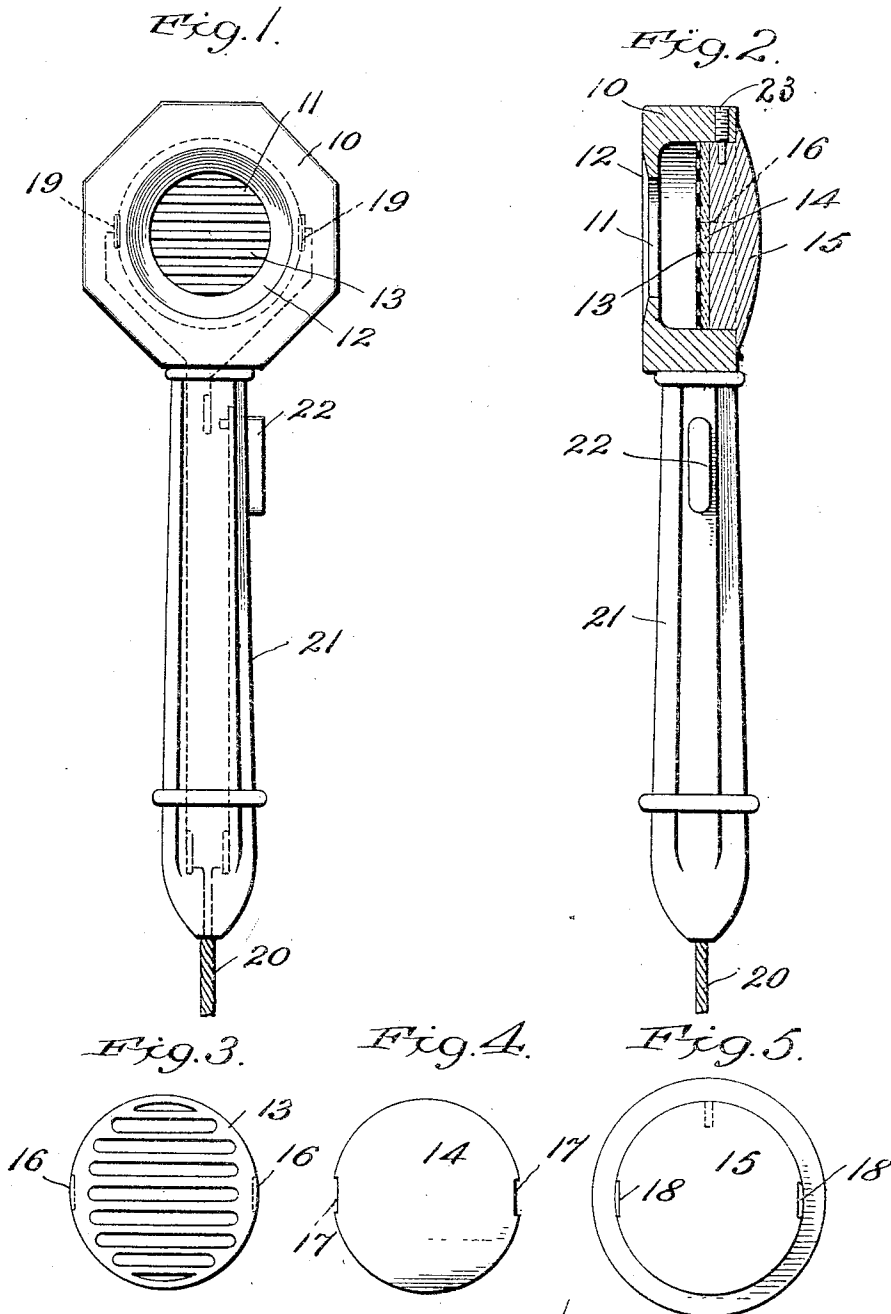


J. L. SPENCE.
ELECTRIC CIGAR LIGHTER.
APPLICATION FILED APR. 27, 1917.

1,235,853.

Patented Aug. 7, 1917.



Jesse Lee Spence, Inventor
By his Attorneys
Wilkinson, Smith and MacKay

UNITED STATES PATENT OFFICE.

JESSE LEE SPENCE, OF NEW YORK, N. Y.

ELECTRIC CIGAR-LIGHTER.

1,235,853.

Specification of Letters Patent.

Patented Aug. 7, 1917.

Application filed April 27, 1917. Serial No. 164,840.

To all whom it may concern:

Be it known that I, JESSE LEE SPENCE, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Electric Cigar-Lighters; and I do hereby 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.

My present invention relates more particularly to electric cigar lighters for use on automobiles and similar localities where jarring or vibration and rapid air currents may be expected. It has been found convenient to supply electrical cigar lighters on automobiles, supplied by current from the generators ordinarily carried by such vehicles, and the devices of this kind hitherto supplied have been subject to certain disadvantages, among which are the following.

The lighting circuit is sometimes accidentally preserved after use, and, when the lighter is released by the user and allowed to hang idly, the lighting surface, remaining in a state of incandescence is apt to come in contact with the upholstery and burn it. One advantage of my invention is that it supplies shielding means which prevent such accidents as these.

When the car is moving rapidly there is more or less jarring, which makes it difficult and inconvenient to apply the incandescent light surface to the cigar tip and to hold it there. My invention supplies a guiding and retaining means, whereby the use of the lighter is made certain and easy under the circumstances mentioned.

Another advantage of my invention is found in the provision of means whereby the blowing about of sparks and ashes is prevented.

In its preferred form my improvement comprises a removable grid and grid support, and the grid is made easily removable from its support. At the same time, the invention provides a simple and reliable means for bringing the grid into the circuit by the mere act of inserting the grid in place.

The improved cigar lighter is illustrated in a preferred form in the accompanying drawing, wherein Figure 1 is a front elevation of the complete lighter, Fig. 2 is a vertical section of the same, the handle be-

ing shown in side elevation, Fig. 3 is a face view of the heat producing grid or incandescing member, Fig. 4 is a face view of the heat resisting plate, and Fig. 5 is a similar view of the removable cap.

The cigar lighter proper comprises a protective and guiding member and a removable grid and grid-support. In the form shown the former member consists of a hollow casing 10, shown octagonal in figure, and having a front aperture 11, preferably circular, as shown. I prefer to supply a conical surface 12 around the exterior of this opening, to facilitate guiding the cigar into the same.

While it is within the scope of my invention to insert the removable grid and support from back or sides, as desired, I prefer the form shown, wherein this element is inserted from the rear. The incandescing metallic grid 13, of any usual form, is directly supported by a heat resisting plate 14, of "lava" or the like. This plate in turn rests upon the supporting cap 15, which I prefer to make of some refractory and insulating substance such as bakelite.

I prefer to hold these three removable elements together by the simple frictional means shown, which also serve for automatically establishing the necessary electrical connection when the grid is inserted. This means comprises two projections or ears 16, turned at right angles to the plane of the grid and forming part of it, which ears fit rather tightly into recesses 17 in the plate 14 and 18 in the cap 15. These tabs embrace the plate and cap tightly enough to provide a frictional securing means whereby the three elements are united in a manner permitting ready separation for repairs.

At the same time, these ears are so placed that, when the cap is inserted into the back of the casing 10, they make close and effective electrical contact with the two terminals 19, mutually insulated, and embedded in the casing 10, as shown. Current is brought to these terminals by the usual wires 20, passing through the handle 21, and circuit is controlled by any convenient form of switch or push button 22, on the handle. This is shown in dotted lines in Fig. 1. The cap may be secured in place in any convenient manner, as, for instance, by a screw 23, entering registering openings in the casing and cap.

In use, the end of the cigar is thrust

through the opening 11, which serves to guide it and at the same time to hold it steady against the incandescent grid in spite of any jarring. The sides of the casing 10 prevent the blowing about of ashes and sparks, and, at the same time the incandescent grid is so far within the casing that it cannot come into contact accidentally with the upholstery of the car or otherwise cause damage.

The whole device is readily separated for cleaning, repairs or replacement of parts.

What I claim is—

1. In a cigar lighter, a casing forming a chamber having a relatively large opening at the back and a smaller guide opening at the front thereof, in combination with a cap for closing the larger opening, said cap having a reduced portion extending part way into said chamber, a grid supported upon the inner face of the reduced portion of

said cap, and controllable means associated with said grid adapted to close an electric circuit through the same at will.

2. A cigar lighter having the characteristics set forth in claim 1 hereof, provided with a thin lava plate between the grid and the cap.

3. A cigar lighter having the characteristics set forth in claim 1 hereof, wherein the grid terminates in ears 16 adapted to fit the sides of the closing cap tightly enough to hold said grid in place by friction.

4. A cigar lighter having the characteristics set forth in claim 3 hereof having electric terminals carried within the chamber so placed as to make contact with the ears fixed to the grid when the cap and grid are in normal working position.

In testimony whereof, I affix my signature.

JESSE LEE SPENCE.