No. 774,624. PATENTED NOV. 8, 1904.

J. WATERS & F. V. THOMPSON.

ELECTRIC CIGAR LIGHTER.

APPLICATION FILED APR. 15, 1904.

NO MODEL. 3 SHEETS—SHEET 1.

Fig. 1

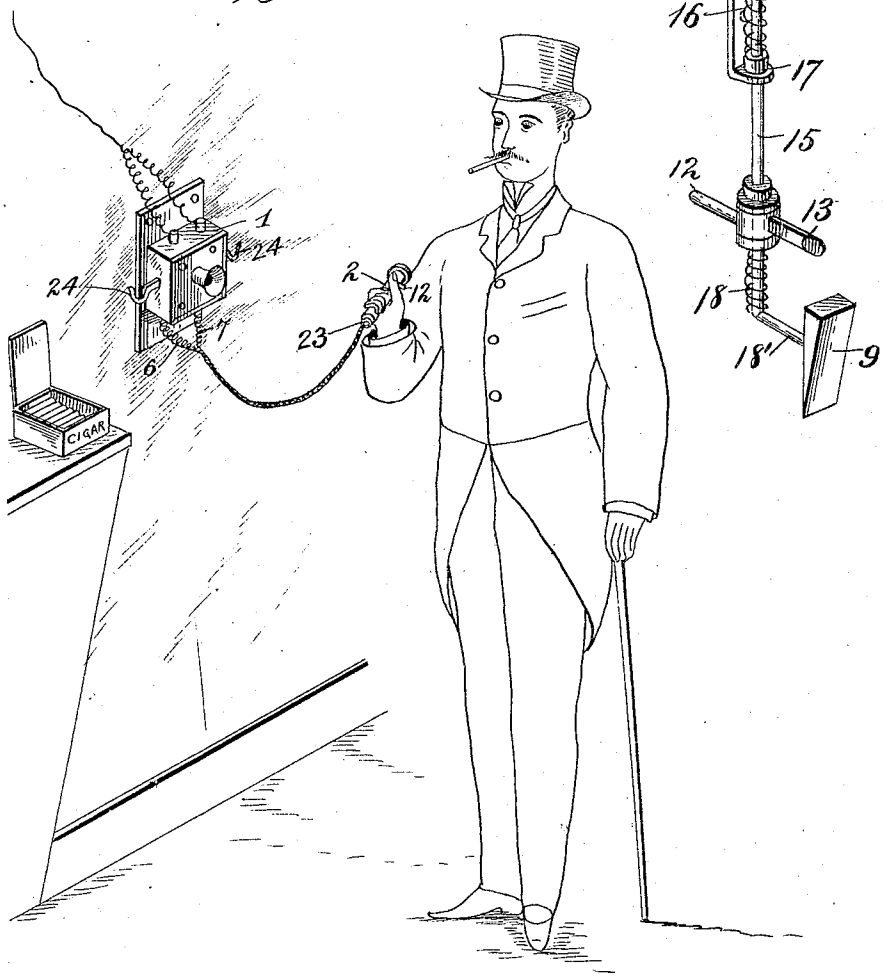



Fig. 6.




Witnesses:
W. N. Durand.
Arthur W. Cosley.

Inventors
James Waters
Frederick V. Thompson
By Louis Bagger & Co.
Attorneys.

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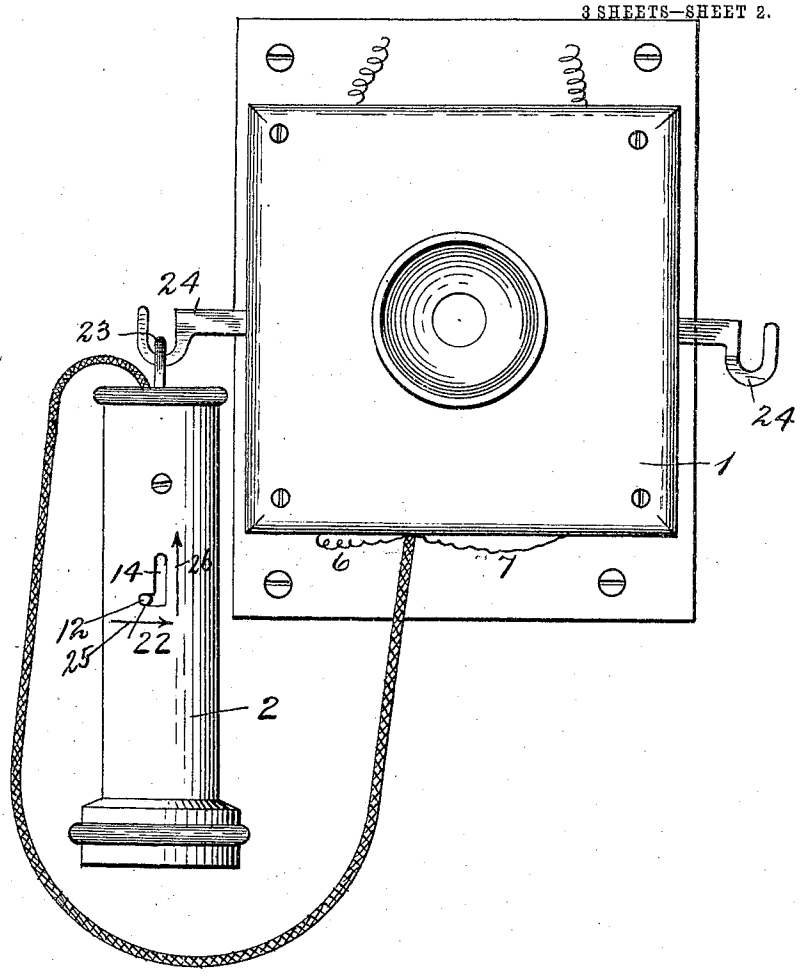
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NO MODEL. 3 SHEETS—SHEET 2.

Fig. 2.



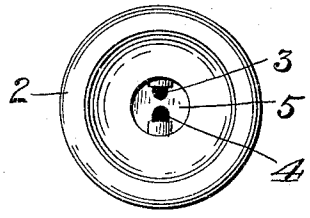




Fig. 4

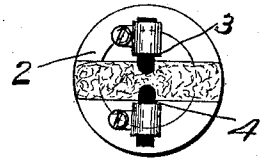



Fig. 5

Witnesses:
W. N. Durand
Arthur O. Gosley.

Inventors:
James Waters.
Frederick V. Thompson
By Louis Bagger & Co
Attorneys.

PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

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NO MODEL. 3 SHEETS—SHEET 3.

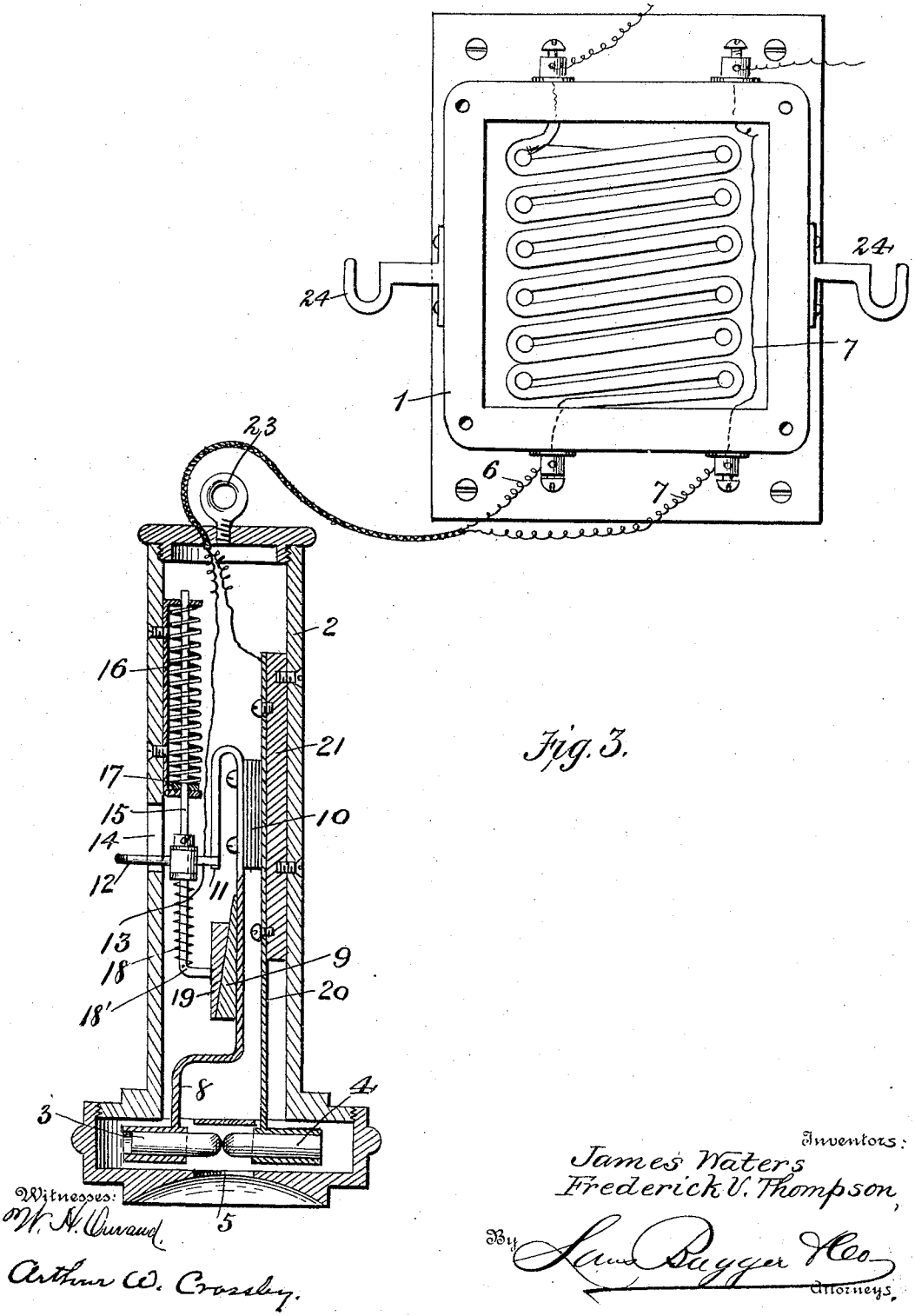



Fig. 3.

Witnesses:
W. N. Durand.
Arthur O. Crosby.

Inventors:
James Waters
Frederick V. Thompson,
By Munn Dayger & Co
Attorneys.

PHOTO-LITHOGRAPHED BY SACHETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 774,624. Patented November 8, 1904.

# UNITED STATES PATENT OFFICE.

JAMES WATERS AND FREDERICK V. THOMPSON, OF PHILADELPHIA, PENNSYLVANIA.

## ELECTRIC CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 774,624, dated November 8, 1904.

Application filed April 15, 1904. Serial No. 203,336. (No model.)

*To all whom it may concern:*

Be it known that we, JAMES WATERS, a subject of the King of Great Britain, and FREDERICK V. THOMPSON, a citizen of the United States, both residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Electric Cigar-Lighters, of which the following is a specification.

This invention has relation to cigar-lighters generally, and particularly to those of the electrical class.

It consists, broadly, of a device that may in general be used as a telephone-receiver is handled equipped with electrical appliances that may be manipulated by the hand of the user or by his thumb or finger to establish an arc whereby a cigar may be lighted.

This invention furthermore consists of the parts and combination of parts constructed, acting, and coöperating as is hereinafter more fully set forth and explained.

Of the accompanying drawings, forming a part of this specification, Figure 1 shows the invention complete and as in use. Fig. 2 shows the invention, on an enlarged scale, as out of use. Fig. 3 is a complete view of our invention, the part simulating a receiver having the front plate removed and the part simulating a transmitter and its adjuncts being shown in vertical longitudinal section. Fig. 4 shows a face view of the lighting end of the device simulating a transmitter. Fig. 5 is a view similar to Fig. 4, with the front cap removed. Fig. 6 is a perspective view of some of the parts contained in the part simulating a transmitter.

Similar figures of reference designate similar parts wherever they occur.

In the drawings, 1 designates a stationary box simulating a telephone-transmitter, in which some of the wires of our invention are arranged and upon which the lighting device proper is arranged to be hung.

2 designates a casing simulating a telephone-receiver, which constitutes the lighting device and contains the immediate lighting means.

3 designates a carbon electrode capable of movement longitudinally and meeting at its end the end of the other electrode, 4, similarly formed and capable of similar movement, the said electrodes being arranged, as shown, at the opening 5 in the end of the casing 2.

It may now be stated that it is designed to employ the receiver part of the contrivance as a cigar-lighter by thrusting the ends of the cigar between the ends of the carbons 3 4, separating them to an extent sufficient to establish an arc and light the cigar, when the latter may be withdrawn and the carbon will come together, extinguishing the light, leaving the "receiver" to be hung up until wanted again. To these ends wires 6, of varying resistance, properly wound and supported and supposed to be connected with a suitable electrical-supply source, are arranged in and proceed from the box 1 through conducting means, to be presently described, to the electrode, while the other wire, 7, is in like manner conducted to the electrode 4 and a source of electric supply.

The electrode 3 has the lower end of a flat spring 8 secured to it, and a short distance above its lower end there is a wedge-shaped iron block 9 attached to it, while at its upper end it has a fiber insulating-block 10 connected to it, and beyond the block 10 it has a portion bent backwardly parallel with its main portion terminating at 11.

12 is a knob the stem 13 of which extends through a slot 14 in the casing 2, has a loose insulated connection with a rod 15, and at its inner end makes contact with the terminal 11 of the spring 8. The rod 15 extends vertically in the casing 2 and by means of a spring 16 acting between the upper end of the casing and a bearing 17 tends to keep said rod 16 pressed downwardly, normally holding the knob 12 at the lower end of the slot 14, while a spring 18, connected at one end with the rod 15 and at the other end with the insulated bushing which connects the said rod 15 with the stem of the knob 12, is made to operate, with a tendency of keeping the inner end of said stem normally in contact with the terminal 11 of the spring 8. At its extreme lower end

the rod 15 is provided with an angular bend 18′, that is connected with a wedge-shaped piece 19, oppositely shaped to the piece 9.

A flat spring 20 is connected at its lower end with the electrode 4 between the insulating-block 10 and similar block 21, to which it is secured by screws. The wire 7 is connected with the spring-plate 20 and out of the casing 2 and through it and into and through the box 1. The wire 6 is connected to the stem 13 of the knob 12 and passes from thence out of the casing 2 to and into the box.

The slot 14 has an angular extension 22 at its lower end, into which the stem of the knob may extend when the parts are in normal position.

It will be understood that all of the parts necessary to be insulated are so insulated whether so specified or not.

In use, supposing the parts to be in normal position, as specified, and that it is desired to light a cigar, the casing will be taken off the box 1, to which it may be supposed to have hung through the medium of a hook 24, passed into the eye 23, and the user by placing his thumb on the knob or bottom 12 may press it around in the direction of the arrows 25 26, Fig. 2, the effect of which will be to allow the spring-plate 8, which has been under appreciable tension to fall back, thereby separating the carbon electrodes. At the same time the stem 13 of the knob 12 will be kept in contact with the downwardly-turned end of the spring-rod 8, keeping the electrical circuit here intact, and as the carbon electrodes separate an arc will be established in the opening at 5, so that a cigar may be lighted through said opening. As soon as the knob 12 is released the spring 16 will depress the rod 15, restoring all parts to their normal position and putting out the light, when the casing 2 may be hung on the box 1, as a receiver of a telephone is "hung up," and the invention left for use again when needed. In this way a novel, very efficient, and convenient cigar-lighter is provided.

It is to be noted that the wires can be led into and out of the box 1 at any point desired and that the lighter-casing can be hung up on either side of the box or at any other convenient point and also that the entire invention can be placed where most desired.

What we claim as our invention is—

A cigar-lighter consisting of an elongated casing having an opening at one end, longitudinally-movable electrodes in said casing at said opening, and in circuit with a source of electrical supply, one of said electrodes mounted on a resilient arm provided with a cam-surface and a manually-operable cam for moving said electrodes into arcing and into circuit-closing positions.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JAMES WATERS.
FREDERICK V. THOMPSON.

Witnesses:
WM. M. STUART, Jr.,
SAMUEL WRIGHT.