

June 30, 1942.

H. G. LEHMANN

2,288,005

CIGAR LIGHTER

Filed Aug. 8, 1938

2 Sheets-Sheet 1

Fig. 1

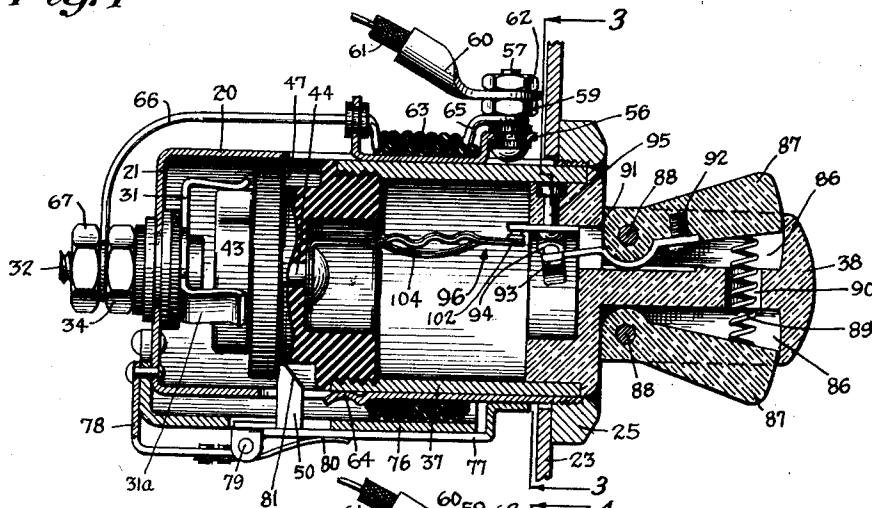


Fig. 2

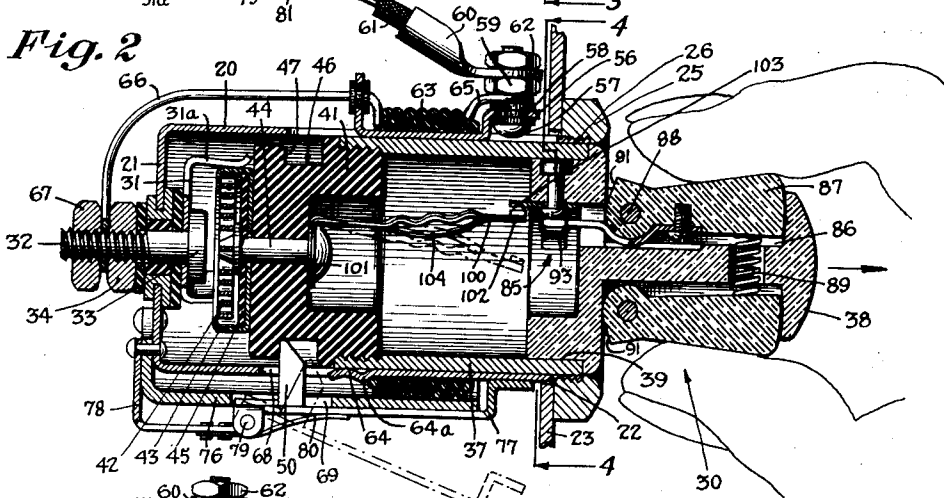


Fig. 3

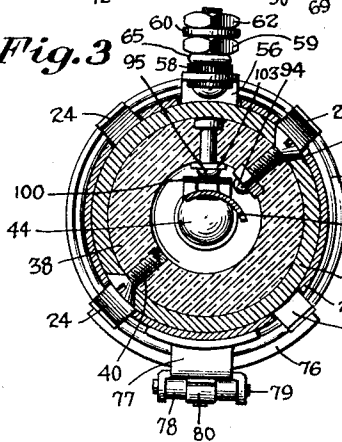
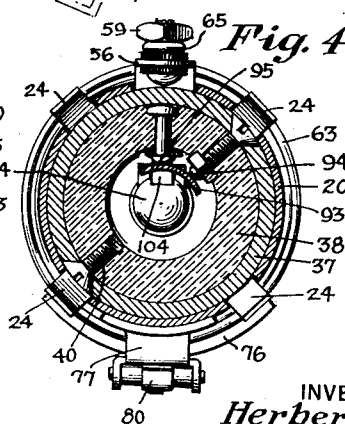


Fig. 4



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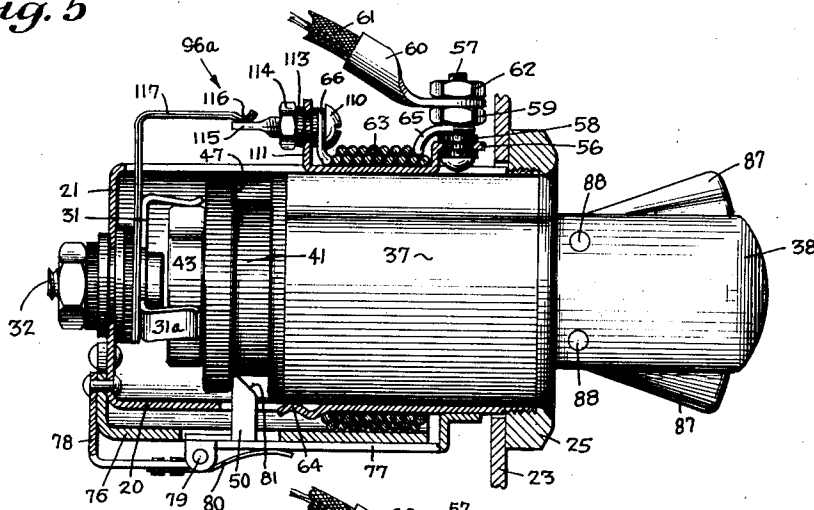
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CIGAR LIGHTER

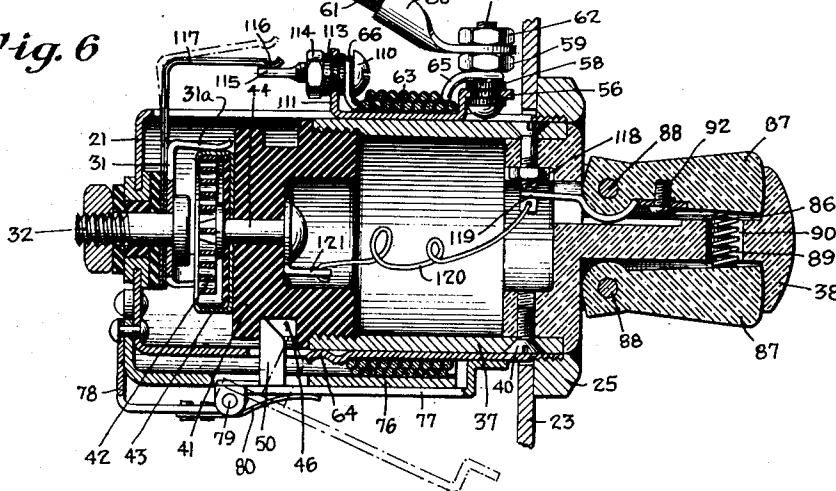
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2 Sheets-Sheet 2

*Fig. 5*



*Fig. 6*



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## UNITED STATES PATENT OFFICE

2,288,005

## CIGAR LIGHTER

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Application August 8, 1938, Serial No. 223,627

18 Claims. (Cl. 219—32)

This invention relates to cigar lighters, and, more particularly, to the type in which the igniting unit is held in deep position in the holder during energization against outward movement therefrom until the heating element has reached a predetermined desired useful heat.

A feature of the present invention is the provision of a latch or detent for yieldably holding the igniting unit in the holding device and for positively holding the igniting unit therein during the period of energization to prevent the igniting unit from being moved into open-circuit position until it has attained a desired useful heat.

According to the present invention, the igniting unit is normally located in the holding device in a position in which a circuit is completed between the holding device and igniting unit for feeding current to energize the heating element. A detent is pivotally mounted on the holding device and is provided with yielding means to cause it to normally snap into engagement with an abutment on the igniting unit to hold it in this position while yielding to permit the unenergized unit to be readily removed.

When the heating element is energized by manually closing a normally open switch to complete an energizing circuit to the heating element, a magnetic means which is included in the circuit will be energized simultaneously with the heating element. The detent is provided with means cooperating with the magnet to positively hold the detent in engagement with the abutment to prevent the igniting unit from being withdrawn from the holding device while it is being energized.

The manually operable switch is closed, when it is desired to use a cigar lighter, by gripping the handle in a manner to withdraw the lighter from the holder. The switch forms a part of the handle and closes a circuit to the heating element when the handle is gripped by the fingers. The magnet coil which is also in the circuit will be energized and will hold the detent in operative position to prevent outward movement of the igniting unit from its closed-circuit position until it has attained a predetermined usable heat, at which time a heat-responsive switch which is included in the circuit will open the circuit and deenergize the magnet coil. This will release the positive operation of the detent so that the continued pull on the igniting unit moves the detent about its pivot against the yielding means and the igniting unit can be readily withdrawn from the holder.

In one form of the invention, one terminal of

the magnet is directly connected to the contact in the holding device, and the circuit is so constructed that the heating element will be abnormally energized so as to cause a heavy current to flow and quickly bring the heating element to the desired heat. In this form of the invention, the igniting unit carries a snap-acting switch which will open the circuit quickly and prevent the heating element from burning up.

In another form of the invention, the magnet coil is connected to the base contact through a heat-responsive switch. In this form of the invention, the heating element is given a normal energization so that it comes to the desired heat in a reasonably short period of time. The heat-responsive switch will open the energizing circuit at a point between the magnet coil and the base contact, and will release the detent so that the igniting unit can be withdrawn from the holder.

Other features and advantages will hereinafter appear.

In the accompanying drawings:

Figure 1 shows a longitudinal sectional view of the holding device with the igniting unit partly in section and the switch in open-circuit position.

Fig. 2 is a longitudinal sectional view of the device with the switch in closed-circuit position.

Fig. 3 is a sectional view taken along the line 3—3 of Fig. 1.

Fig. 4 is a sectional view taken along the line 4—4 of Fig. 2.

Fig. 5 is a longitudinal sectional view of a holder showing another form of the invention with the switch in open-circuit position.

Fig. 6 is a longitudinal sectional view of the holder and igniting unit shown in Fig. 5, with the switch in closed-circuit position.

In the form of the invention shown in Figs. 1 and 2, a sheet metal holder 20 is provided and has a transverse wall 21 at one end. The sheet metal holder is adapted to be mounted in an aperture 22 in a dashboard 23 or other support and locked in place in any suitable manner. Preferably, the holder is provided with a plurality of tangs 24, as shown in Fig. 3, which engage the back of the dashboard, and a collar 25 is threaded on the open end 26 of the holder and into engagement with the outer face of the dashboard to clamp the holder in place in the aperture therein and ground it to the dashboard.

The holder is adapted to slidably receive a removable igniting unit 30 and is provided with a fixed base contact 31 having a plurality of resilient contact fingers 31a projecting into the hold-

er to cooperate with the igniting unit to form an energizing circuit as will be explained. The contact is mounted on the wall 21 by a bolt 32 insulatedly mounted in an aperture in the wall with the contact disposed under the head 33 of the bolt and held in place by a nut 34 threaded on the free end of the bolt.

The igniting unit, which is removably mounted on the holder, comprises a tubular member 37 of conducting material having a handle 38 provided with a reduced neck 39 secured in one end of the member 37 and held in place by screws 40, the heads of which are countersunk into the tubular member, as shown in Figs. 3 and 4, so as not to interfere with the movement of the igniting unit into the holder.

The other end of the tubular sleeve has mounted thereon, as by being threaded into the end thereof, a cap 41 of insulating material on which is mounted a heating element 42. The heating element preferably comprises a spiral coil of resistance wire, which is disposed within a contact cup 43 and has one end connected thereto and the other end connected to a central stud 44. The contact cup 43 is clamped against the insulating cap 41 by the central stud which is insulated from the contact cup by the washer 45. The outer surface of the insulating cap is provided with a circular recess 46 forming an abutment 47, the purpose of which will be later described.

The igniting unit is normally held in a deep position on the holder. A feeding circuit for the heating element is established in this position, the contact cup 43 being engaged by the fingers 31a of the base contact, and the tubular sleeve 37 being in engagement with the metallic tubular holder 20.

The igniting unit is maintained in deep position by a novel detent or latch mechanism 50 which assists the base contact fingers, which grip the sides of the contact cup, in holding the igniting unit against outward movement. The detent is yieldably mounted so that it will permit the igniting unit to be removed when the latter has not been energized, but when a circuit has been closed to energize the igniting unit the detent will positively hold the igniting unit in closed-circuit position until the igniting unit has attained a predetermined heat.

To accomplish this, the tubular holder is provided with an upstanding lug 56 lanced from the body.

A bolt 57 is disposed in an aperture and insulated therefrom by insulation 58, and is locked in place by a nut 59. The bolt is connected to a suitable source of energy by a connector lug 60 which is connected to a conductor 61 leading from the source of energy, which lug is locked in place on a bolt by a nut 62.

The actuating means for the latch or detent comprises a magnet coil 63 which is wound about the exterior of the body of the holding device and effectively prevented from shifting on the holder by having one side abutting the lug 56 and the other end engaging a projection 64a on a contact finger 64 lanced from the body of the holder.

The coil is connected in series between the bolt 57, connected to the source of energy, and the base contact 31. This is accomplished by having one terminal 65 of the coil connected to the bolt 57 by being clamped between the nut 59 and the insulation.

The other terminal 66 of the coil is connected

to the bolt 32 and locked in place by a nut 67 so that the coil is always connected in series with the base contact, so that when the circuit is completed through the heating element the magnet coil will be energized.

As shown in Figs. 3 and 4, the holding device is provided with a semicircular pole piece 76 which is secured to the end wall 21, as shown in Fig. 2, and extends over the magnet coil 63.

The latch or detent is mounted on the holder so as to extend through suitable openings 68, 69 in the holder and pole piece respectively, and into engagement with the abutment 47 on the igniting unit when the latter is in normal position on the holding device.

The latch has formed integrally therewith an armature 77 which extends into operative relation with the pole piece to be held thereby when the magnet coil 63 is energized.

As shown in Figs. 1 and 2, the latch is mounted on the holder by a resilient element 78 to which the armature 77 carrying the latch or detent is pivoted at 79. A leaf spring 80, secured to the resilient element 78, as by rivets, extends into engagement with and bears against the armature and normally urges the latch or detent 50 to an operative position, in which position the detent extends through openings in the pole piece and holding device and into the path of movement of the igniting unit when the latter is moved into deep position.

The face of the detent first encountered by the igniting unit, in so moving, is provided with a taper or cam surface 81 which will engage the face of the insulating cap 41 so that continued movement of the igniting unit will cam or move the detent outwardly, the resilient member yielding to permit the detent to so move, and permit the igniting unit to move into deep position, at which time the abutment on the insulating member will have passed the detent and the latter will snap into the recess 46 on the insulating cap.

When the coil 63 is unenergized, the detent will be merely held in engagement with the abutment by the leaf spring 80. While this will normally hold the igniting unit in deep position, it will also yield to permit the detent to pivot, should it be desired to remove the igniting unit when the latter is unenergized. However, when the igniting unit is energized, the circuit will be closed through the magnet coil 63, which will attract the armature 77 and positively hold the detent in engagement with the abutment 47 until the heating element is ready for use.

The heating coil may be of any desired construction. In the form of the invention shown in Figs. 2 and 3, the heating coil is of such resistance that when subjected to an abnormally high current it will heat up quickly. However, in the form of the invention shown in Figs. 5 and 6, the coil is of such a value that it heats up in a period of seven or eight seconds, as is normal with cigar lighters of general construction.

The novel control for the circuit of the present invention comprises a switch 85 mounted on the handle 38 and adapted to close the circuit to the heating element when the handle is gripped by the fingers, as shown in Fig. 2, to be withdrawn from the holder in the direction of the arrow in Fig. 2.

The portion of the handle adapted to be engaged by the fingers is recessed at 86 so as to receive a pair of finger-engaging pieces 87 which

are pivoted at 88 so as to move in the handle, and are held in extended position by a spring 89 passing through an aperture 90 in the portion of the handle between the recesses. The finger pieces are formed with an abutment 91 engaging the end of the handle to limit their outward movement.

One of the finger pieces has secured thereto, as by a screw 92, a bridging contact 93, which is adapted to bridge a pair of contacts 94, 95 carried by the handle. The contact 94 is connected to the metallic sleeve 37 and ground through the holder, and the contact 95 is connected to the heating element 42 through a heat-responsive switch 96 carried by the igniting unit.

When it is desired to use the lighter, the finger pieces 87 are gripped as shown in Fig. 2, which moves the bridging contact 93 into engagement with the contacts 94, 95 carried by the handle as shown in Fig. 4. This completes the circuit from the source of energy, through the magnet coil, to the base contact, through the heating element, to the switch contact 95 connected thereto, through the bridging contact, to the contact 94 connected to the metallic sleeve, and thus to ground, through the holder.

The heat-responsive switch can be of suitable construction, but, inasmuch as the heating element is brought to heat quickly, it is preferred to have the switch in the form of the quick-acting switch which will operate rapidly and prevent the heating element from burning out. In the illustrated form of the invention, the movable element 100 of the switch comprises a bimetallic strip having one end 101 secured under the head of the central stud 44 and is thus electrically connected with the end of the heating coil. The contact end 102 of the bimetallic member is normally urged into engagement with a contact plate 103 clamped to the handle by the contact 95. The bimetallic strip is of such design that it heats at substantially the same rate as the heating coil, and is biased into either of two positions by having a portion 104 thereof buckled out of the plane of the strip and adapted to urge the bimetallic element into engagement with the plate. However, when the heating element is energized, the bimetallic strip will become heated and tend to flex, and will cause the buckled portion to shift so as to project from the other side of the bimetallic strip and will quickly move the bimetallic strip away from the plate as shown in dotted lines in Fig. 2.

When the heat-responsive switch opens the circuit, the coil 63 will be deenergized and the detent, which has been holding the igniting unit against the pull of the fingers, will be released and will move about the pivot to the dotted line position as shown in Fig. 2, so that the igniting unit can be readily removed for use.

The form of the invention shown in Figs. 5 and 6 is substantially the same as shown in the previously described form of the invention, except that the heat-responsive switch 96a is positioned between the magnet coil 63 and the base contact 31. This is accomplished by connecting the terminal 66 of the coil 63 to a bolt 110 carried by a finger 111, lanced up from the body of the holder adjacent the base thereof. The bolt 110 is disposed in an aperture in the finger and insulated therefrom by insulation 113, and locked in place by a nut 114 which also locks the terminal thereto.

The end of the bolt opposite the head is provided with a contact 115 adapted to cooperate

with a movable contact 116 carried by a bimetallic arm 117 which projects from the interior of the holder and is normally disposed with the contacts in closed-circuit relation. The bimetallic member is electrically connected to the base contact and is disposed between the contact and the insulation, as shown in Figs. 5 and 6, and held in place by the clamping action of the bolt 32.

Whenever the circuit is completed through the heating element by closing a switch carried by the igniting unit, the coil 63 will be energized and act to hold the latch 50 in operative holding position. The switch for closing the circuit, in this form of the invention, comprises a single contact 118 connected to the sleeve 37 and projecting into the handle, as shown in Fig. 6, and a movable contact 119 connected to one of the finger pieces 87 and connected by a wire 120 to a lug 121 clamped under the head of the central stud 44.

When it is desired to use the device of the present invention, the finger pieces are compressed, as described with reference to Fig. 2, and the contacts 118, 119 will close the circuit to the heating element and magnet coil. The magnet coil will positively hold the detent in engagement with the abutment on the igniting unit to prevent its withdrawal.

When the heating element has attained its desired heat, the bimetallic member will move the contact portion away from the contact and open the circuit to the heating element and magnet coil. This will deenergize the magnet coil and release the detent, whereby the igniting unit is free to be withdrawn and the detent moved about its pivot to the dotted line position shown in Fig. 6.

It will be seen that in both forms of the invention the unenergized heating element is yieldably held in deep position and is positively held against outward pulling movement during that time in which the energizing circuit for the heating element is maintained closed. When the heating element has attained its predetermined usable heat, the circuit is opened by heat-responsive switch means which releases the positive action of the detent and permits the igniting unit to be removed against the action of the yielding means for use.

Variations and modifications may be made within the scope of this invention and portions of the improvements may be used without others.

I claim:

1. In a cigar lighter, a holding device; an igniting unit having a heating element thereon removably mounted on the holding device; a detent carried by the holding device for yieldably maintaining the igniting unit in position on the holding device; means for energizing the heating element; electromagnetic means rendered operative upon energization of the heating element to actuate the detent to hold the igniting unit positively against withdrawal from the holding device; and means, mechanically independent of said detent, for altering the energization of said electromagnetic means to render it inoperative upon the heating element attaining a predetermined useable temperature, whereby the detent becomes yieldable again and the igniting unit can be withdrawn from the holding device.

2. In a cigar lighter, a holding device; an igniting unit having a heating element thereon removably mounted on the holding device; a de-

tent pivoted on the holding device; means for yieldably urging the detent about its pivot and into releasable engagement with the igniting unit for retaining the latter in the holding device; means for energizing the heating element; electromagnetic means for positively holding the detent in engagement with said igniting unit, whereby the latter is positively retained in the holding device, said electromagnetic means being rendered operative upon energization of the heating element; and means, mechanically independent of said detent, for rendering said electromagnetic means inoperative upon the heating element attaining a predetermined useable temperature, whereby the detent again becomes yieldable to permit withdrawal of the igniting unit from the holding device.

3. In a cigar lighter, a holding device; an igniting unit having a heating element thereon removably mounted on the holding device; a detent for yieldably holding the igniting unit in position on the holding device; means including a normally closed quick-acting heat-responsive switch mechanically independent of said detent, and a normally open, manually operable switch in the heating element circuit, the latter switch being adapted to close the circuit for energizing the heating element; electromagnetic means included in the heating element circuit and operable upon energization thereof to lock the detent in igniting unit retaining position, said heat-responsive switch interrupting the circuit upon said heating element attaining a predetermined useable heat, thereby deenergizing said electromagnetic means and rendering said detent again yieldable so that the igniting unit may be withdrawn from the holding device.

4. In a cigar lighter, a holding device; an igniting unit having a heating element thereon removably mounted on the holding device; a detent pivotally mounted on the holding device; means for yieldably urging the detent about the pivot and into engagement with the igniting unit for maintaining the igniting unit in position on the holding device; a circuit including manually operated switch means for energizing the heating element; electromagnetic means included in the circuit of said heating element for positively holding the detent in engagement with said igniting unit, whereby the latter is positively retained in the holding device, said electromagnetic means being rendered operative upon energization of the heating element; and heat-responsive switch means, mechanically independent of said detent for interrupting said circuit upon the heating element attaining a predetermined useable temperature, said electromagnetic means being rendered inoperative thereby, and said detent becoming yieldable again to permit withdrawal of the igniting unit from the holding device.

5. In a cigar lighter, a holding device; an igniting unit having a heating element thereon removably mounted on the holding device; a detent pivotally mounted on the holding device; means for yieldably urging the detent about its pivot and into engagement with the igniting unit for maintaining the latter in position on the holding device, the detent being formed with a cam surface engageable by the igniting unit as it is inserted into position on the holding device, whereby the detent is moved outwardly of the holding device, the urging means moving the detent into retaining engagement with the igniting unit when the igniting unit has reached

a predetermined position on the holder, and said urging means normally yielding to a withdrawing force manually applied to the igniting unit to release the latter from the detent; electromagnetic means rendered operative upon energization of the heating element circuit to lock said detent in igniting-unit-engaging position; and means, mechanically independent of said detent, for rendering said electromagnetic means inoperative upon the heating element attaining a predetermined useable temperature, said detent thereby becoming yieldable again to permit withdrawal of the igniting unit from the holding device.

6. In a cigar lighter, a holding device; an igniting unit having a heating element and a handle thereon removably mounted on the holding device; a grip switch mounted on the handle and adapted to close a circuit through the heating element upon the handle being gripped to remove the igniting unit from the holder; a detent for yieldably holding the igniting unit in position on the holding device; and an electromagnetic means energized simultaneously with the heating element and operable to actuate the detent to positively hold the igniting unit against removal from the holder, said means releasing the detent for movement by the igniting unit upon the heating element attaining a predetermined heat.

7. In a cigar lighter, a holding device; an igniting unit having a heating element and a handle thereon removably mounted on the holding device; a pair of contacts carried by the handle; a circuit for energizing the heating element, including said contacts; a bridging member carried by the handle for closing the gap in the circuit through the contacts; an actuator mounted on the handle and adapted to move the bridging member into engagement with the contacts upon the handle being gripped for removal of the igniting unit from the holder; detent means for yieldably holding the igniting unit in position on the holding device; and electromagnetic means energized simultaneously with the heating element for locking the detent against the yielding action and holding the igniting unit against removal from the holder and releasing the same upon the heating element attaining a predetermined heat.

8. In a cigar lighter, a holding device; an igniting unit having a heating element and handle thereon removably mounted on the holding device; a pair of contacts carried by the handle; a heat-responsive switch connecting one of said contacts with the heating element; a circuit for energizing the heating element, including said contacts; a bridging member carried by the handle for closing the gap in the circuit through the contacts; an actuator mounted on the handle and adapted to move the bridging member into engagement with the contacts upon the handle being gripped for removal of the igniting unit from the holder; detent means for yieldably holding the igniting unit in position on the holding device; and electromagnetic means energized simultaneously with the heating element for locking the detent against the yielding action and holding the igniting unit against removal from the holder, said means releasing the locking action on the detent upon the heating element attaining a predetermined heat.

9. In a cigar lighter, a holding device; an igniting unit having a heating element and a handle thereon removably mounted on the holding

device; a contact carried by the handle; a second contact carried by the handle; a circuit for energizing the heating element, including said contacts; an actuator mounted on the handle and connected to one of said contacts and operable to move the contact into engagement with the other contact upon the handle being gripped for removal of the igniting unit from the holder; detent means for yieldably holding the igniting unit in position on the holding device; electromagnetic means energized simultaneously with the heating element for locking the detent means against the yielding action and holding the igniting unit against removal from the holder; and heat-responsive switch means connected to one terminal of the electromagnetic means and adapted to open the circuit and deenergize the electromagnet upon the heating element attaining a predetermined heat.

10. In a pull type cigar lighter, a holding device; an igniting unit having a heating element thereon mounted in deep position on the holding device and removable therefrom for use; pivoted detent means carried by the holding device for yieldably maintaining the igniting unit in deep position on the holding device; a handle on the igniting unit whereby the igniting unit can be withdrawn from the holding device; means operable as a result of the grasping of the handle for actuating the detent to positively hold the igniting unit against outward movement from the holding device; and heat-responsive means for rendering said last-named means inoperative and releasing said igniting unit for outward movement upon the heating element attaining a predetermined heat.

11. In a pull type cigar lighter, a holding device; an igniting unit having a heating element thereon mounted in deep position on the holding device and removable therefrom for use; a handle on the igniting unit whereby the igniting unit may be gripped to be pulled outwardly from the holding device; means operable as a result of the handle being gripped to pull the igniting unit from the holding device for closing a circuit through the heating element; and electromagnetic detent means operable during the energizing of the heating element for engaging and holding the igniting unit against outward movement from the holding device, said means releasing the igniting unit upon the heating element attaining a predetermined heat.

12. In a pull type cigar lighter, a holding device; an igniting unit having a heating element thereon mounted in deep position on the holding device and removable therefrom for use; a handle on the igniting unit whereby the igniting unit may be gripped to be pulled outwardly from the holding device; means operable as a result of the handle being gripped to pull the igniting unit from the holding device for closing a circuit through the heating element; electromagnetic detent means operable during the energizing of the heating element for causing the detent to hold the igniting unit against outward movement from the holding device; and heat-responsive switch means for deenergizing the magnet means and releasing the detent upon the heating element attaining a predetermined heat.

13. In a pull type lighter, a holding device; an igniting unit having a heating element thereon mounted in deep position on the holding device and removable therefrom for use; detent means carried by the holding device for yieldably maintaining the igniting unit in deep position

on the holding device; a handle on the igniting unit whereby the igniting unit can be withdrawn from the holding device; means operable upon the grasping of the handle for closing an energizing circuit to the heating element and for positively holding the detent in engagement with the igniting unit whereby the igniting unit is held against outward movement from the holding device; and heat-responsive means for releasing the detent upon the heating element attaining a predetermined heat.

14. In a pull type lighter, a holding device; an igniting unit having a heating element thereon mounted in deep position on the holding device and removable therefrom for use; a circuit for the heating element adapted to supply a heavy current to the heating element whereby it is abnormally energized and quickly brought up to the desired heat, a handle on the igniting unit whereby the igniting unit can be withdrawn from the holding device; detent means carried by the holding device for yieldably maintaining the igniting unit in deep position on the holding device; and means operable upon the grasping of the handle for closing the circuit to the heating element and for holding the detent against movement to positively hold the igniting unit against outward movement from the holding device momentarily, said means releasing the detent upon the heating element attaining a predetermined heat.

15. In a pull type cigar lighter, a holding device; an igniting unit having a heating element thereon mounted in deep position on the holding device and removable therefrom for use; a contact cup surrounding the heating element; a contact carried by the holding device and having resilient fingers claspably engaging the contact cup to establish a circuit between the contact and heating element and to hold the igniting unit in deep position; pivoted detent means carried by the holding device and engaging the igniting unit; a handle on the igniting unit whereby the igniting unit can be withdrawn from the holding device; and means operable upon the grasping of the handle for holding the detent in engagement with the igniting unit to positively hold the igniting unit against outward movement on the holding device, said means being released upon the heating element attaining a predetermined heat.

16. In a pull type cigar lighter, a holding device; an igniting unit having a heating element thereon mounted in deep position on the holding device and removable therefrom for use; cooperating contacts carried by the holding device and igniting unit for establishing a circuit for feeding current to the heating element when the igniting unit is held in deep position on the holding device; a pivoted detent carried by the holding device for yieldably maintaining the igniting unit in deep position on the holding device; a handle on the igniting unit whereby the igniting unit can be withdrawn from the holding device; and means operable upon the grasping of the handle for completing the energizing circuit to the heating element and for holding the detent against pivotal movement to positively hold the igniting unit against outward movement, said means releasing the detent for pivotal movement upon the heating element attaining a predetermined heat.

17. In a cigar lighter, a holding device; an igniting unit having a heating element and a handle thereon removably mounted on the hold-

ing device; a detent for yieldably holding the igniting unit in position on the holding device; an energizing circuit for said heating element; means including a normally closed heat-responsive switch and a normally open manually operable switch in the heating element circuit, the manual switch being closed only in response to the handle being grasped by a user for withdrawing the igniting unit from the holding device; and electromagnetic means included in the heating element circuit, said means upon energization thereof positively locking the detent in igniting unit retaining position, said heat-responsive switch interrupting the circuit upon said heating element attaining a predetermined useable temperature, thereby deenergizing said electromagnetic means to release said detent,

and the latter yielding to a manual force applied for withdrawal of the igniting unit.

18. In a cigar lighter, a holder; an igniting unit mounted thereon having a handle adapted to be grasped by hand for completely withdrawing the igniting unit from said holder for use; a heating element carried by the igniting unit; a circuit for energizing said heating element; means including cooperable contacts carried by said handle for closing said circuit only in response to the handle being manually grasped by a user for withdrawing the igniting unit from said holder; and means made operative by the closing of said circuit for delaying the completion of the manual withdrawal of the igniting unit until the heating element is properly heated for use.

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