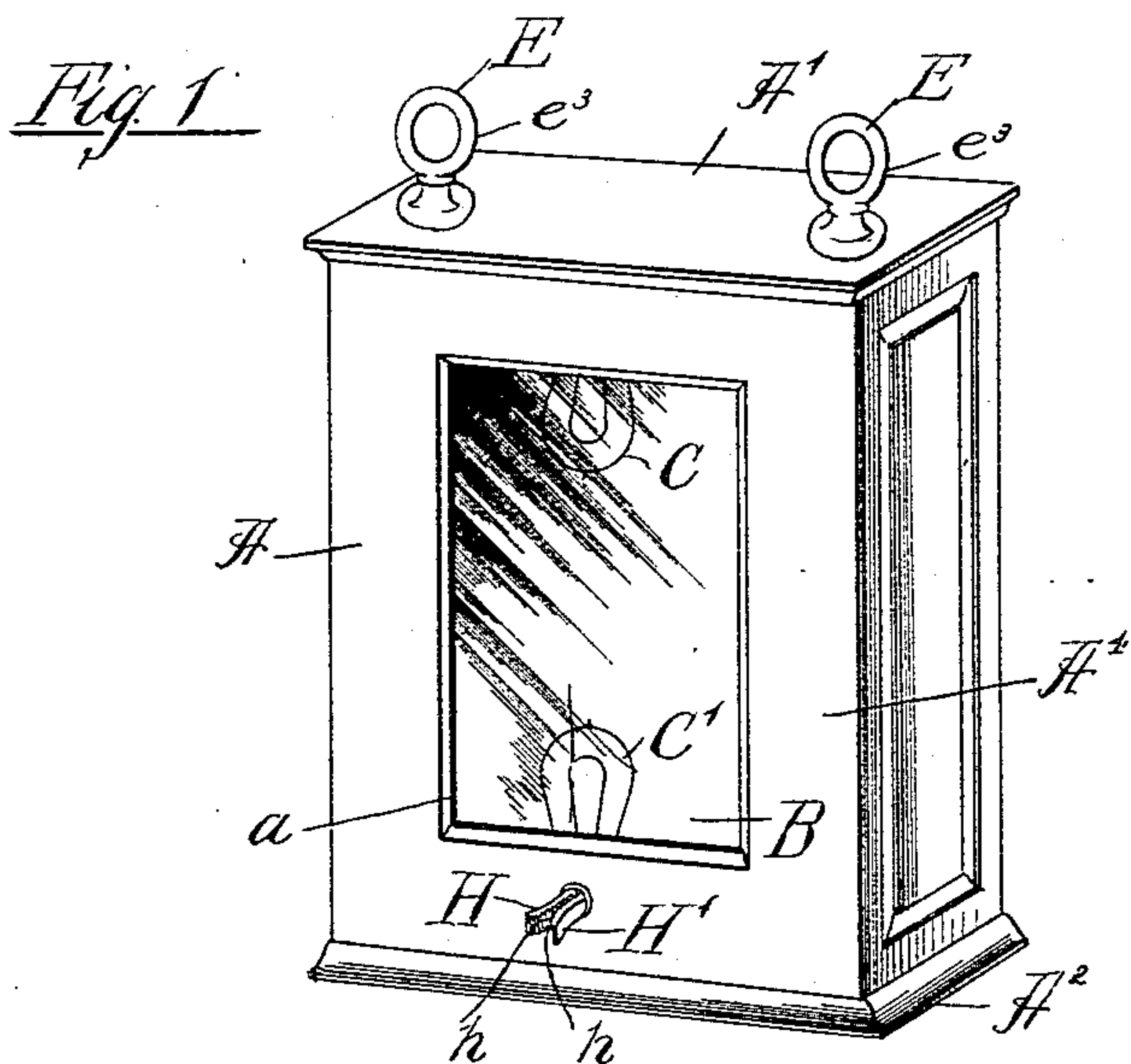
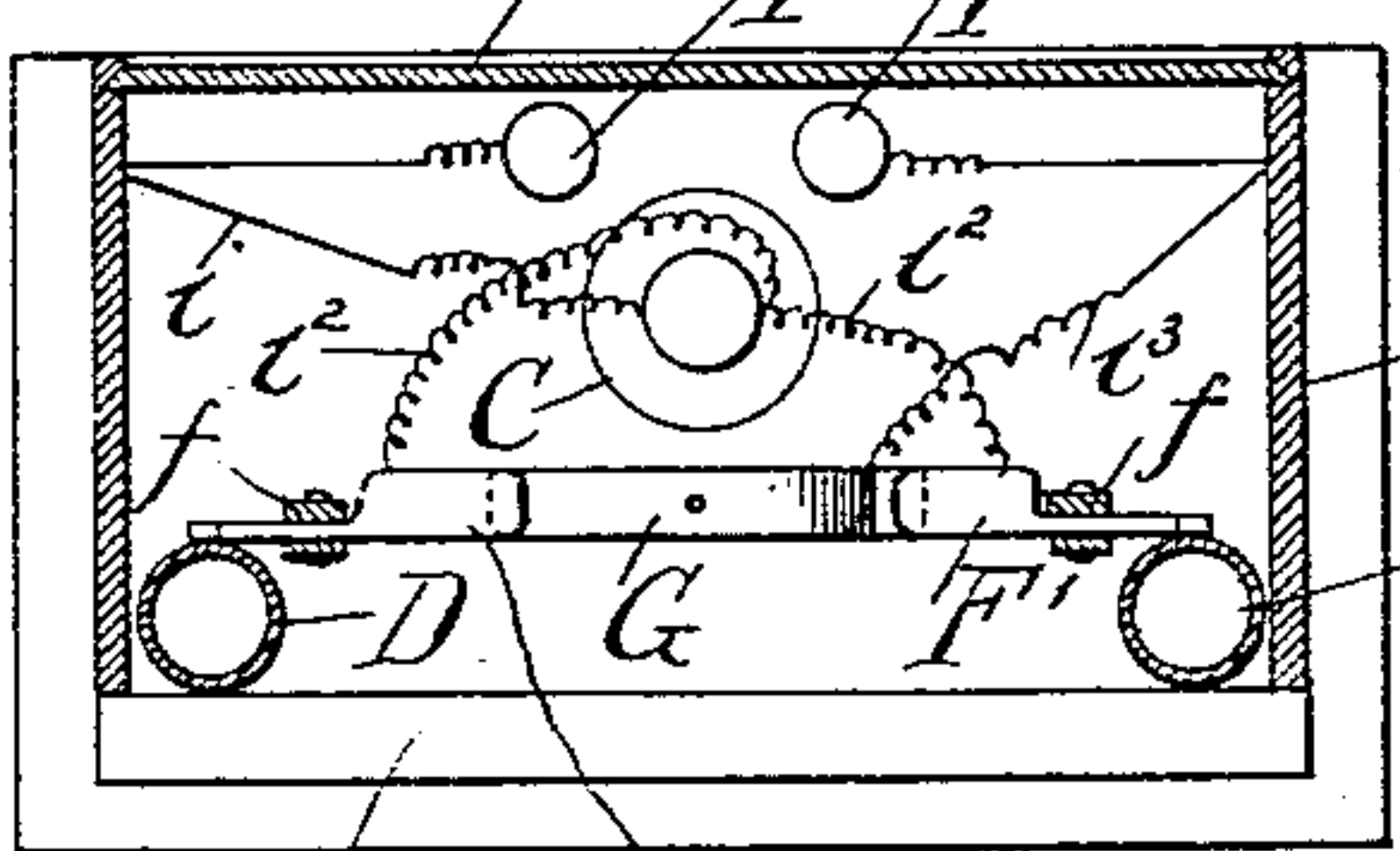


Fig. 4



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM FISHER, OF CHICAGO, ILLINOIS, ASSIGNOR TO LYNDEN EVANS,
OF SAME PLACE.

ELECTRIC CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 559,939, dated May 12, 1896.

Application filed October 12, 1895. Serial No. 565,484. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FISHER, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric Cigar-Lighters and Advertising Devices; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a combined cigar-lighter and advertising device, and relates more specifically to improvements in that class of electric cigar-lighters in which an alcohol-torch is lighted by means of an electric current.

The object of the invention is to provide a construction in devices of the character referred to whereby a transparency or the like will be displayed in one or more colors each time the light is used.

The invention has also in view the production of a simple practical construction having a plurality of torches, which may be used independently of each other and at the same time.

The invention consists in the matters hereinafter described, and more particularly pointed out in the appended claims, and will be readily understood, reference being had to the accompanying drawings.

Figure 1 is a view in perspective of a cigar-lighter embodying my invention. Fig. 2 is a vertical section taken on line 2 2 of Fig. 3. Fig. 3 is a vertical section taken on line 3 3 of Fig. 2. Fig. 4 is a horizontal sectional view taken on line 4 4 of Fig. 2.

As shown in said drawings, A designates as a whole the casing, comprising top and bottom walls A' A², respectively, back wall A³, and front wall A⁴. The top, bottom, and back walls may be of any suitable or desired material, preferably of metal or other opaque substance, and the size and shape of the casing may also be varied as desired or in accordance with different circumstances. The casing herein shown, however, consists of a rectangular box, the rear wall A³ of which is constructed to slide into place between the

side and end walls, so as to afford access to the interior of the box. The front wall A⁴ of the box is constructed with a panel-opening a, which is closed by means of any desired transparency or translucency B—as, for instance, some advertising-picture printed in outlines—which will be displayed when the interior of the case is illuminated.

C C' designate incandescent lamps arranged within the casing A, preferably, and as shown, mounted upon the inner sides of the upper and lower ends thereof, by means of which lamp the interior of the box may be illuminated and the transparency thus displayed, as hereinafter described. Preferably one or both of the lamps C C' will be colored, so as to produce a varied effect upon the transparency when lighted.

D D' designate tubular cups or receptacles adapted to hold a suitable burning fluid, usually alcohol, and conveniently located in the upper front part of the casing, with their upper ends protruding through the top wall A' thereof.

E E' designate lighting-torches adapted to normally rest within the cups D D' and each comprising a shank e, preferably of metal, provided at its lower end with a suitable absorbing device adapted to retain sufficient of the burning fluid when lifted out of the cup to sustain a flame for some moments, the absorbing device herein shown consisting of a bunch or coil of fine wire e'. The extreme end of the shank e is tipped with a carbon pencil e². The upper end of the torch is provided with a suitable handle e³, which is enlarged annularly at its juncture with the shank to form a cap e⁴, which serves as a closure for the upper end of the cup D or D' when the torch is not in use. The outer periphery of said cap e⁴ extends outward over the margin of the cup a slight distance for a purpose hereinafter described.

Next describing the electrical circuits and contact devices by means of which the lamps are thrown into circuit when a torch is used, F F' designate two contact-levers pivotally mounted between their ends in suitable insulated bearings or supports f f, secured upon the inner surface of the top wall A' of the

casing, preferably so as to extend in alignment with each other. The remote and shorter end of each of said levers is arranged to extend outwardly adjacent to one of the cups D or D' and is provided at said end with an upturned portion f' , which extends upwardly alongside of the cup in position for its upper end to be engaged by the overhanging portion of the cap e^4 of the torch, so as to be held depressed by said torch when the latter is in position within its cup. The opposite inwardly-extending ends of the said levers F F' are arranged to fall into contact with the ends of a metal bridging-strip G, secured to the top wall of the casing, when released by the lifting of either of the torches E or E'. The bridging-strip G is suitably insulated from the casing, so as to properly transmit electric current and form a part of the lamp-circuit.

H H' designate a pair of terminals mounted in suitable insulating-supports and arranged to protrude from the casing at any suitable point, conveniently and, as herein shown, at the front side near the lower end of the box. Said terminals have the form of jaws mounted in their insulating-supports adjacent to but not in contact with each other and are provided in their proximate sides with a series of teeth or projections h h . The space between said jaws is just sufficient to admit the carbon end of the torch E loosely when the latter is inserted endwise therein.

The lamp and lighting circuits are as follows: A supply-conductor I, connected with any suitable source of electrical supply—as, for instance, with an ordinary incandescent lighting-circuit—is led in through the casing at any convenient point and connected with a terminal or binding-post I'. From this terminal a conductor i leads to the upper lamp C and is connected with the filament thereof at one side of the lamp. From the other side of the lamp conductors i' i^2 lead to the levers F and F', respectively. A return-conductor i^3 is connected with the bridging-strip G and leads thence to a second terminal or binding-post I² and thence out through the casing. From the supply-lead i , at a point within the casing, a conductor j leads to one of the jaw-terminals II, while from the other jaw II' a conductor j' leads back to and through the lamp C' and thence to the return-conductor or terminal I².

The foregoing-described circuits obviously constitute two multiple-arc circuits, each including a single lamp.

The operation of the device thus constructed and arranged is as follows: The cups having been supplied with suitable burning fluid, when it is desired to light a cigar the operator lifts either one of the torches—as, for instance, that designated E—from the cup, thus releasing the lever F and permitting it to drop into contact with the end of the bridging-strip G, thereby closing the circuit through the upper lamp C and illuminating the inte-

rior of the casing. The operator now inserts the carbon end of the torch between the serrated terminals at the lower end of the box, thereby closing the circuit through the lower lamp C', and if said lamp be differently colored from the upper lamp obviously changing the appearance of the transparency. Upon attempting to withdraw the carbon-point from between the terminals a spark will be generated by the breaking of the circuit therethrough which will ignite the saturated carbon and thus light the torch. The provision of the teeth on the proximate sides of the jaws not only insures the more certain sparking between the terminals, but also produces a flickering of the lamp controlled by said circuit, thereby more certainly attracting the attention of the operator to the transparency thus displayed. When the shank is withdrawn from between the terminals, the lower lamp obviously goes out, and upon replacing the torch in its holder the contact of the cap with the upper end of the contact-lever lifts the other end of the lever out of contact with the bridging-piece and thus breaks the circuit through the upper lamp. Obviously the operation is the same in case the other torch E' be used, and it is to be noted that whichever one of the torches is lifted out it will serve to close the circuit through the upper lamp, and also that if both be lifted out together the circuit will still remain through the lamp until both have been returned to their respective holders.

While I deem the foregoing construction an exceedingly practical and preferred one, yet it will be obvious that various modifications may be made both in the construction and arrangement of the parts without departing from the spirit of the invention or without the exercise of more than ordinary mechanical skill. I do not therefore wish to be limited to the precise details of construction shown herein. The particular construction shown is, however, as hereinbefore stated, believed to be especially desirable not only in the general invention, but in the matter of detail, and such construction has therefore been made the subject of specific claims.

I claim as my invention—

1. A combined cigar-lighter and display device, comprising a casing provided in one side with a transparency, or equivalent, an incandescent lamp arranged behind said transparency connected with a normally open circuit, a pair of adjacent terminals and a lighting-torch adapted to close the circuit through the lamp when inserted between said terminals, substantially as set forth.

2. A combined cigar-lighter and display device comprising a casing provided in one side with a transparency or equivalent, an incandescent lamp arranged behind said transparency and connected with a normally open circuit, a torch, holder for said torch, and a contact device operated by said torch, adapted to close the circuit through the lamp when

the torch is removed from its holder, substantially as described.

3. A combined cigar-lighter and display device, comprising a casing provided in one side with a transparency or equivalent, two incandescent lamps arranged behind said transparency and connected with normally open circuits, a torch, a torch-holder and a pair of circuit-closing devices for each lamp, one of which pairs is operated to close the circuit through the lamp upon the removal of the torch from its holder and the other of which pairs constitutes the lighting-terminals for igniting the torch and operate to close the circuit through the other lamp when the torch is inserted between said terminals, substantially as described.

4. In a combined cigar-lighter and display device, the combination of a casing, a transparency arranged in one side of the casing, an incandescent lamp arranged within each end thereof, a burning-fluid receptacle arranged in the upper part of the casing, open at its upper end, a torch adapted to rest within said fluid-receptacle, a circuit-controlling lever arranged to be held in open-circuit position by the torch when the latter is within the receptacle, a pair of lighting-terminals mounted in the casing and an electric circuit including the lamps, the circuit-controlling

lever and the lighting-terminals, substantially as set forth.

5. In a combined cigar-lighter and display device, the combination of a casing, a transparency arranged in one side of the casing, an incandescent lamp arranged within each end thereof, a pair of burning-fluid receptacles arranged in the upper part of the casing, each open at its upper end, a torch adapted to rest within each one of said fluid-receptacles, a circuit-controlling lever arranged adjacent to each fluid-receptacle and adapted to be held in open-circuit position by the torch when the latter is within the receptacle, a bridging-strip with which said levers are each adapted to contact, a pair of lighting-terminals mounted in the casing and a multiple-arc electric circuit including the lamps, the circuit-controlling levers, the bridging-strip and the lighting-terminals, substantially as set forth.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two witnesses, this 10th day of October, A. D. 1895.

WILLIAM FISHER.

Witnesses:

ALBERT H. GRAVES,
TAYLOR E. BROWN.