

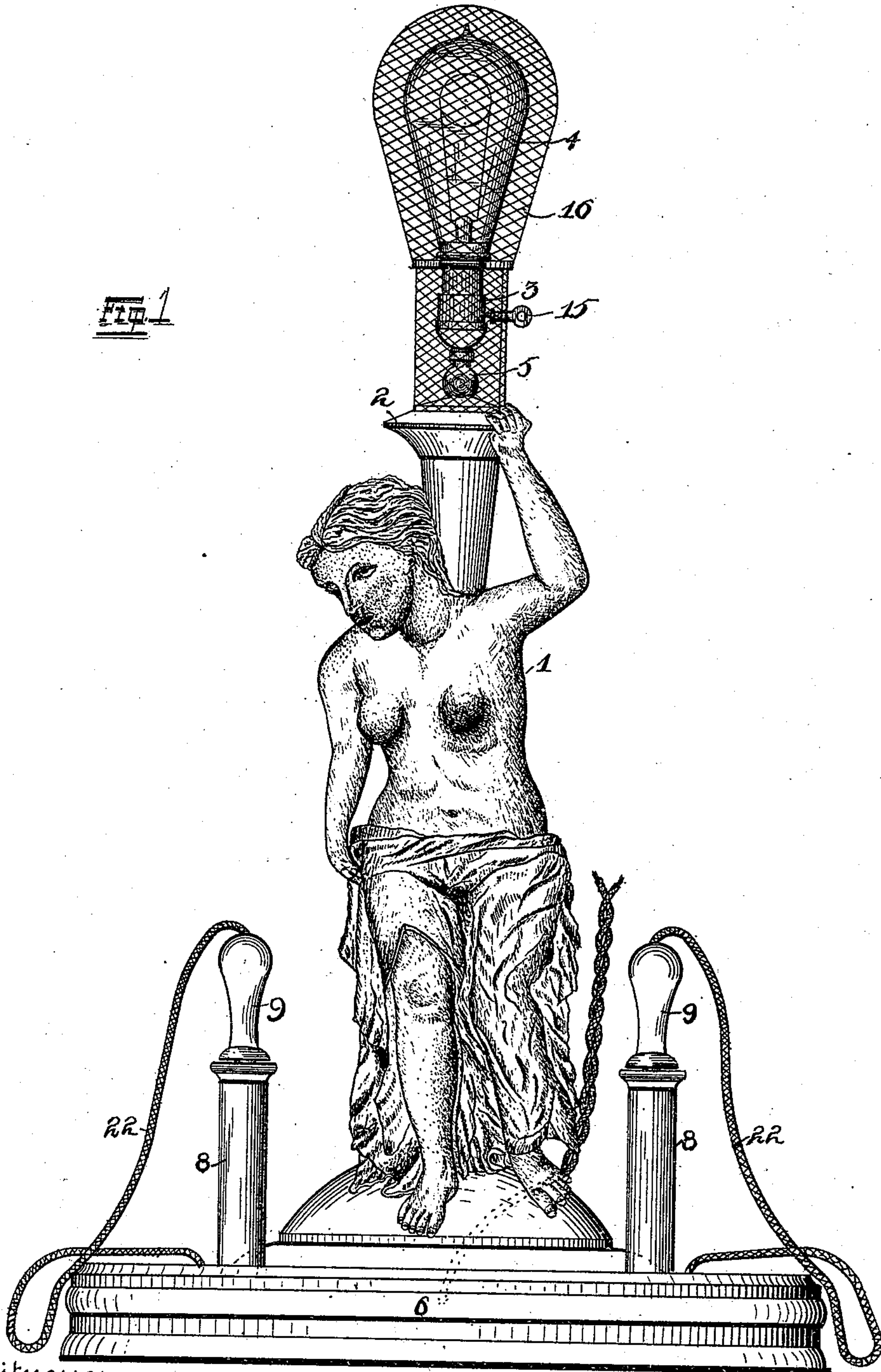
(No Model.)

2 Sheets—Sheet 1.

E. T. GUTBERLET & W. R. ISARD.
ELECTRIC CIGAR LIGHTER.

No. 488,889.

Patented Dec. 27, 1892.



Witnesses

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Herbert L. Robinson.

Edward T. Gutberlet Inventors

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By their Attorneys

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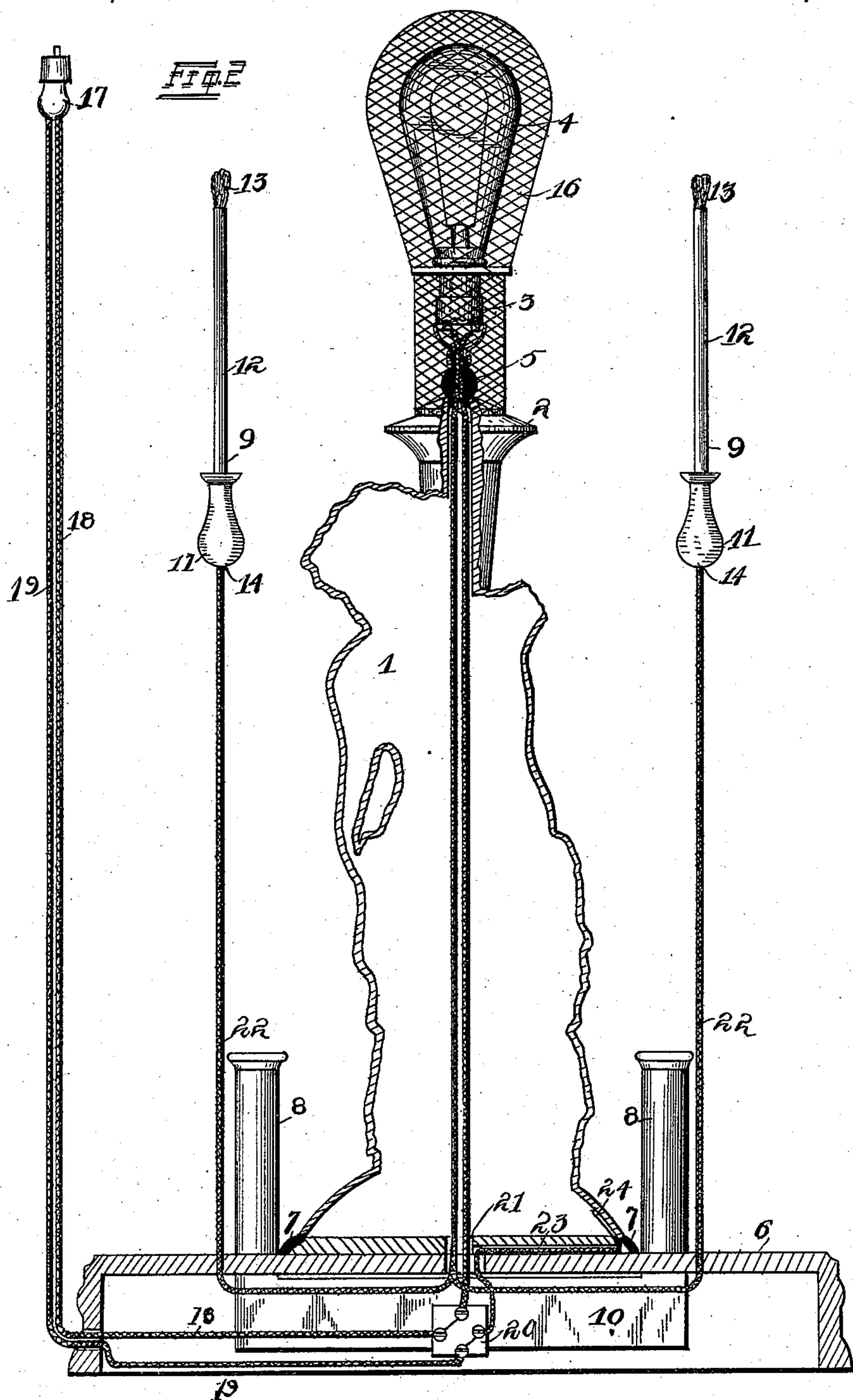
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UNITED STATES PATENT OFFICE.

EDWARD T. GUTBERLET AND WILLIAM R. ISARD, OF ST. LOUIS, MISSOURI.

ELECTRIC CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 488,889, dated December 27, 1892.

Application filed June 27, 1892. Serial No. 438,107. (No model.)

To all whom it may concern:

Be it known that we, EDWARD T. GUTBERLET and WILLIAM R. ISARD, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Electric Cigar-Lighters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention relates to improvements in an "electric cigar lighter," and consists in the utilization of electric currents in a suitable device for the ignition of an inflammable liquid by the breaking or making of the currents as will be more fully hereinafter described and designated in the claims.

The object of our invention is to improve upon the electric cigar lighters now in use, and to construct a device which is readily attachable to any current of high voltage, and which does away with the use of batteries and an exciter.

Referring to the drawings: Figure 1 is a plan view of our invention, and Fig. 2 is a vertical section view showing the method of distribution of the current.

In the drawings: 1 indicates the statue of a woman supporting a suitable figure 2 to which a lamp socket 3, and a lamp 4 therein, are secured. Between said figure 2 and the socket 3 is an insulation block 5 which prevents the short circuiting of the current from the statue 1 into the socket 3. The statue 1 is made of any metal which is a good conductor of electricity, and is mounted upon a base 6 and insulated therefrom by a strip of vulcanite or other insulation 7. Secured in the base are a number of dip-holders 8 which extend above the upper side of the base a distance in accordance with the length of the dips 9 used. The dip-holders 8 are preferably of round metal tubing, and extend downwardly to the base into what we term an equalizing chamber 10. By the use of this expression we mean that when the inflammable liquid is poured into one of the dip-holders 8 it passes downward into said chamber 10, and seeks its level in the other dip-holders, and consequently does away with the filling of each separate dip-holder. The dips 9 consist of a handle 11 preferably made from some insulating material, and has secured

therein a metal shank 12 in the free end of which are secured a number of fine metal filaments 13 which constitute a brush. The handle is provided with a perforation 14 through which the wire leading to the dip passes, and the proper connection is made with the shank 12 therein.

The socket and lamp used are of the ordinary design and construction used in electrical work except in that the socket has a specially constructed key for the turning off and on of the current. Said key 15 is made with a very long shank in order that it may project beyond a wire-screen or netting 16 which surrounds the lamp and socket, and is adapted to protect same from breaking and also to keep the inflammable liquid upon the dip from soiling the lamp. Said wire netting 16 is electrically connected with the statue 1, and forms an additional contact surface for the operation of the device.

The statue 1, the upright supporting figure 2, and the netting 16 form what we term a contact piece, and in the method of connections shown in the accompanying illustrations we designate the dips 9 as circuit closing dips. The statue 1, the supporting figure 2, and the base 6 are all made in the form of a shell leaving the interior a hollow space.

We will now proceed to describe the manner in which the circuit connections are made as shown in Fig. 2 of the drawings. The introduction of the current into the cigar-lighter is primarily made through a plug 17, the base of which may be of any construction to fit into the socket in which it is to be inserted in place of the lamp. Two insulated wires 18 and 19 lead therefrom to their proper contact connections in a fuse-block 20. The fuse-block 20 is of the usual design made use of in electrical construction, and therefore, we need not describe its details. We will first trace the wire 18 and the connections made thereto. Starting from its connection on the fuse-block it passes upward through an opening 21 through the base 6 and insulation 7, and its proper connection is made to one of the binding posts in the socket 3. The current passes through the lamp by reason of its contact in the socket 3, and the wire is attached to the other binding post of the socket, and thence passes downward into the base 6 where branch

connections such as 22 are made to the dips 9. Although only two dips have been shown in the accompanying drawings, any number may be used without materially effecting the original idea and function of our invention and the connections to said dips are similarly made. The wire 19 from its connection upon the fuse-block 20 passes through a groove 23 in the insulating plate 7 and is suitably fastened to a contact piece 24 upon the inside of the statue 1. Thus it will be seen that the lamp 4 is connected into the circuit as resistance, and that a complete circuit is not formed, and the filament of said lamp 4 does not become incandescent except by the contact between one of the dips 9 and the statue 1 or the wire netting 16, which constitute the contact terminal of one pole of the current while the dip 9 constitutes the contact terminal of the other pole. As is well known the sudden making or breaking of a circuit by means of the contact or separation of its terminals produces a spark. Therefore, the inflammable liquid upon the end of the dip 9 is ignited by this spark when the dip is brought in contact with the statue 1 or the wire-netting 16. The liquid used is preferably alcohol and is picked up and held by the fine filaments 13 upon the end of the dip 9, and consequently is instantly ignited when the circuit is closed. The netting 16 is preferably made in two sections so that the top section can be displaced in order that the lamp may be removed or cleaned.

Having stated the object and described the parts in detail, of our invention, We will now proceed with its operation. A gentleman wishing to light a cigar lifts the dip 9 with the inflammable liquid thereon out of the dip-holder 8, and brings the brush 13 in a sudden sweeping contact with the statue 1 or netting

16, and by reason of the spark produced by said contact the alcohol is ignited and a light for the cigar is furnished. While the dip 9 is in contact with the statue 1 or netting 16 the lamp is incandescent, but when the circuit is broken the lamp is consequently in its normal state. After the light has been applied to the cigar, the dip is replaced in the holder and is then ready for further use.

Having fully described our invention, what we claim is,

1. In an electric cigar lighter, the combination, with a stand or upright, a contact brush or brushes, and electrical conductors communicating respectively with the stand or upright and the brush or brushes, of a lamp carried by the stand or upright and insulated therefrom, said lamp being in series with the brush conductor, and a wire netting inclosing the lamp and in electrical connection with the stand or upright; substantially as and for the purpose set forth.

2. In an electric cigar lighter, the combination, with a stand or upright 1, a contact brush or brushes 9, a lamp 4 carried by the stand or upright and insulated therefrom, and a wire netting 16 inclosing the lamp and in electrical contact with the stand or upright, of a conductor 18 leading to the lamp and from thence to the brush or brushes, and a conductor leading directly to the stand or upright; substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

EDWARD T. GUTBERLET.

WILLIAM R. ISARD.

Witnesses:

HERBERT S. ROBINSON,
ALFRED A. EICKS.