

NO PATENT GRANTED
ON THIS APPLICATION

PATENT SPECIFICATION



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PROVISIONAL SPECIFICATION.

Improvements relating to Electric Cigar Lighters and similar Devices.

We, QUAIN ELECTRIC COMPANY, LIMITED, of 55, Effra Road, Brixton, London, S.W. 2, Manufacturers, and JOHN RONALD SPINK, of 24, Lansdowne Road, Walthamstow, London, E. 17, Engineer, do hereby declare the nature of this invention to be as follows:—

This invention relates to electric cigar lighters and similar devices and has for its object to provide a cigar lighter of a simple construction which is effective and durable in use.

According to the invention we provide an electric cigar lighter in which the resistance wire is enclosed within a tube or tubes of silica.

The invention comprises the constructional features which are hereinafter described.

In carrying the invention into effect we provide the cigar lighter as a casing open at the top and having secured beneath it the handle by means of which it may be held. The handle may be provided with a switch lever by means of which on the handle being grasped, the electric circuit may be completed by the incidental depression of the switch lever in a manner known in telephone transmitters which are adapted to the handle of a receiver.

The electric resistance wire is passed through a series of parallel disposed silica tubes, the tubes being mounted upon an insulating support. The casing in which the silica tubes are mounted may be covered by a plate having a central aperture through which the silica tubes are

exposed and this plate may be held in position by means of a closing ring. At the exterior of the casing a ring or eye may be integrally or otherwise formed so that the cigar lighter may be hung upon a hook. Thus the current is only used on the lighter being taken from the hook and on its handle being grasped in the hand. The electric circuit may, however, be completed by mounting the lighter when out of use upon the hook-formed end of a switch lever so that when the lighter is removed, the switch lever under the influence of a spring moves to close the circuit, whereby current passes through the resistance wire, thus immediately heating the surrounding silica tubes to incandescence.

It will be understood that the respective tubes of silica are mounted in juxtaposition but not in contact, and that the tubes, being of small diameter, present surfaces by which the end of a cigar or cigarette may be quickly lighted.

The casing of the cigar lighter may be provided of a cup-shape, the handle being attached to the base of the cup, but the edge of the cup or casing is advantageously inclined as is also the support on which the silica tubes are mounted, so that thus the lighter is capable of being conveniently held by the person using it to light a cigar or cigarette.

Dated this 31st day of December, 1919.

EDWARD EVANS & Co.,
27, Chancery Lane, London, W.C. 2,
Agents for the Applicants.

[Price 1/-]

COMPLETE SPECIFICATION.

Improvements relating to Electric Cigar Lighters and similar Devices.

We, QUAIN ELECTRIC COMPANY, LIMITED, of 55, Effra Road, Brixton, London, S.W. 2, Manufacturers, and JOHN RONALD SPINK, of 24, Lansdowne Road, Walthamstow, London, E. 17, Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to electric cigar lighters and similar devices and has for its object to provide a cigar lighter of a simple construction which is effective and durable in use.

According to the invention we provide a cigar lighter or similar device in which the resistance wire is disposed within a number of parallel tubes of silica, and in which the silica tubes are mounted upon a holder, comprising a handle, and on which holder a closing ring is applied having an aperture of such shape as to expose the silica tubes for contact therewith of the end of a cigar or the like to be ignited.

The invention is illustrated in the accompanying drawings in which

Figure 1 is a side elevation, Figure 2 a front elevation, and Figure 3 a plan view of the top face of a lighter provided according to the invention.

In carrying the invention into effect as illustrated in the accompanying drawings, we provide the cigar lighter as a casing *a* open at the top, and having secured beneath it the handle *b* by means of which it may be held. The handle *b* may be provided with a switch lever *c* by means of which on the handle being grasped, the electric circuit may be completed by the incidental depression of the switch lever *c* in a manner known in telephone transmitters which are adapted to the handle of a receiver.

The electric resistance wire is passed in parallel or series through a number of parallel disposed silica tubes *d*, the tubes being mounted upon a fireproof insulating support. The casing *a* in which the silica tubes *d* are mounted may be covered by a plate *e* having a central aperture through which the silica tubes are exposed and this plate may be held in position by means of a closing ring *f*. At the exterior

of the casing a ring or eye *g* may be integrally or otherwise formed so that the cigar lighter may be hung upon a hook. Thus the current is only used on the lighter being taken from the hook and on its handle being grasped in the hand. The electric circuit may, however, be completed by mounting the lighter when out of use upon the hook-formed end of a switch lever, so that when the lighter is removed, the switch lever under the influence of a spring moves to close the circuit, whereby current passes through the resistance wire, thus immediately heating the surrounding silica tubes to incandescence.

It will be understood that the respective tubes of silica are mounted in juxtaposition but not necessarily in contact, and that the tubes, being of small diameter, present surfaces by which the end of a cigar or cigarette may be quickly lighted.

The casing *a* of the cigar lighter may be provided of a cup-shape as illustrated, the handle *b* being attached to the base of the cup, but the edge of the cup or casing is advantageously inclined as illustrated in Figures 1 and 2 as is also the support on which the silica tubes are mounted, so that thus the lighter is capable of being conveniently held by the person using it to light a cigar or cigarette.

Figure 4 illustrates in longitudinal section a modified form of cigar lighter in which the construction of the cup *a* is shown.

According to this construction the silica tubes *d* are mounted within grooves in a circular insulated and fireproof plate *h* which is seated upon a shoulder *a*¹ formed in the interior of the cup *a* and the metal ring *f* is in opposite positions in the downwardly protruding part of its under face provided with three grooves to accommodate the respective silica tubes *d* so that thus the ring *f* serves positively to retain the silica tubes in their position upon the insulating plate *a*¹.

Instead of the heater being suspended in the manner described with reference to Figures 1 and 2 the conducting wires may be applied upon a drum which is mounted upon a helical spring in known manner

so that when the cigar lighter is not required for use, its lower end may be brought down on to a seat formed at the top of the casing in which the drum is mounted and held in that position by the tension of the spring while when it is required for use it may be drawn away from its position under the resistance of the spring.

10 The plate a^1 may instead be provided with two parallel ribs within which recesses are formed for the reception of the silica tubes.

15 I am aware that parallel tubes of silica have before been proposed for the enclosure of a resistance wire.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. An electric cigar lighter or similar device, in which the resistance wire is

disposed within a number of parallel silica tubes and in which the silica tubes are mounted upon a holder, comprising a handle, on which a closing ring is applied having an aperture of such shape as to expose the silica tubes for contact therewith of the end of a cigar or the like to be ignited, substantially as described.

2. An electric cigar lighter or a lighter for other similar purposes, substantially as hereinbefore described with reference to Figures 1 to 3 of the accompanying drawings.

3. An electric cigar lighter or a lighter for other similar purposes, substantially as hereinbefore described with reference to Figure 4 of the accompanying drawings.

Dated this 29th day of October, 1920.

EDWARD EVANS & Co.,
27, Chancery Lane, London, W.C.,
Agents for the Applicants.

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[This Drawing is a reproduction of the Original on a reduced scale.]

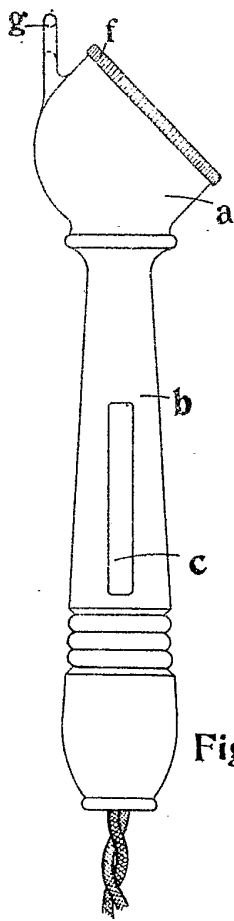


Fig. 1.

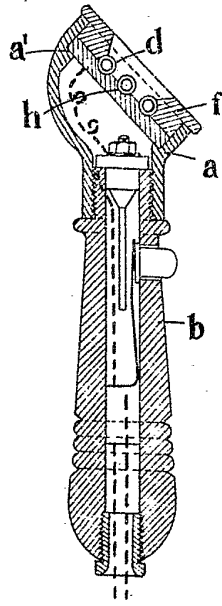


Fig. 4.

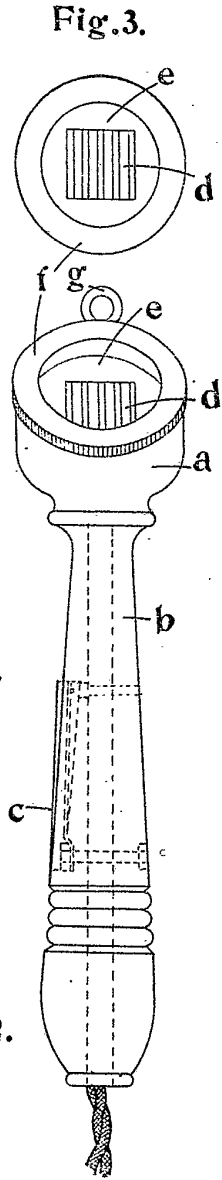


Fig. 2.

Fig. 3.