PATENT SPECIFICATION

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COMPLETE SPECIFICATION.

Improvements in and relating to Electric Lighters for Cigars and the like.

I, ALFREDO ZECCHINI, a subject of the King of Italy, of Via Aurelio Saffi No. 7, Turin, Italy, Assignee in part of INNOCENTE PANZA, a subject of the King of Italy, of Via S. Quintino No. 45, Turin, Italy, 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 an electric lighter for cigars and the like, comprising a body which is rendered incandescent by the electric current.

The invention consists in apparatus of this type wherein, in a stationary socket in the circuit of a source of current, is located a removable member comprising a a circuit in which is inserted the heating body mounted at one extremity of the said removable member, while at the opposite extremity of the removable member is mounted a member for the control of the circuit.

In the annexed drawing is shown by way of example an embodiment of an electric lighter according to this invention, intended to be secured to a wall. Figure 1 is the outer view of the complete apparatus; Fig. 2 is a separate view of the plug provided with the heating member; Fig. 3 is a central section of the whole device; Fig. 4 is an inside view of the sleeve carrying the heating member; and Fig. 5 is a diagram of the circuit.

In the construction illustrated by Figs. 1 to 3, the device comprises a hollow socket 1 which is connected to a plate 2, intended to be secured to a wall, by means of sleeves 3 in which are located pins 5 and 6, each encircled by an insulating bushing 4. One end of each of the said pins is acted on by a spring 5^1, 6^1 connected with the circuit wires, and the opposite end of each pin projects into the socket 1.

In the event of the socket 1 being in contact with the plate 2 the end of the blades 5^1, 6^1 connected to the circuit may be caused to project into the said socket.

In any case, within the socket 1, provided with holes 1^1, for the escape of the air which expands when heated, is located a metal plug 7, having a grasping head 8 which is intended to enter said socket, and at its inner end is provided with a heating member. This heating member consists of a block 9 of refractory material enclosed in a metal sleeve 10 screwed at the mouth of the plug 7 and having a front recess in which is located an electric resistance 11. This resistance has one end connected to a conducting ring 12 secured on the inner surface of the block 9 and the opposite end secured to a central rod 13 extending in the hollow of the said plug 7.

In the plug 7, between insulating rings 14^1, is mounted a partition 14 of conducting material the rim of which is free. The said plug is provided with a hole in which is mounted to slide endwise a rod 15 one end of which faces that of the rod 13 while the opposite end carries a knob 16 of insulating material which projects beyond the head 8.

The rod 15 is held by a spring 17 and stop flange 18 in its end position, by which its end is spaced away from the rod 13, and the electric connection between it and the partition 14 is ensured under all circumstances by a brush 19.

The location of the partition 14 in the plug 7 must be such that when this plug

is in position in the socket 1 the outer rim of the partition 14 makes contact with the pin 5 and at the same time the pin 6 makes contact with the wall of the plug 7.

The outer portion of the insulating rim which appears on the surface of the plug 7 under the partition 14, and the plug 7 under the pin 6, must be so shaped that when the plug 7 is being removed from the socket 1 the pin 6 leaves the wall of the plug 7 before the pin 5, on leaving said insulating rim, makes contact again with the metal wall of the plug 7.

When the plug 7 is seated in the socket 1 as shown by Figure 3, the partition 14 and the rod 15 are electrically connected with the pin 5, while the ring 12, to which one end of the resistance 11 leads, is electrically connected with the pin 6 through the body of the plug 7.

However, the circuit is open until the knob 16 is depressed. Then the rod 15 is carried into contact with the rod 13 connected with the other end of the resistance 11.

When an ignition is to be effected it is sufficient to depress the knob 16 and to hold it down during the time necessary for making the resistance incandescent. Thereupon the head 8 is grasped and the plug 7 removed from the socket 1, and then the heating member may be used for ignition purposes at any place.

When the plug 7 is being removed there is no possibility of short-circuits because the pin 6 has ceased to be in contact with the wall of the plug before the pin 5 comes into contact with said wall.

The described construction of the plug provided with the heating member allows of easily replacing the latter by unscrewing the sleeve 10 and screwing on another one, the rim 12 of which ensures contact with the metal body of the plug 7.

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

1. An electric lighter for cigars and the like, characterised by the fact that in a stationary socket into which the current feeders lead a removable plug is located in such a manner as to have the insulated ends of a circuit in contact with the said feeders, the plug having at its inner end a heating member inserted in said circuit and at its outer end a member controlling the circuit.

2. An electric lighter for cigars and the like as claimed in Claim 1, characterised by the fact that the heating member is connected at one end to the metal body of the plug which carries it and which is engaged with one of the current feeders, and at the other end leads to a rod opposite which is located a longitudinally displaceable rod controlled by an end knob and electrically connected with a conducting flange insulated with regard to the plug wall and making contact with the other feeder.

3. An electric lighter for cigars and the like as claimed in Claim 2, characterised by the fact that the movable rod is mounted in a metal partition the rim of which projects to the outer surface of the plug between two insulating rims.

4. An electric lighter for cigars and the like as claimed in Claims 1 to 3, characterised by the fact that the portions of the removable plug intended to make contact with the current feeders of the stationary socket are so arranged and shaped that when the plug is removed no short-circuit can take place through the metal body of the plug.

5. An electric lighter for cigars and the like as claimed in Claim 1, characterised by the fact that the heating member consists of a resistance located in an insulating block enclosed in a sleeve adapted to be screwed at the inner mouth of the removable plug, and having its ends connected to a central rod and to a peripheral conducting ring mounted on the internal portion of the said block so as to provide for the connections with the other parts of the circuit.

6. An electric lighter for cigars and the like, constructed, arranged and adapted to operate substantially as described in the foregoing specification and illustrated in the accompanying drawing.

Dated this 26th day of April, 1921.

For the Applicant,

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10, New Court, Lincoln's Inn, London, W.C. 2,

Chartered Patent Agents.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1922.

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

FIG. 1

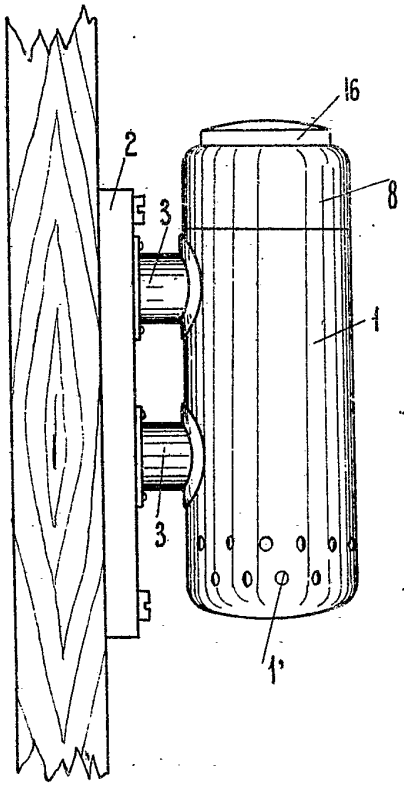
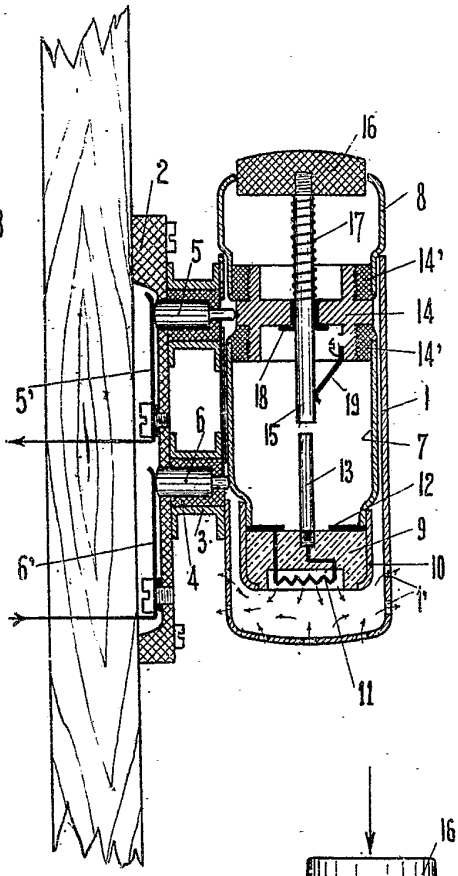


FIG. 3



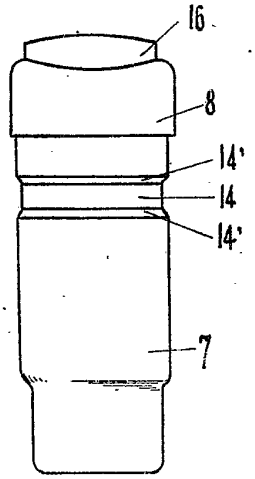


FIG. 2

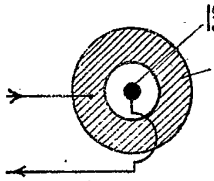


FIG. 4

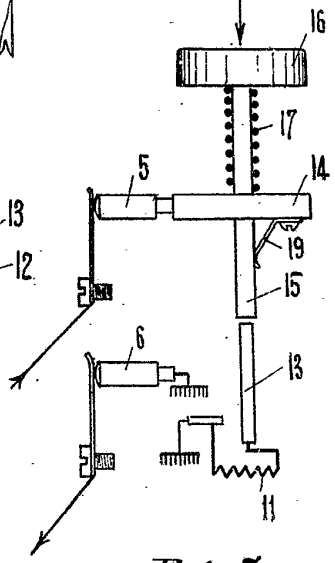


FIG. 5

Malby&Sons, Photo-Litho