

119,141

PATENT



SPECIFICATION

Application Date, Nov. 14, 1917. No. 16,701/17;

Complete Left, May 13, 1918.

Complete Accepted, Sept. 26, 1918.

PROVISIONAL SPECIFICATION.

Improvements in Electric Cigar Lighters, Pipe Lighters and the like Apparatus.

We, MAX JOHN RAILING and REGINALD JOHN HAMILTON HILL, both of 67, Queen Victoria Street, London, Electrical Engineers, do hereby declare the nature of this invention to be as follows:—

Our invention relates to improvements in electric cigar lighters, pipe lighters and the like apparatus, and has principally for its objects to provide efficient means for supporting the heating wire, and to provide means for correctly determining the length or lengths of the said wire to be wound on the support for any given voltage or voltages for which the apparatus is to be adapted.

In carrying the invention into practice, we provide a hollow conical, or other suitably shaped piece of steatite, magnesic material, or other suitable refractory material, grooved externally and wound in the grooves with suitable resistance wire.

Holes are formed through the wall of the cone, spaced at correct intervals apart 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.

The wire may be attached to suitable pins or terminals placed in the holes. In some cases the cones may be more or less fully wound and tapping terminals arranged in the holes to suit the different voltages.

The base of the coned piece is flanged or otherwise formed, for suitable attachment to the usual types of lamp-holders or the piece may be otherwise mounted.

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.

Dated the 13th day of November, 1917.

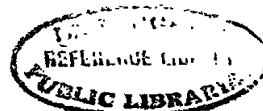
MAX JOHN RAILING.
REGINALD JOHN HAMILTON HILL.

COMPLETE SPECIFICATION.

Improvements in Electric Cigar Lighters, Pipe Lighters and the like Apparatus.

We, MAX JOHN RAILING and REGINALD JOHN HAMILTON HILL, both of 67, Queen Victoria Street, London, Electrical Engineers, do hereby declare the

[Price 6d.]



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:—

Our invention relates to improvements in electric cigar lighters, pipe lighters and the like apparatus, and consists mainly in the application of a known form of resistance, consisting of a hollow conical support of refractory material grooved and wound with resistance wire and provides a means for a cigar, pipe or cigarette lighter to be used directly off the mains of any standard electric light supply. It can also be used in conjunction with a separate resistance if so desired.

Our invention also provides an efficient means for supporting the heating wire or wires and for correctly determining, by properly spaced holes, the length or lengths of the said wire or wires to be wound on the support for any given voltage or voltages for which the apparatus is to be adapted.

Referring to the accompanying drawings, Fig. 1 is an elevation of a lighter constructed according to our invention, Fig. 2 is a sectional elevation of the same, and Fig. 3 shows a part on a larger scale.

In carrying the invention into practice, we provide a hollow conical piece of steatite, magnesian material, or other suitable refractory material A, grooved externally and wound in the grooves B with suitable resistance wire C as shown clearly at Fig. 3.

Holes D are formed through the wall of the cone, spaced at correct intervals apart 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 wire C may be attached or connected to suitable pins or terminals E placed in the holes D, to which pins the leads F are connected, the said leads terminating in connecting pieces G, mounted on the block H for completing the circuit to the plungers of a bayonet lampholder, the base of the coned piece A being suitably formed for attachment to such type of lampholder; or the piece may be otherwise mounted in a holder or on a base as may be desired.

In the case of use with the screw form of lampholder, as will be readily understood, the leads F would be connected one to a central contact in the block H and the other to an outer grooved sleeve.

In some cases the cones 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.

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. In electric lighters of the kind referred to, the application of a resistance comprising a hollow conical support of refractory material grooved and wound with resistance wire.

2. An electric lighter of the kind referred to comprising a conical support of refractory material grooved and wound with resistance wire and provided with holes spaced at intervals, and fitted with connections for determining the length of wire or wires to suit any required voltage, substantially as described and illustrated.

3. An electric lighter constructed and arranged substantially as described and as illustrated by the accompanying drawings.

Dated the 8th day of May, 1918.

M. J. RAILING.
REGINALD J. H. HILL.

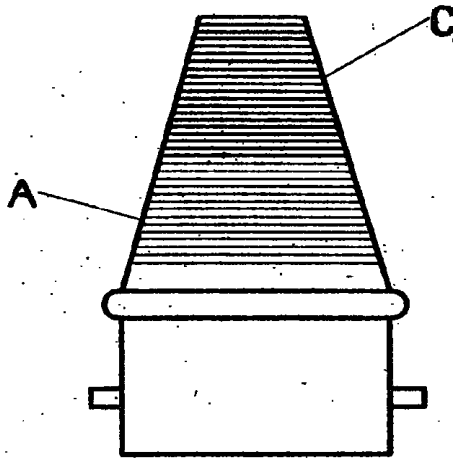


FIG. 1

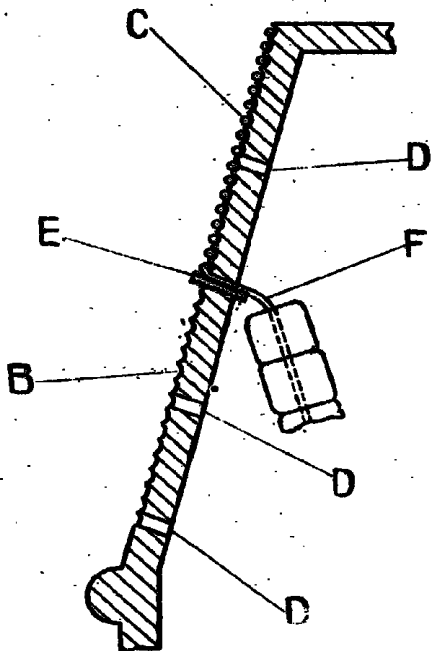


FIG. 3

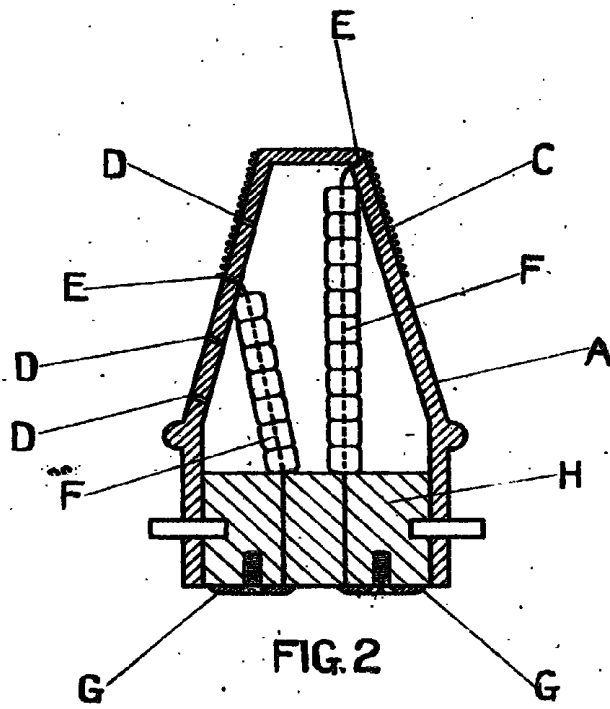


FIG. 2

[This Drawing is a full-size reproduction of the Original.]