R. W. BAKER, V. L. KING & H. C. PARKER.

ELECTRIC CIGAR LIGHTER.

APPLICATION FILED DEC. 29, 1909.

995,763.

Patented June 20, 1911.

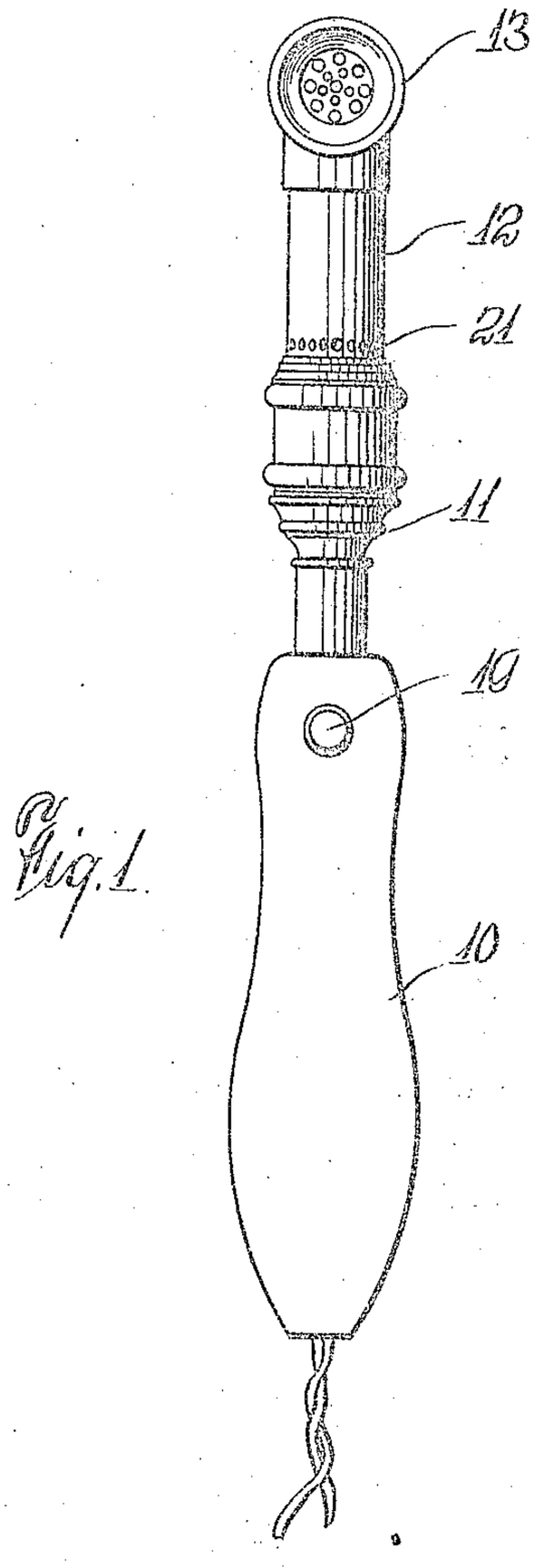

Fig. 1.

Fig. 2.

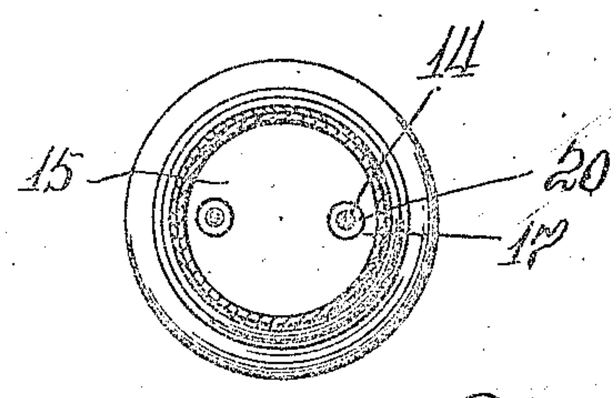

Fig. 3.

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UNITED STATES PATENT OFFICE.

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ELECTRIC CIGAR-LIGHTER.

995,763. Specification of Letters Patent. Patented June 20, 1911.

Application filed December 29, 1909. Serial No. 535,471.

To all whom it may concern:

Be it known that we, RAYMOND W. BAKER, of the city, county, and State of New York, VICTOR L. KING, of Woodridge, Bergen, county, New Jersey, and HERSCHEL C. PARKER, of the city of New York, county of Kings, and State of New York, have invented a new and useful Improvement in Electric Cigar-Lighters, of which the following is a full, clear, and exact description.

Our invention relates to improvements in electric cigar lighters, and the object of our invention is to produce a cigar lighter in which the heat necessary to light a cigar is obtained by radiation from a resistor adapted to glow in the air upon the passage of an electric current through it.

A further object of the invention is to produce a device in which the heating element is not only inexpensive, but is also easily renewable. To this end we use as a heating unit a resistor preferably in filament form which will glow immediately and continuously in the open air when a current of electricity is passed through it. We have found by experiments that a filament of the substance know as silundum has all the desired characteristics. This material is a solid solution composed of silicon carbid dissolved in carbon. The method of producing it is fully set forth in our application for a patent for electric filaments or resistors filed November 26th, 1909, Serial No. 529,893. The filament can also be silicon di-carbid or a combination of silicon containing more than one atom of carbon to one atom of silicon. Such a filament will glow at high incandescence in the open air for a long time without oxidization, but we do not limit the invention to the use of any precise filament, though it should be of the general kind stated and of a non-metallic nature, and the filament described is of such high resistance that a short section of it supplies the necessary heat.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar reference characters indicate corresponding parts in all the views.

Figure 1 is a front elevation of the cigar lighter; Fig. 2 is a side sectional view of the same, and Fig. 3 is a cross section on the line 2—2 of Fig. 2.

The cigar lighter is composed of a handle 10 to which is attached the shank 11, which is screw threaded on its upper outer surface and which is adapted to screw into the head 12. The head 12 has a lateral bend at its outer end into which is screwed a perforated diaphragm 13. This diaphragm 13 is to protect the heating unit 14 from contact with the cigar when being lighted. The lower part of the head 13 is slightly enlarged in order to contain the insulating block 15 which is of the same diameter as the shank 11, and adapted to be supported by the top of said shank and held in place by the recess 16 in the head 12. The block 15 is preferably of slate but may be of any desired insulating material, and has metal plugs extending through it and terminating on its lower surface in binding posts 17. Attached to and forming a continuation of the metal plugs are metal tubes 20 which extend above the upper surface of the block 15. These tubes are adapted to support the filament 14. The ends of the filament are inserted in the tubes and then the space between the inner surface of the tubes and the filament is filled with an electric conducting cement. In this way the filament is not only firmly supported, but perfect electric contact is obtained between the filament and the metal plugs.

It will be seen that we provide a device in which the heating element can be very easily and quickly renewed in case the filament becomes broken or worn out. No mechanical skill is required in the operation as all that is necessary is to unscrew the top 12, disconnect the plug 15 from the leading-in wires at the binding post 17 and then connect up a new plug having a filament already attached thereto.

The head portion 12 is perforated at 21 in order to allow for a circulation of air through that portion when a cigar is being lighted. This makes it possible to utilize the heat radiated from the filament to the fullest extent for the purpose desired, and a cigar can therefore be as easily lighted as in a flame or in contact with a heated surface.

Any desired means for making and break-

ing the current may be used. We have shown as preferable the ordinary push button switch by which a connection is made by the button being pushed in, and broken as soon as pressure on the button is released.

It will be noticed that the structure which we have described is very simple and inexpensive, and that the head is left hollow and unobstructed so that when a draft is created by the suction caused by drawing on the cigar as it is applied to the lighting opening, an unobstructed wave of intense heat amounting practically to a flame, will pass directly to the end, and further that by locating the filament 14, which is capable of very high incandescence, between the cigar opening and the openings 21, a draft is produced causing very easy lighting. It will also be observed that the head has an unobstructed heating chamber in which the filament 14 is located, so that no impediment is offered to the quick impact of a hot blast or flame against the cigar end.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent:—

1. A cigar lighter comprising a hollow handled head, the body portion of the head being left unobstructed so as to form a heating chamber, a seat or socket for the cigar end located in the head and provided with a perforated back wall, a second set of perforations through the wall of the head, a resistor in filament form capable of high incandescence in the open air, said resistor being located between the two sets of openings, and electric connections for the resistor.

2. A cigar lighter comprising a hollow handled head, said head containing an unobstructed heating chamber, a seat or socket for a cigar end located in the head and having a perforated back wall, an insulating block fitting snugly in the head, a resistor in filament form capable of high incandescence in the open air, supported on the block and extending into the chamber of the head, and electric connections for the resistor.

3. A cigar lighter comprising a handle terminating in a shank at its upper end, a head connected with said shank, said head having perforations in the side thereof and having an opening in the upper part thereof, a perforated diaphragm supported in said opening, a resistor in filament form adapted to glow in the open air upon the passage of an electric current through it supported in said head, and electric connections for said resistor.

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