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H. OVEREN

ELECTRICAL CIGAR LIGHTER

Filed March 3, 1925

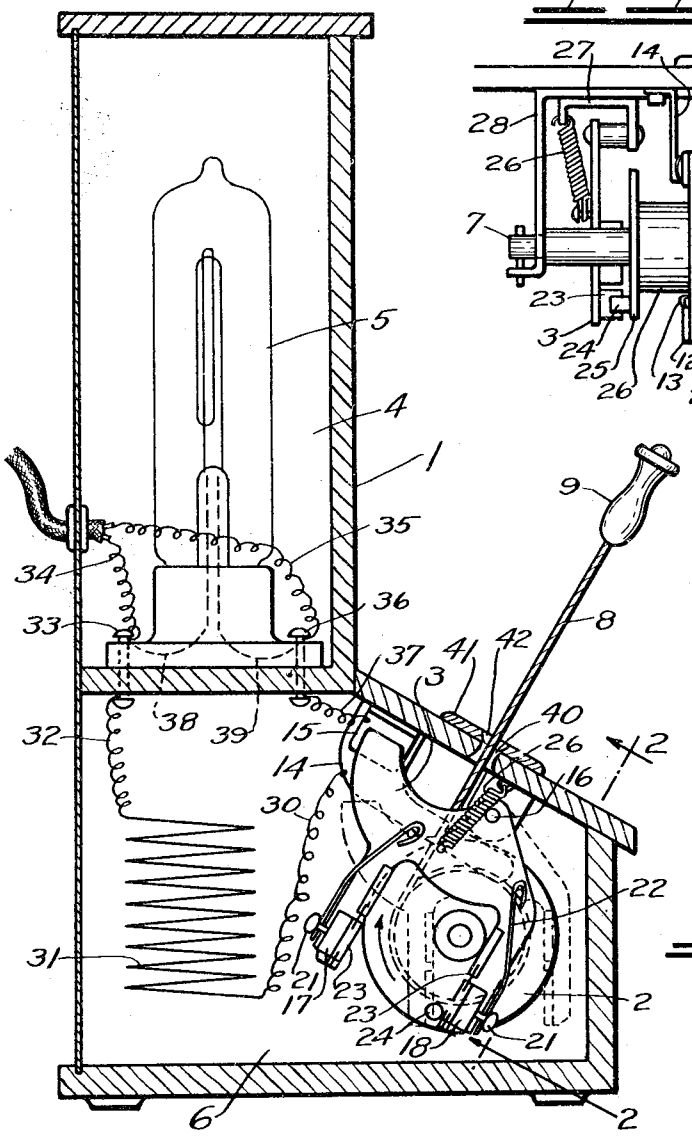


FIG. 1

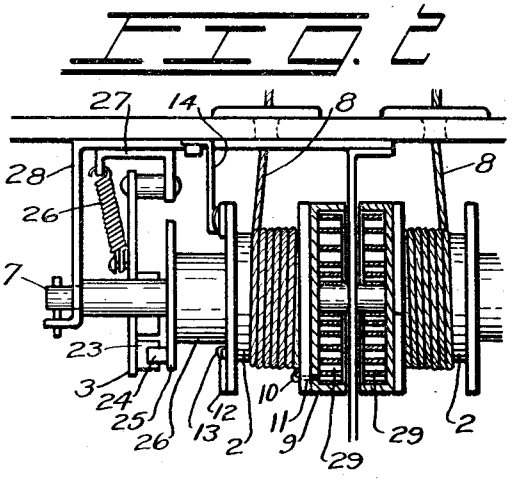


FIG. 2

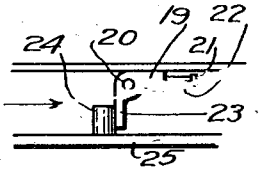


FIG. 3

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UNITED STATES PATENT OFFICE.

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ELECTRICAL CIGAR LIGHTER.

Application filed March 3, 1925. Serial No. 12,905.

The invention is a cigar lighter having torches in a cabinet with cords connecting them through contact points to coils so that as the torches are pulled away from the cabinet, they will automatically light.

The object of the invention is to provide an electric cigar lighter of a simple and economical construction.

Another object of the invention is to provide a self-winding spool for a torch cord which will automatically form a contact to light the torch as the torch is withdrawn from the cabinet.

And a further object of the invention is to provide an electric cigar lighter which only uses current when it is in use.

With these ends in view, the invention embodies a cabinet having torches with cords extending into the cabinet, spools upon which the cords are wound, springs for automatically winding the spools and means for automatically causing contact points to engage as the spools start to unwind.

Other features and advantages of the invention will appear from the following description taken in connection with the drawings, wherein:—

Figure 1 is a cross section through the cabinet.

Figure 2 is a sectional view on line 2—2 of Figure 1.

Figure 3 is a detail showing the latch on the ends of the contact point.

In the drawings I have shown my device as it would be made wherein numeral 1 indicates the casing, numeral 2 the spool and numeral 3 the movable contact point.

The casing 1 is provided with an upper compartment 4 in which a light 5 may be placed to display advertising or the like if desired and a lower compartment 6 in which the operating mechanism may be placed. It is understood that the casing may also be made of any suitable design and arranged in any suitable manner. The spool 2 is supported on a shaft 7 in suitable brackets and on the spool is a double wire electric cord 8 that has a torch 9 on its outer end, one end of the cord 8 is grounded to the shaft through the spring housing 9 to which it is connected by a wire 10 at the point 11 and the other wire of the cord 8 is attached to a contact ring 12 by a wire 13 which extends through the spool. The spool 2 with its flanges is made of an insulating material and the contact ring 12 is secured to it in any suitable manner. The ring 12 engages a brush 14 and the brush 14 is connected to the frame as shown in Figure 1.

The contact point 3, which engages at point 15, is pivotally supported on a pin 16 in suitable supports from the spring and is provided with two projecting members 17 and 18 each having latches 19 pivotally mounted along their inner edges on pins 20 as shown in Figure 3; and each of the latches have pins 21 extending outward from their inner ends which engage springs 22 to hold them in the position shown. The latches 19 also have downwardly extending flanges 23 that engage a pin 24 on a flange 25 that is attached to the drum 26 of the spool 2. It will be observed that as the pin 24 engages one of the flanges 23 while the flange 25 is moving in the direction of the arrow shown in Figure 3, it will cause the latch 19 and the contact point 3 upon which the latch is mounted to move; and when the pin 24 engages the flange 23 on the opposite side or while moving in the opposite direction, the spring 22 will permit the inner end of the latch to move outward and the flange 23 to move forward to permit the pin to pass by without engaging or moving the contact point. The contact point 3 is also provided with a spring 26 which is arranged to hold the contact point on either side of the center or in either the full line or dotted line position.

In Figure 1 the device is shown with the cord 8 moving outward so that the pin 24 has engaged the flange 23 on the member 17 of the contact point 3 and moved it to the position shown, the pin moving in the direction of the arrow, and it will be observed that as the cord continues to move outward, the pin 24 may continue to rotate without moving the contact point 23, as the pin may readily pass by the latch 19 on the member 18 without moving the member as hereinbefore described.

It will be observed, however, that as the pin 24 moves in the opposite direction when the cord has been released, it will engage the flange 23 of the latch 19 on the member 18 and move the member to the position shown in the dotted lines or until the pin 24 may move by the upper end of the flange 23, thereby moving the contact points out of engagement.

The contact point 3 is connected to the ground through its support, which is indicated by the numeral 27 and the shaft support which is indicated by the numeral 28 as shown in Figure 2, the shaft being connected to one of the wires of the cord 8 through the spring housing 9 as hereinbefore described.

A spring 29 similar to a clock spring is attached to the shaft and to the spring housing which is connected to the spool 2 so that as the cord 8 is released the spring will wind the spool upon the shaft.

The electric circuit from the torch 9 passes through the double wire cord 8 to the contact points 3 and 15 as hereinbefore described and also to the point 14 from where it passes through a wire 30 to a coil 31 and from the coil through a wire 32 to a terminal 33 from where it may be connected by a wire 34 to any suitable source of electric current or to one terminal of a battery. The other terminal of the battery or source of electric current is connected by the wire 35 to a terminal 36 and from there to the contact point 15 by a wire 37.

The light 5 may also be connected in the circuit by connecting it to the terminals 33 and 36 through wires 38 and 39.

The casing 1 is provided with openings 40 through which a cord 8 passes and above these openings are discs 41 having openings 42 in their centers to form seats for the torches when not in use.

It will be understood that changes may be made in the construction without departing from the spirit of the invention. One of which changes may be in the design or arrangement of the spools, another may be in the arrangement of the contact points, and still another may be in the use of other means for operating the contact point.

The construction will be readily understood from the foregoing description. To use the device, it may be assembled as shown with as many torches as may be desired in the casing and it will be observed that as the torch is pulled outward, the contact points will engage and complete a circuit therethrough to light the torch, and as soon as the torch is permitted to move inward, the contact points will disengage and immediately break the circuit. It will also be observed that the contact points will operate as soon as the torch begins to move in either direction and the torch may then continue to move in either direction without moving the contact points.

Having thus fully described the invention, what I claim as new and desire to secure by letters patent, is:—

1. In a device of the class described, the combination of a spring tensioned rotatable drum, a double wire electric cord wound thereon, an electric circuit including the wires of the cord, a pivoted switch included in the electric circuit and having spaced arms, and switch tripping means carried by the drum and disposed between the arms of the switch for alternate engagement therewith during reverse movements of the drum to move the switch in opposite directions passed the dead center thereof.

2. In a device of the class described, the combination of a spring tensioned rotatable drum, a double wire electric cord wound thereon, an electric circuit including the wires of the cord, a snap switch included in the electric circuit and provided with spaced arms, a spring pressed pivoted latch on each arm, and a trip member carried by the drum for contact with the latches to throw the switch members, one latch being held against pivotal movement in one direction, and the other latch being held against pivotal movement in the opposite direction.

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