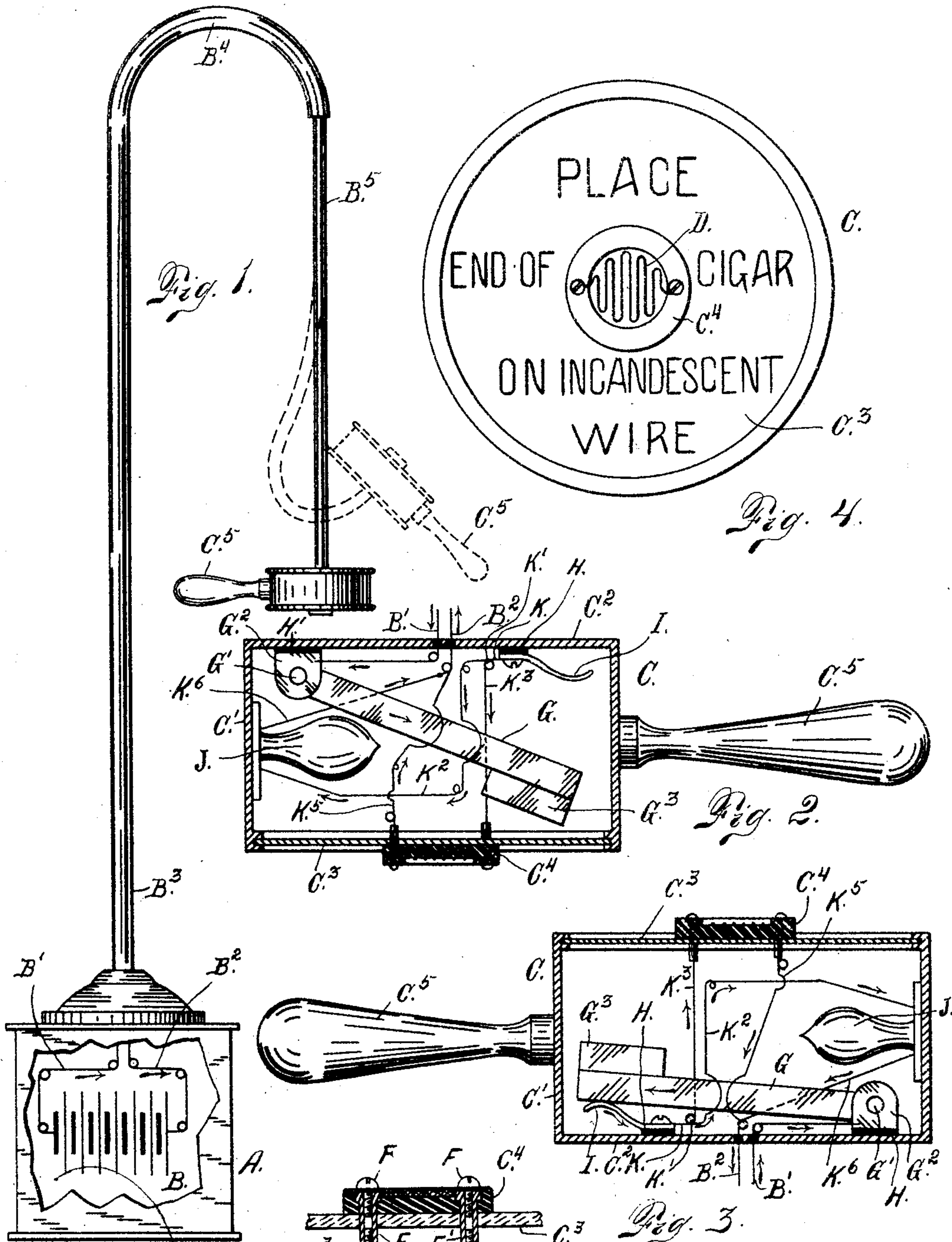


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W. P. CARSTARPHEN, JR.
ELECTRIC CIGAR LIGHTER.
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ELECTRIC CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 778,444, dated December 27, 1904.

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To all whom it may concern:

Be it known that I, WILLIAM P. CARSTARPHEN, Jr., a citizen of the United States of America, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Electric Cigar-Lighters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in electric cigar-lighters of the class provided with a lighting device which becomes incandescent by the passage of a current of electricity therethrough, the lighting device being connected with any suitable source and the circuit being normally open, but adapted to be closed as the device is brought into position for use or by the action of the user during the operation of lighting a cigar.

In my improved apparatus I combine with the lighting device an illuminated plate or dial located adjacent the lighting device and preferably surrounding the latter, whereby instructions for using the apparatus are made conspicuous by the lighting of a lamp located in the circuit, which is closed simultaneously with the closing of the circuit in which the incandescent lighting device is located.

In my improvement an incandescent lamp is located in a suitable casing, the lamp being in the rear of a transparent or partially transparent plate, in the center of which is mounted the lighting device, adapted to be made incandescent by the closing of the electrical circuit. The position of the apparatus is normally such that this circuit is open; but as the user grasps the handle of the device and brings it into requisition for use the circuit is not only closed through the lighting device proper, but also through the incandescent lamp in the rear of the transparent plate or dial, whereby the dial is instantaneously illuminated and the directions thereon for using the device made conspicuous, since they are located immediately before the eyes of the user. This illuminated

feature makes the device more attractive and enables the unfamiliar user to make use of the device without difficulty. In the specific construction herein described, and illustrated in the drawings, a pivoted arm concealed within the casing of the apparatus normally assumes a position whereby the circuit is broken; but when the casing is brought into position to enable the user to apply the end of the cigar to the incandescent lighting device this pivoted arm drops by gravity to engagement with a contact, whereby the two circuits—that is to say, the circuit through the incandescent lighting device and through the lamp or illuminating device—are both closed.

It is evident that any suitable electric source may be employed in connection with my improvement.

Having briefly outlined my invention, as well as the function it is intended to perform, I will proceed to describe the same in detail, reference being made to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 may be termed a "side elevation" of my improved apparatus, the full-line position of the lighter being the normal position when not in use and the dotted-line position the position when in use and when the circuits are closed through the lamp and the incandescent lighting device. Fig. 2 is a section taken through the casing of the apparatus and disclosing the mechanism within, the circuits being open and the construction shown on a larger scale than in Fig. 1. Fig. 3 is a similar view showing the circuits closed. Fig. 4 is a face view of the device provided with suitable directions for use, the said directions being disclosed by the illumination in the rear of the front plate or dial. Figs. 3 and 4 are on the same scale as Fig. 2. Fig. 5 is a sectional detail view taken through the lighting device and the illuminated dial, shown on a larger scale.

The same reference characters indicate the same parts in all the views.

Let A designate a suitable casing containing the electrical source B as a number of cells forming a battery. The circuit-wires B' and B² pass through an upright rod B³, curved at

the top, as shown at B¹, thence through a hanging flexible cord B⁵, and thence through the back of the casing C, containing the mechanism of the apparatus. As shown in the drawings, the body portion C' of this casing C is cylindrical in shape, closed at the back by a disk or circular plate C² and provided in front with a transparent or partially transparent plate C³, suitably connected with the casing. In the center of the transparent plate C³ is located a circular piece C⁴ of insulating material, upon which is mounted a lighting device D, formed of material having such resistance that the passage of the current there- through makes the wire incandescent for cigar-lighting purposes. The extremities of this lighting device D are connected by screws F with sleeves E, which pass through the parts C³ and C⁴, the inner extremities of the sleeves being connected with the circuit-wires, as hereinafter explained.

Within the casing C is located an arm G, pivoted at G' upon an ear G², connected with and insulated from the back of the casing. The extremity of this arm remote from the pivot is preferably weighted, as shown at G³, in order to insure quick action when the casing is turned to the circuit-closing position. Suitably connected with the back of the casing and insulated therefrom, as shown at H, is a contact I, adapted to be engaged by the arm G when the casing is properly manipulated or turned to the position shown in Fig. 3 or by dotted lines in Fig. 1. An incandescent lamp J is also mounted in the casing and located in one of the circuits closed by the engagement of the arm G with the contact I. Assuming that the parts are in the position shown in Fig. 3 of the drawings, the current may be said to pass through the wire B' to the ear or lug G², thence through the arm G to the contact I, and thence through a wire K to the point K', from which point lead two wires K² and K³, the latter passing to the sleeve E, to which it is made fast by a screw K⁴. The current passes thence from the sleeve E through the lighting device D to the sleeve E' and thence from said sleeve through a wire K⁵ and out of the casing, through the wire B², to the opposite pole of the battery or electrical source. From the point K' the wire K² leads to the lamp J, and the current passes from said wire through the lamp and from the latter through the wire K⁶ to the wire B² and thence to the pole of the battery opposite that with which the wire B' is connected.

From the foregoing description it is believed that the use and operation of my improved electric cigar-lighter will be readily understood. Assuming that the device is in the position shown by full lines in Fig. 1, if a person desires to light his cigar he grasps the handle C⁵ and throws the casing to the position indicated by full lines in Fig. 1. When this occurs, the pivoted arm G drops to the

position shown in Fig. 3—that is to say, to engagement with the contact I—whereby the circuit is closed through the lighting device D and the lamp J, as heretofore explained. As soon as the circuit is closed the device D becomes incandescent, and at the same time the light from the lamp illuminates the dial or the plate C³, surrounding the igniting device, and makes the instructions for using the instrument very conspicuous, as shown in Fig. 4. It is evident that any desired instructions may be placed upon the said illuminated dial or plate, it being preferred to produce these instructions on the inner surface of the illuminated dial or plate. It is evident, however, that the instructions may be applied in any suitable manner whereby they are conspicuously brought into view by the closing of the circuit through the lamp in the rear of the dial.

Having thus described my invention, what I claim is—

1. In a cigar-lighter, the combination of a suitable casing provided with a plate of transparent material, a lighting device located adjacent said plate, an incandescent lamp located in the casing, an electrical source, a normally open circuit in which the lamp and lighting device are located, and means connected with the casing for simultaneously closing the circuit through the lamp and lighting device.

2. In a cigar-lighter, the combination of a closed casing having a transparent plate on one side, an incandescent lamp in said casing, a lighting device exposed on the side of the transparent plate and adapted to be made incandescent by the electric current, a normally open circuit in which the lamp and lighting device are located, and suitable means connected with the casing for closing said circuit at the will of the user.

3. The combination of a casing having a transparent or partially transparent plate on one side, an incandescent lighter exteriorly mounted on said plate, an incandescent lamp located in the casing, a normally open electrical circuit in which the lamp and lighting device are located, and means connected with the casing for closing the circuit at the will of the user.

4. In a cigar-lighter, the combination of a closed casing having a transparent or partially transparent plate on one side, an exposed incandescent lighter centrally located with reference to the transparent plate, an incandescent lamp concealed by the casing, and a movable device connected with the casing and adapted when actuated to close the circuit in which the lighting device and lamp are located.

5. In a cigar-lighter, the combination of a suitable casing provided with a transparent portion, a cigar-lighter mounted on the transparent side of the casing and of less area than the said transparent portion, an incandescent lamp located in the casing, a movable device

concealed by the casing, a contact also located within the casing, means for normally supporting the casing whereby the movable device and the contact are separated, and an
5 electrical circuit in which the lamp, the lighting device, the movable device and the contact are located, the arrangement being such that as the casing is moved to permit the
10 lighter to be conveniently used, the movable part is brought into engagement with the contact within the casing, and the circuit closed through the lamp and lighting device, substantially as described.

6. In a cigar-lighter, the combination of a
15 casing provided with a handle, a lighting device mounted on one side of the casing, a normally open circuit in which the lighting device is located, an arm located within the casing and pivotally connected therewith, a con-
20 tact also located within the casing, and means for supporting the casing whereby the pivoted arm and the contact are normally separated, the arrangement of the pivoted arm within the casing being such, however, that when
25 the casing is manipulated to bring the light-

ing device into convenient position for use, the pivoted arm is made to engage the contact whereby the circuit is closed through the lighting device.

7. In a cigar-lighter, the combination with 30
a suitable support, of a casing suspended on said support by a flexible connection, an electrical circuit whose conductors pass through the said flexible connection, the casing being
35 provided with a transparent side, an incandescent wire exposed on the transparent side of the casing, an incandescent lamp located in the casing, a normally open electrical circuit in which the lighting device and the lamp
40 are located and connected in multiple, and a suitable means connected with the casing for closing the said circuit through the lamp and lighting device at the will of the user.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM P. CARSTARPHEN, JR.

Witnesses:

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HELEN M. KANE.