Feb. 3, 1925. 1,524,828

W. KASTEN

ELECTRICAL CIGAR LIGHTER

Filed Sept. 1, 1923 2 Sheets-Sheet 1

Fig. 1.

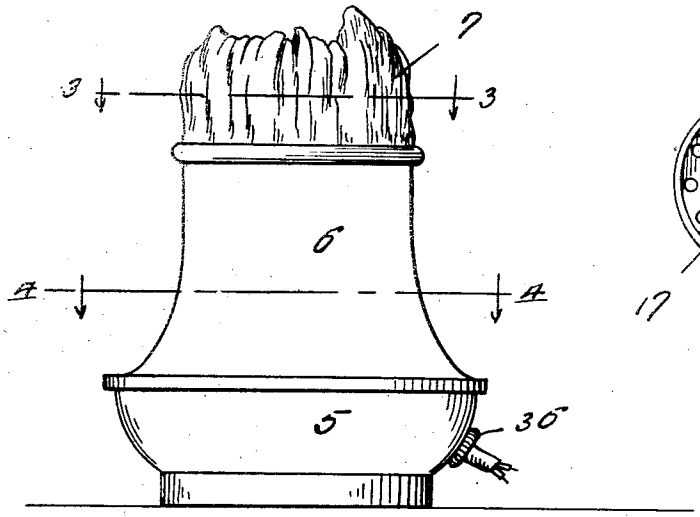


Fig. 2.

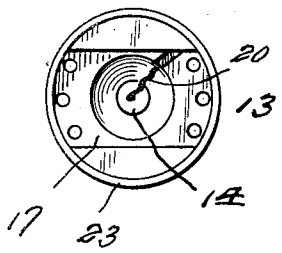


Fig. 3.

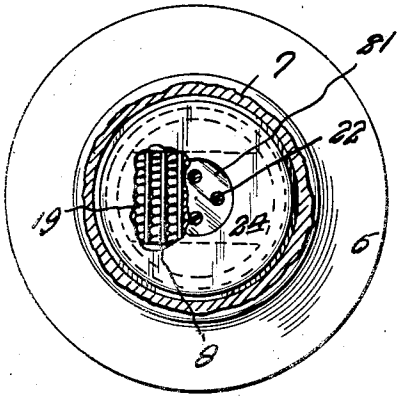
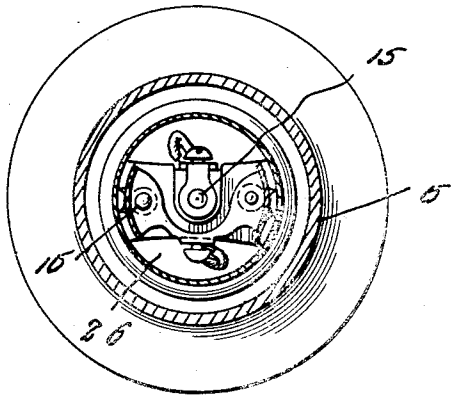


Fig. 4.



Witnesses:
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Fig. 2.

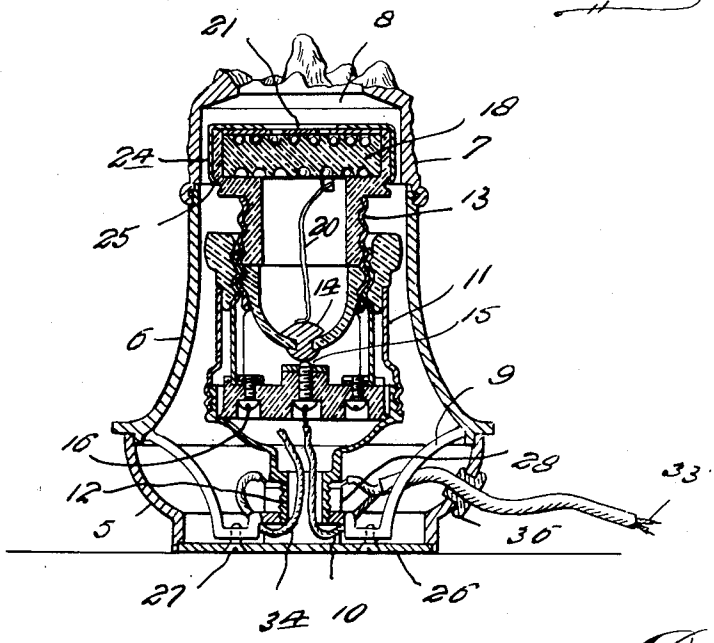


Fig. 6.

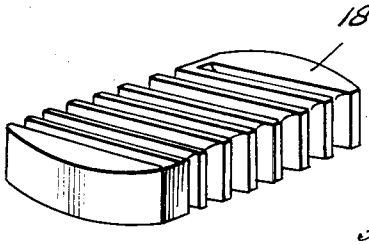


Fig. 7.

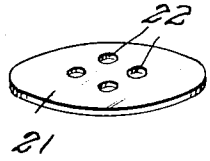
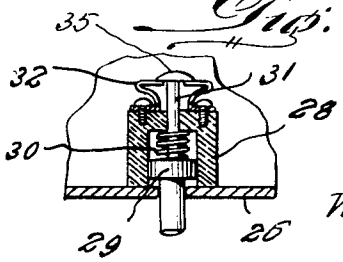


Fig. 5.



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Patented Feb. 3, 1925. 1,524,828

UNITED STATES PATENT OFFICE.

WILLIAM KASTEN, OF BROOKLYN, NEW YORK.

ELECTRICAL CIGAR LIGHTER.

Application filed September 1, 1923. Serial No. 660,493.

To all whom it may concern:

Be it known that I. WILLIAM KASTEN, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Electrical Cigar Lighters, of which the following is a specification.

This invention relates to certain new and useful improvements in electrical cigar lighters of that type embodying a resistance unit having a resistor which is utilized for lighting the cigar.

The primary object of the invention is to generally simplify and improve devices of the above kind whereby the same may be cheaply and easily constructed of a comparatively few parts, some of which are of standard design, and whereby the parts may be readily dismantled for facilitating the repair or renewal thereof, and for facilitating the initial assembling of the device.

A further object of the invention is to provide a cigar lighter adapted to rest upon a support such as a table, and which embodies a resistor, the current to which is automatically controlled so that the current is cut off when the device is placed upon the table and is automatically turned on upon removal of the lighter from the support upon which it rests.

Other objects are to provide a device which will present an ornamental appearance, which embodies means for preventing the resistor from becoming clogged with ashes from the cigar lighted thereon, and which will give satisfactory service for a long continued period of use.

Other objects will appear as the nature of the invention is better understood and the same consists in the novel form, combination, and arrangement of parts, hereinafter more fully described, shown in the accompanying drawings, and claimed.

In the drawings, wherein like reference characters designate corresponding parts throughout the several views,

Figure 1 is a side elevational view of a cigar lighter, constructed in accordance with the present invention.

Figure 2 is a substantially central vertical sectional view thereof.

Figure 3 is a horizontal sectional view, taken substantially on the line 3—3 of Figure 1, and partly broken away to reveal details of the invention.

Figure 4 is a view similar to Figure 3, taken substantially upon the line 4—4 of Figure 1.

Figure 5 is an enlarged fragmentary sectional view, illustrating details of construction of the automatic switch.

Figure 6 is an enlarged perspective view of the insulator of the resistance unit.

Figure 7 is a view similar to Figure 6 of the protecting disc for the resistor, and

Figure 8 is a top plan view of the plugs which support the resistance unit with the latter detached.

Referring more in detail to the drawings, the invention embodies a casing which preferably includes a cup shaped lower or base section 5, into the upper end of which is fitted the lower end of a downwardly flared intermediate section 6, said sections being detachably joined in any well known or preferred manner, and a top section 7 that is detachably connected with the upper end of the section 6 by means of a bayonet slot connection or the like, which section 7 is formed at its upper edge with an inturned flange 8, and is molded to represent the flame of an oil burner or the like as shown clearly in Figures 1 and 2.

Rigid with the lower end of the intermediate section 6 is a spider which embodies radial legs 9 which extend inwardly and downwardly and join centrally of the casing with a centrally apertured plate member 10, the spider thus projecting into the base section 5 as shown in Figure 2.

Arranged within the section 6 is a threaded plug socket 11 which has a nipple 12 upon its lower end that is threaded into the plate member 10 for supporting said socket in an upright position centrally within the casing.

A threaded plug 13 is detachably engaged in the socket member 11 and includes a central contact 14 engaged with the central contact 15 of the socket 11, while said socket and said plug have threaded shells of a well known form which interengage for conveying the current from the binding post 16.

The plug 13 is open, at its top, and is provided with a transverse groove 17 as shown clearly in Figure 8, within which is seated, a resistance unit which includes an insulating plate 18 of the form shown in Figures 2 and 6. The top, bottom and sides of the insulator 18 are formed to provide

a continuous helical groove within which the resistance wire or resistor is placed as indicated at 19, and one end of this resistor is connected with the central contact 14 by means of a lead 20, the other end of said resistor being suitably connected with the shell of the plug 13 as is well understood in the art. The resistance unit is thus supported by the plug 13 within the upper section 7 of the casing, with the top of the resistor exposed through the opening in the flange 8, and in order to prevent the resistance unit from becoming dirty or clogged by ashes, the same is covered by means of a mica disc 21 which is provided with a central series of openings 22 through which the resistor is exposed, the disc 21 being disposed upon the upper surface of the resistance unit, and within the marginal flange 23 provided on the upper end of the body of insulation forming part of the plug 13. The resistance unit and disc 21 are held in place by means of a centrally apertured sheet metal cap 24 which is placed upon the upper end of the plug 13, and which may be held in place by spinning the lower end of the cap flange as at 25 into an annular groove provided in the insulator of the plug 13 as shown in Figure 2.

The lower casing section 5 is provided with a removable bottom wall 26 which is in the nature of a disc seated within a rabbett of the remaining portion of the section 5 as shown in Figure 2, and the preferred means of attaching the bottom wall 26 consists in the provision of relatively small screws 27 which pass through said wall 26 and are threaded into the adjacent portion of the spider arms 9.

The removable bottom wall 26 of the casing is provided with a normally closed switch, the casing of which is generally indicated at 28, in Figures 2 and 5. This switch has its casing 28 secured upon the upper surface of the wall 26 and embodies a spring pressed plunger 29 slidable in said casing 28, said plunger being normally projected downwardly through an opening in the wall 26 by means of a compression spring 30 which surrounds the upwardly projecting stem 31 of said plunger within the casing 28. The casing 28 is provided with a pair of contacts 32, to one of which one of the feed wires 33 may be attached, and the other of which is attached to the wire 34 leading to the contact binding post 16 of the socket 11. The contacts 32 are bridged by a head 35 on the upper end of the stem 31, when the plunger 29 is projected through the wall 26, thus allowing the current to flow through the shell of the socket 11. The other of the feed wires 33 is connected directly to the central contact 15 of the socket 11 as shown in Figure 2, and it will be thus seen that when the plunger 29 is projected downwardly to cause the head 35 to bridge the contact 32, current will be supplied to the coil 19 of the resistance unit for rendering the latter incandescent so that cigars may be lighted therefrom when inserted through the opening in the upper casing section 7. On the other hand, it will be seen that the spring 30 is of such strength as to be easily compressed when the weight of the device is imposed upon the plunger 29 whereby said plunger will be forced upwardly when the lighter is placed upon a support such as a table for disengaging the head 35 from the contact 32 and automatically cutting off the current supply to the resistor. At this time, the plunger 29 has its lower end within the plane of the lower surface of the wall 26 so that the device may rest flatly upon the support as indicated in Figures 1 and 2. The section 5 is provided with a side opening within which an insulator bushing 36 is secured, through which the wires 33 extend into the casing of the cigar lighter.

From the above description, it can be seen that I have provided a very simple, attractive, durable and desirable form of cigar lighter which may be conveniently manufactured and assembled as well as dissembled for repairs or renewal of parts, the construction embodying several standard devices.

It is believed that the construction and operation as well as the advantages of the invention will be readily apparent to those skilled in the art from the foregoing description, and minor changes may be made without departing from the spirit and scope of the invention as claimed.

I claim:

1. In an electrical cigar lighter, adapted to be placed upon a table or other support, a casing having an open top, and provided with an internal spider at its lower portion having a central opening, the wall of which is threaded, a threaded plug socket, having a nipple upon its lower end threaded into said opening, a threaded plug having detachable engagement with said socket and having a resistance unit in its upper end exposed through the open top of the casing, and a normally closed switch carried by the bottom of the casing for automatically cutting off the current to the resistance unit upon placement of the device upon said support.

2. In an electrical cigar lighter, adapted to be placed upon a table or other support, a casing having an open top and provided with an internal spider at its lower portion having a central opening, the wall of which is threaded, a threaded plug socket having a nipple upon its lower end threaded into said opening, a threaded plug having detachable engagement with said socket and

provided with a resistance unit in its upper end exposed through the open top of the casing, and a normally closed switch carried by the bottom of the casing for automatically cutting off the current to the resistance unit upon placement of the device upon said support, said casing having a removable bottom wall upon which the switch is mounted, means for detachably fastening said bottom wall in place comprising screws engaged with the arms of said spider, said switch comprising a plunger normally projected through said bottom wall.

3. In an electrical cigar lighter, adapted to be placed upon a table or other support, a casing having an open top, and provided with an internal spider at its lower portion having a central opening, the wall of which is threaded, a threaded plug socket having a nipple upon its lower end threaded into said opening, a threaded plug having detachable engagement with said socket and having a resistance unit in its upper end exposed through the open top of the casing, and a normally closed switch carried by the bottom of the casing for automatically cutting off the current to the resistance unit upon placement of the device upon said support, said casing comprising a cup-shaped lower section having a removable wall, a downwardly flared intermediate section detachably engaged with the upper end of said lower section, and an upper section detachably engaged with the upper end of said intermediate section, said spider embodying radial arms rigid with the lower end of the intermediate section and extending inwardly and downwardly within the lower section, and said switch being carried bv the removable wall of the lower casing section and embodying a plunger normallly projected through said bottom wall.

4. In an electrical cigar lighter adapted to be placed upon a table or other support, a casing having an open top, and provided with an internal spider at its lower portion having a central opening, the wall of which is threaded, a threaded plug socket, having a nipple upon its lower end threaded into said opening, a threaded plug having detachable engagement with said socket and provided with a resistance unit in its upper end exposed through the open top of the casing, and a normally closed switch carried by the bottom of the casing for automatically cutting off the current to the resistance unit upon placement of the device upon said suport, said screw plug having a transverse groove in its upper end and provided with a rim thereabove, said resistance unit being snugly fitted in said groove, a perforated disc within the rim of the plug and disposed upon said resistance unit, and means carried by the plug for retaining the resistance unit and disc in place.

In testimony whereof I affix my signature.

WILLIAM KASTEN.