Feb. 23, 1926. 1,573,992

L. PENGILLY

CIGAR LIGHTER

Filed March 6, 1923

Fig. 1

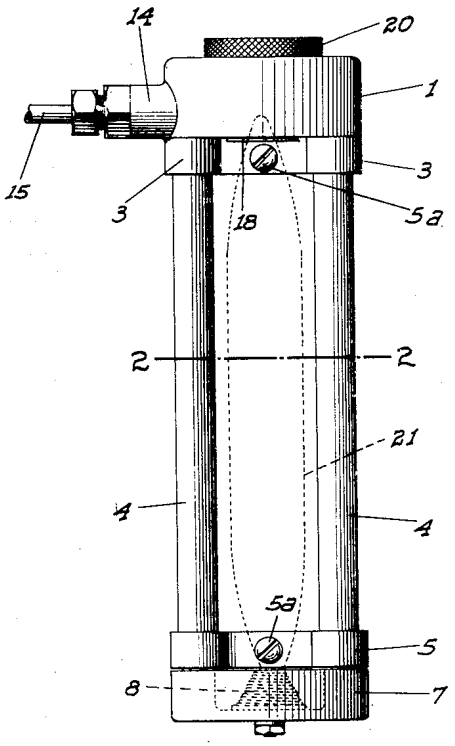


Fig. 3

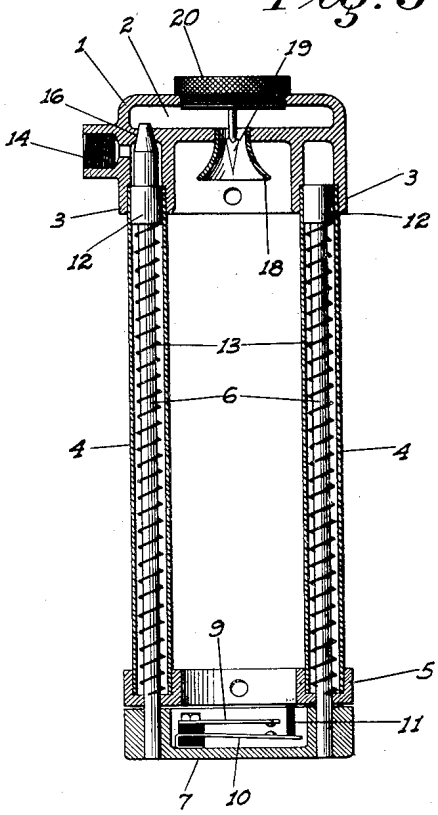


Fig. 2

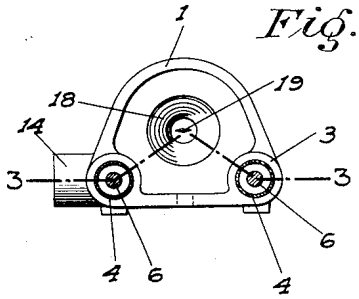
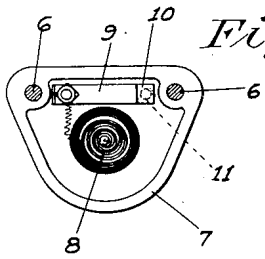


Fig. 4



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BY

ATTORNEY

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UNITED STATES PATENT OFFICE.

LEWIS PENGILLY, OF STOCKTON, CALIFORNIA.

CIGAR LIGHTER.

Application filed March 6, 1923. Serial No. 623,212.

To all whom it may concern:

Be it known that I, LEWIS PENGILLY, a citizen of the United States, residing at Stockton, county of San Joaquin, State of California, have invented certain new and useful Improvements in Cigar Lighters; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in devices for lighting cigars, and especially to a form of device intended to be mounted on the dash of an automobile.

The use of this device eliminates the need of matches, since I have provided an electric heating element, whose current is drawn from the battery of the car, for igniting the cigar, while the necessary draft or suction through the cigar during the igniting operation is obtained by using the suction of the engine of the car for the purpose.

In this respect, the present device operates the same as the cigarette lighter shown in my copending application filed February 5th, 1923, Serial No. 616,906; but certain changes are necessary for use with cigars, since the latter are of many different lengths, and it is important, from a commercial and practical standpoint, that one size of the device shall be able to accommodate a cigar of any length made.

It is also necessary with most cigars, to punch one end before they will draw. and the provision of means for enabling this to be done without any extra operation on the part of the user being necessary, and to enable the device to be used for all lengths of cigars, besides other novel features, form the principal objects of the present invention.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purposes for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Fig. 1 is a front view of the device in its normal position.

Fig. 2 is a cross section on the line 2—2 of Fig. 1.

Fig. 3 is a vertical section on the line 3—3 of Fig. 2.

Fig. 4 is a top plan view of the bottom member of the device.

Referring now more particularly to the characters of reference on the drawings, the numeral 1 denotes a casing open on its lower end, the upper portion of which is formed with a transverse chamber 2. Formed with the casing and extending downwardly are sleeves 3 in which are fitted the upper ends of tubes 4, extending downwardly therefrom parallel to each other, the bottoms of said tubes, being closed and connected by a cross member 5, the casing and member 5 being adapted to abut at the back against the dash of the car, and to be secured thereto by screws 5^a or other suitable means.

Positioned in the tubes and projecting through and guided by the member 5 are rods 6, fixed at their lower ends to a cup 7, having a small exposed heating coil 8 centrally and vertically disposed therein, the current for said coil being obtained from any suitable means, such as the battery of the car on which the device is mounted.

A switch having a pair of vertically spaced spring contact strips 9 and 10 is interposed in the wiring to the coil, and is mounted in the cup to one side of the coil.

The strip 10, which is under the strip 9, is longer than the latter, and is normally held away from the strip 9, that is when the cup is adjacent the member 5, by means of a pin 11 or other projection, depending downwardly from the said member, and which then bears on and presses down the projecting portion of the strip 10. Thus when the parts 5 and 7 are in the above mentioned position. the circuit to the coil is broken.

On the upper ends of the rods 6 are guide plungers 12, slidable neatly in the upper ends of the tubes 4, coil compression springs

13, somewhat weak, being about the rods between the plungers 12 and member 5, thereby normally holding the rods and cup or heater supporting member in their uppermost position.

One of the sleeves 3 communicates with the casing chamber 2, and has a tapped boss 14 connected thereto whereby to connect a pipe 15, the other end of which is tapped into the intake manifold of the engine of the car. The communicating port 16 between the adjacent sleeve 3 and the chamber 2 is in vertical alinement with the corresponding rod 6, and is formed as a seat for a needle valve 17 provided at the upper end of the rod plunger and formed as an extension thereof, this valve being seated in the opening, and preventing communication from the pipe 15 to the chamber 2, when the rods 6 and member 7 are in their uppermost position, as above stated.

Projecting downwardly from the chamber 2 in vertical alinement with the heater coil 8 is a bell shaped cup 18, open to said chamber, into which cup and centrally thereof projects a sharp pointed and edged blade 19 preferably mounted on a removable plug 20 screwed into the upper end of the casing 1, the plug being removed, with the blade, when it is desired to clean the latter.

The length of the tubes 4 is such that the shortest distance between the blade 19 and coil 8 is somewhat less than the shortest cigars made, while the springs 13 allow of an expansion or moving out of the cup 7 from the casing 1, a sufficient distance to allow of the longest cigars being placed therebetween.

In operation, the cigar 21 is held parallel to the tubes and the end to be lighted placed in engagement with the coil 8.

Downward pressure on the cigar will then cause the member 7 to move away from the cup 18, until the opposite end of the cigar can enter the same. Upward pressure on the cigar will then cause the blade 19 to puncture the adjacent end of the cigar, the periphery of which seats in the cup, the action of the springs 13 holding both ends of the cigar in engagement with the respective members.

With the moving apart of the members, the heater circuit is closed, and the valve 17 moves out of its seat, opening communication through the cup 18, chamber 2, sleeve 3 and pipe 15, allowing the tendency to vacuum existing in said pipe with the operation of the engine to draw air through said parts.

Since the cigar is seated in the cup 18, the air drawn into the chamber 2 must pass lengthwise through the cigar, which it can do by reason of the incision made in the normally sealed end by the blade 19.

With the necessary draft thus obtained through the cigar, the proper ignition of the end engaged with the heater coil will be but a matter of a very few seconds, when the cigar may be removed by depressing the member 7, when said member will again move to its uppermost position, automatically breaking the heater circuit and shutting off communication between the pipe 15 and chamber 2.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the appended claims.

Having thus described my invention, what I claim as new and useful and desire to secure by Letters Patent is:

1. A cigar lighter comprising a cup connected to a suction means and adapted to receive one end of a cigar therein, an electric heating element in alinement with the cup and with which the other end of the cigar is adapted to be engaged, said element and cup being relatively movable to and from each other whereby cigars of different lengths may be accommodated therebetween and means whereby the element will be heated and the suction means enabled to communicate with the cup only when the element is moved away from the cup.

2. A cigar lighter comprising a cup connected to a suction means and adapted to receive one end of a cigar therein, an electric heating element in alinement with the cup and with which the other end of the cigar is adapted to be engaged, means connecting said cup and element in a manner to permit of relative movement thereof to and from each other, a switch for the heater circuit, a valve in the suction line, and means actuated only with the moving apart of the element and cup for closing the switch and opening said valve.

3. A cigar lighter comprising a cup connected to a suction means and adapted to receive one end of a cigar therein, an electric heating element in alinement with the cup and with which the other end of the cigar is adapted to be engaged, means connecting said cup and element in a manner to permit of relative movement thereof to and from each other, means automatically acting to move the element toward the cup, a switch for the heater circuit closed only when the element is moved away from the cup, a port between the suction means and the cup, and means mounted with said connecting means for closing said port except when the element is moved away from the cup.

4. A cigar lighter comprising a casing having a chamber adapted to communicate

with a suction pipe, a cup projecting from said chamber, a tube, a rod slidably guided in said tube, an electric heating element mounted with the rod at one end thereof in alinement with the cup, spring means about the rod resisting movement of the element away from the cup, a valve member mounted on said rod and normally closing communication between the pipe and cup, a switch for the heater circuit, and means holding said switch open until the element is drawn away from the cup.

5. A cigar lighter comprising a cup connected to a suction means and adapted to receive one end of a cigar therein, an electric heating element alined with the cup and with which the other end of the cigar is adapted to be engaged, said cup and element being relatively movable to and from each other whereby cigars of different lengths may be accommodated therebetween, and means whereby the suction means can only communicate with the cup when the cup and element are moved apart.

6. A cigar lighter comprising a cup connected to a suction means and adapted to receive one end of a cigar therein, an electric heating element alined with the cup and with which the other end of the cigar is adapted to be engaged, said cup and element being relatively movable to and from each other whereby cigars of different lengths may be accommodated therebetween, and means whereby the suction means will be automatically placed in communication with the cup when the cup and element are moved apart.

7. A structure as in claim 1, in which yieldable means is provided for normally holding the cup and element in their closest positions relative to each other.

In testimony whereof I affix my signature.

LEWIS PENGILLY.