R. J. H. HILL.

ELECTRIC CIGAR LIGHTER, PIPE LIGHTER, AND THE LIKE.

APPLICATION FILED SEPT. 16, 1919.

1,340,716. Patented May 18, 1920.

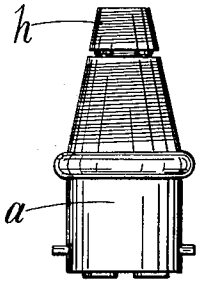


FIG 1

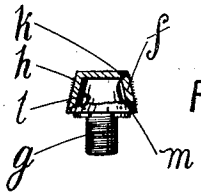


FIG 4

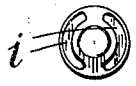


FIG 5

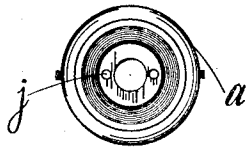


FIG 3

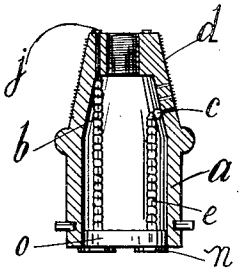


FIG 2

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UNITED STATES PATENT OFFICE.

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ELECTRIC CIGAR-LIGHTER, PIPE-LIGHTER, AND THE LIKE.

1,340,716. Specification of Letters Patent. Patented May 18, 1920.

Application filed September 16, 1919. Serial No. 324,213.

To all whom it may concern:

Be it known that I, REGINALD JOHN HAMILTON HILL, a citizen of the United Kingdom of Great Britain and Ireland, and resident of 67 Queen Victoria street, London, England, have invented certain new and useful Improvements in Electric Cigar-Lighters, Pipe-Lighters, and the like, of which the following is a specification, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to electric cigar lighters, pipe lighters and the like and has for its main object to provide means whereby a portion of the cigar lighter may be easily replaced when worn out.

The electric cigar lighter, pipe lighter or the like comprises a hollow, preferably conical shaped, support of refractory material grooved externally and wound with resistance wire, leads being provided by means of which current may be adjustably taken directly from any standard electric light supply.

A replaceable tip is provided for the support said tip being adapted to serve as the cigar or pipe lighter proper. This tip can be easily replaced when worn out.

On the underside of the tip are contacts which when the tip is in position engage contacts on the conical support.

In order that the invention may be clearly understood reference will now be had to the accompanying drawing wherein the invention is illustrated by way of example.

Figure 1 is an outside elevation of the conical support with the replaceable tip in position.

Fig. 2 is a sectional elevation of the conical support.

Fig. 3 is a plan view of the support.

Fig. 4 is a part section of the replaceable tip, and

Fig. 5 a view of the underside of the replaceable tip.

In this example *a* is the conical support of refractory material grooved externally and wound with resistance wire *d*.

The support is provided with holes *c* spaced apart at correct intervals to determine the length of wire winding in the grooves which will suit the predetermined voltage. Thus a short length of wire may be wound in the grooves for use on say circuits of 100 to 110 V., a longer length for 200 to 220 V., and a still longer length for 230 to 250 V., and the wire may be of uniform or varied thickness as required. A suitable wire for the purpose is that known as "nichrome" of about .01 inch diameter.

The leads *e* are connected to contact pieces *n* on the block *o* whereby the lighter may be connected to the plungers of a bayonet lamp holder.

The replaceable tip *f* is provided with a threaded projection *g* adapted to engage a threaded opening in the support, and to be securely held therein.

The tip is grooved externally and wound with resistance wire *h* which may be similar to or dissimilar to that employed on the support *a*, and is provided with contacts *i* on the underside adapted, when the tip is in position on the support, to engage contacts *j* thereon. Fixing holes at *k* and *l* are provided for the resistance wire *h* and for the leads *m*.

The provision of the removable tip renders the lighter very economical as the tip can be replaced when worn out, it being possible to use the same support for a large number of tips.

In some cases the conical support may be more or less fully wound and tapping terminals arranged in the holes to suit the different voltages.

The device can be used in conjunction with a switch as a separate piece of apparatus, or it may be combined with a suitable throw off push switch in the carrying apparatus.

What I claim and desire to secure by Letters Patent is:—

1. An electric lighter for cigars, pipes, and the like comprising a conical shaped hollow support, leads in said support, holes in said support, resistance wire in said support, means whereby said support can be connected to a lamp holder, a tip, means for detachably securing said tip to said support, resistance wire on said tip, and contacts on said tip, and leads connecting said contacts and resistance wire.

2. An electric lighter including a hollow support, said support having a threaded opening formed in the upper end thereof, contacts formed adjacent the upper end of the support, a conical tip having a threaded extension adapted to be positioned in the

threaded opening of the support, resistance wire on said tip, and contacts having connection with the resistance wire and adapted to engage the contacts on the upper edge of the support for supplying electrical current to the resistance wire.

3. An electric lighter including a hollow support, contacts forming at the base of the support for receiving electric current, leads in circuit with the contacts, said leads extending through the hollow support, a tip supported on the upper end of the support, contacts formed on the upper end of the support, contacts formed on the lower end of the tip, means for securing the tip to the support for holding the tip in position on the support, and a resistance wire surrounding the tip and in circuit with the leads of the support.

In witness whereof I have hereunto set my hand in presence of two witnesses.

REGINALD JOHN HAMILTON HILL.

Witnesses:
WILLIAM B. SCOMFIELD,
ELLIS A. CASH.