

April 2, 1940.

A. A. JOHNSON

2,196,151

CIGAR LIGHTER

Filed Dec. 11, 1936

4 Sheets-Sheet 1

Fig. 1

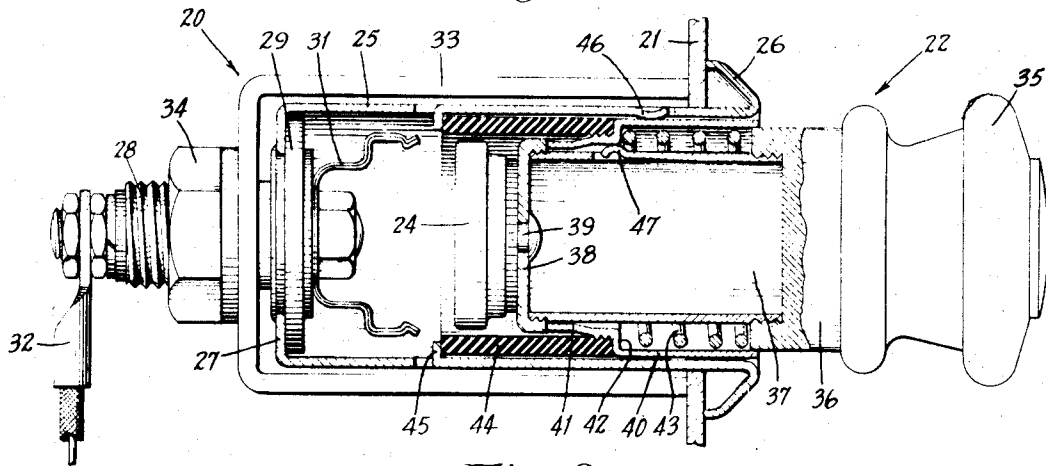


Fig. 2

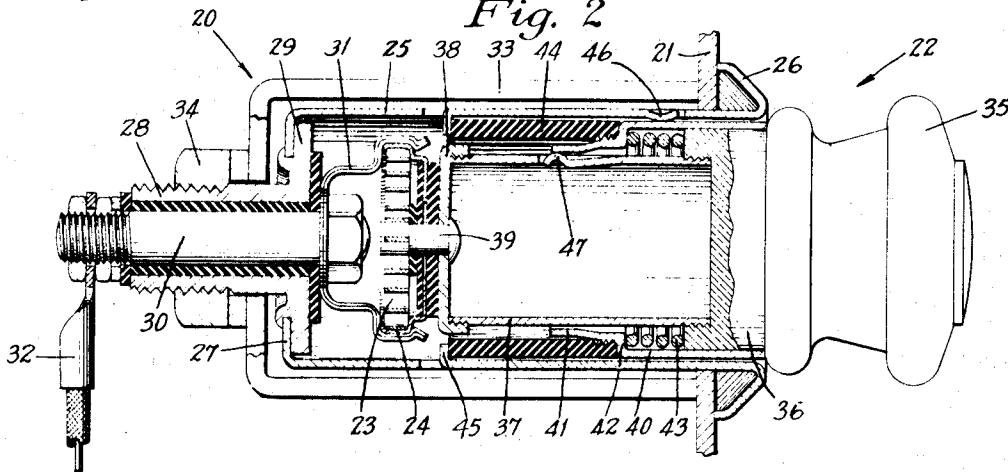


Fig. 3

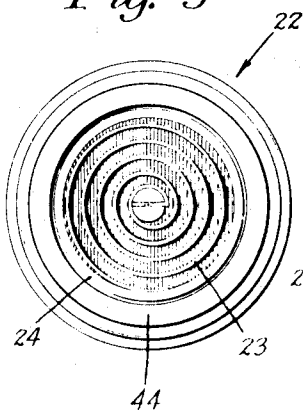
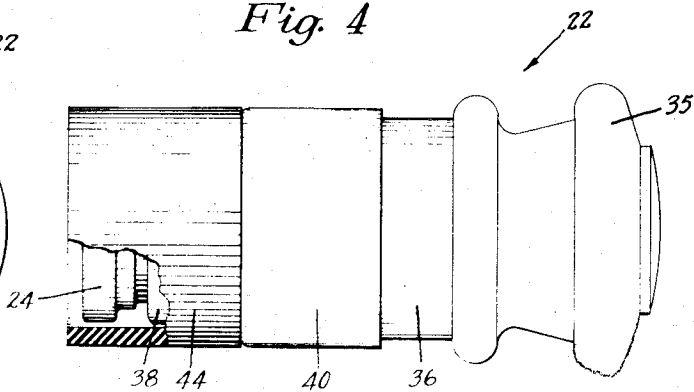


Fig. 4



INVENTOR

A. A. Johnson

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Fig. 5

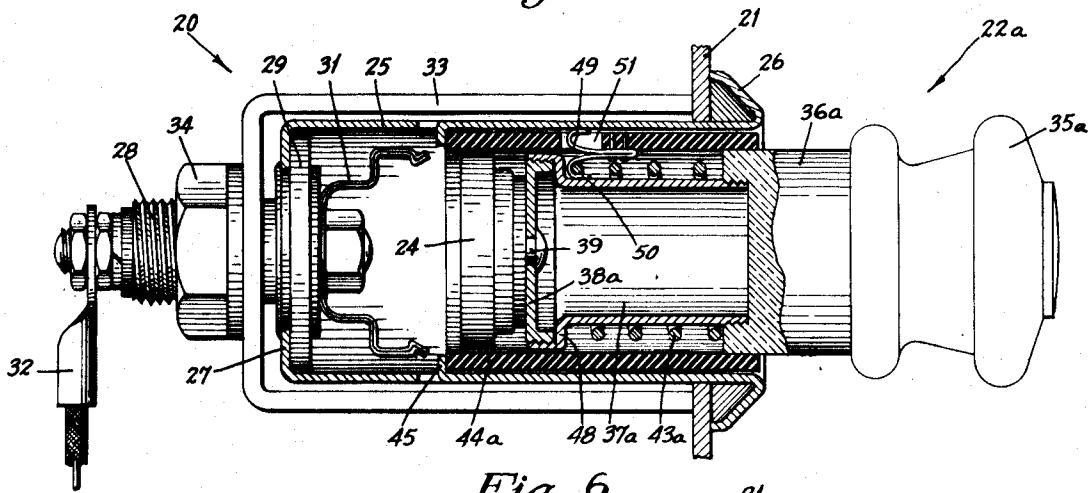


Fig. 6

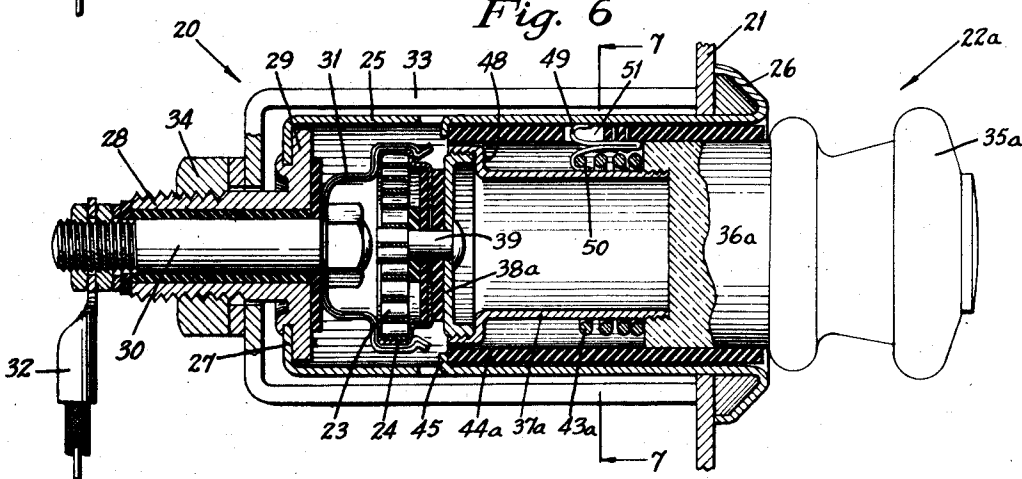
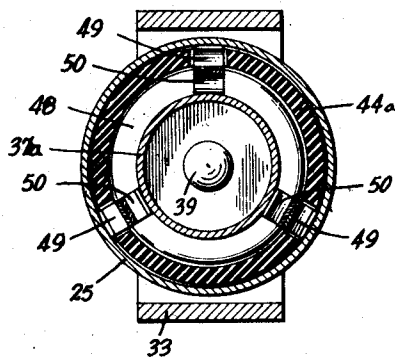


Fig. 7



INVENTOR

Arthur J. Herman

April 2, 1940.

A. A. JOHNSON

2,196,151

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Fig. 8

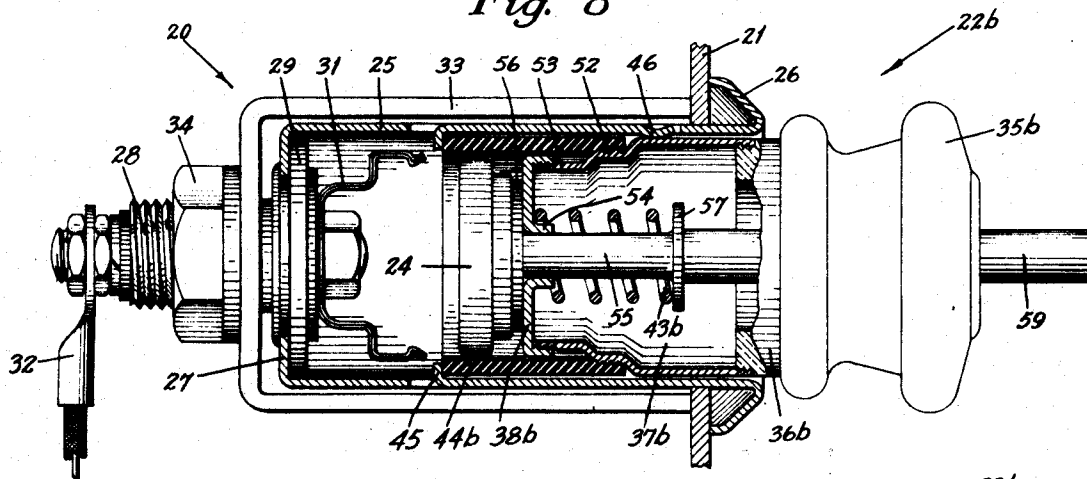


Fig. 9

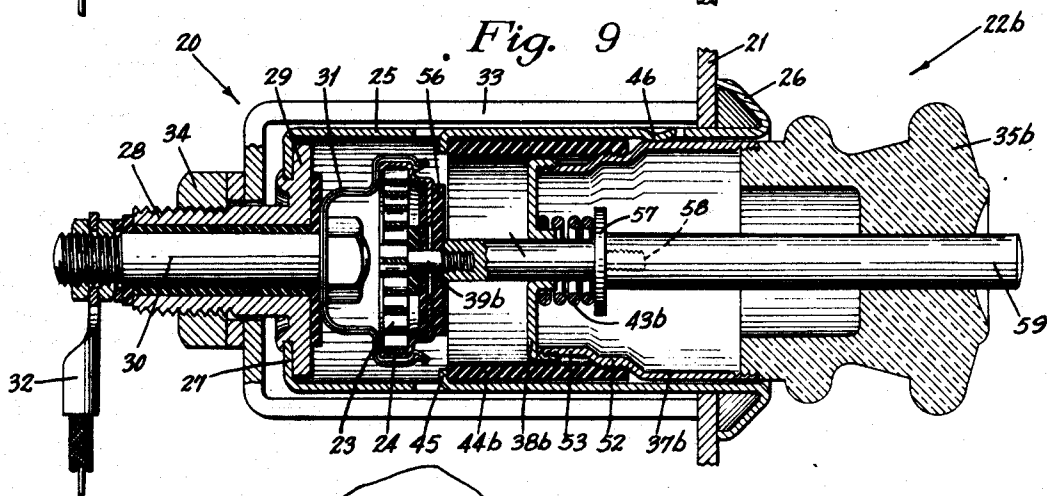
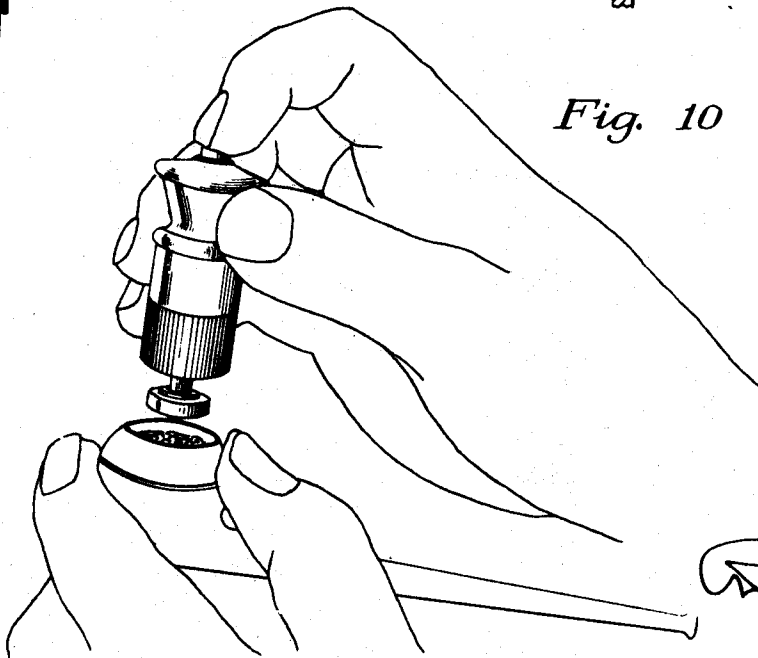


Fig. 10



INVENTOR

Arthur J. Johnson

April 2, 1940.

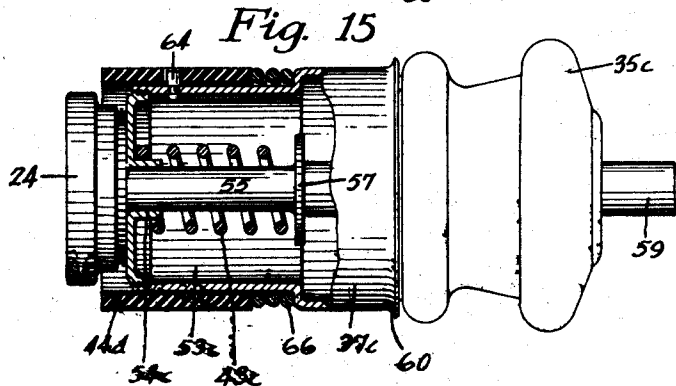
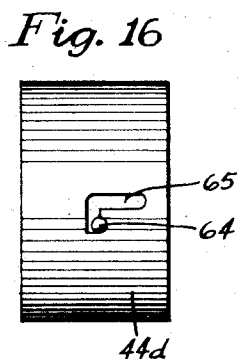
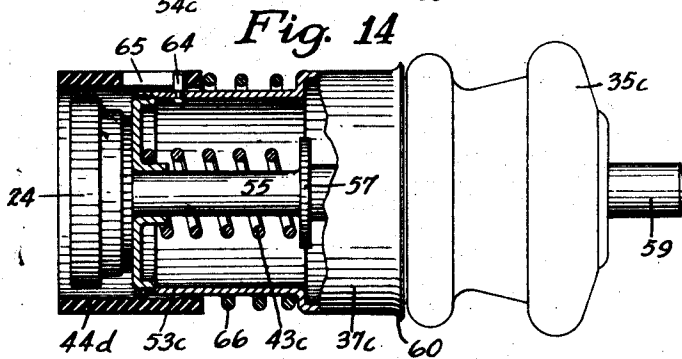
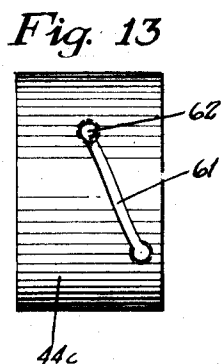
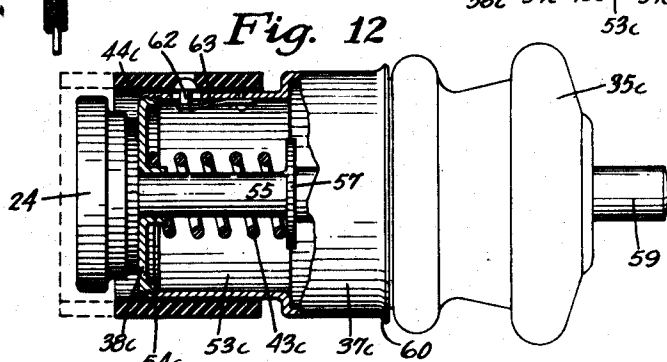
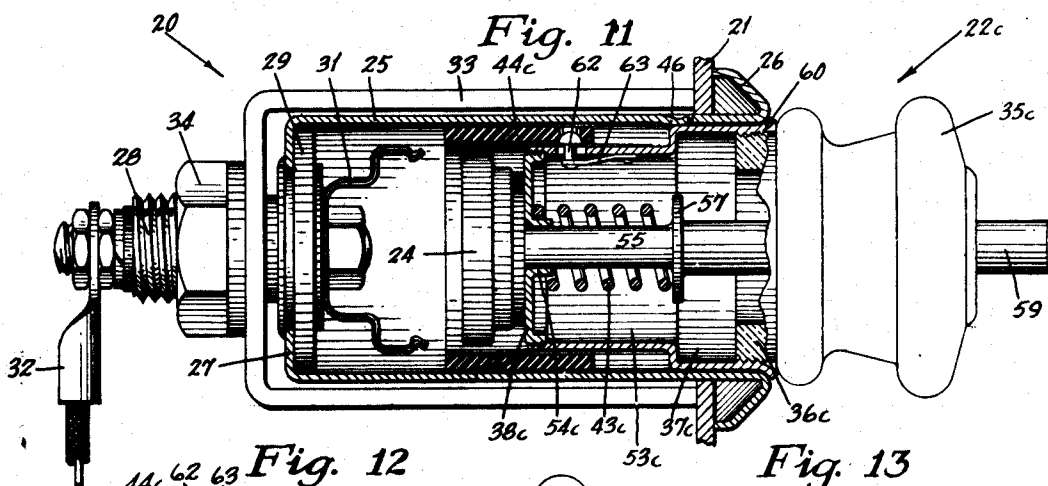
A. A. JOHNSON

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CIGAR LIGHTER

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4 Sheets-Sheet 4



INVENTOR

A. A. Johnson

UNITED STATES PATENT OFFICE

2,196,151

CIGAR LIGHTER

Arthur A. Johnson, Bridgeport, Conn., assignor
to Automatic Devices Corporation, Bridgeport,
Conn., a corporation of Connecticut

Application December 11, 1936, Serial No. 115,289

22 Claims. (Cl. 219—32)

This invention relates to electric cigar lighters, and particularly to the type of cigar lighter having a removable and transportable igniting unit carrying a heating element which is adapted, when hot, to ignite cigarettes and the like, and which igniting unit is normally carried in a base or on a holding structure.

Cigar lighters of this type, as used for automobiles, commonly comprise a holding device adapted to be mounted on an instrument board or supporting plate and presenting a recess or well into which the removable igniting unit, plug-like in form, is placed and held. In the more recent lighters of this type an effort has been made to prevent a user from inadvertently touching the heating element, by so placing the element on the igniting unit that it is enclosed and removed from the touch while being energized on the holder.

In these lighters, however, the parts of the igniting unit closely adjacent the element are apt at times to become hot and painful to the touch. It is an object of the present invention to overcome this disadvantage. This is accomplished by providing a heat-insulating guard on the igniting unit, in which guard the heating element is nested when the unit is being transported and handled, and from which the element is protruded during energization thereof so that the guard is not unduly heated. The igniting unit as thus protected is used in the ordinary manner to ignite cigars and cigarettes.

Combined with this organization there is also provided by the invention means for protruding the heated element, during use, from the guard, as might be found desirable in lighting a pipe. Also, in another embodiment of the invention, the guard is made retractable, so that an extreme protrusion of the element can be effected, or so that the igniting unit can be used as if no guard were provided, by keeping the guard continually in retracted position.

Other features and advantages will hereinafter appear.

In the accompanying drawings showing several embodiments of the invention:

Figure 1 is an axial section of one embodiment, the igniting unit being in open-circuit position, and being shown partly in elevation.

Fig. 2 is a similar view but with the igniting unit in closed-circuit position.

Fig. 3 is an end elevation of the igniting unit, taken at the inner end thereof.

Fig. 4 is a side elevation of the igniting unit

with the heating element guard partly broken away.

Fig. 5 is an axial section of another embodiment of the invention, wherein the heat-insulating guard tube extends substantially the length of the igniting unit body.

Fig. 6 is a similar view but with the igniting unit in closed-circuit position.

Fig. 7 is a transverse section taken on the line 7—7 of Fig. 6.

Fig. 8 is an axial section of another embodiment of the invention, wherein the heating element is movable by a plunger passing through the knob of the igniting unit.

Fig. 9 is a similar view, but with the heating element in closed-circuit position.

Fig. 10 shows the lighter of Figs. 8 and 9 being used in lighting a pipe.

Fig. 11 is an axial section of another embodiment of the invention, wherein the guarding tube is movable to different positions on the igniting unit.

Fig. 12 shows the igniting unit, partly in section, of Fig. 11, but with the guard tube in retracted position.

Fig. 13 is a top plan view of the heat guard.

Fig. 14 shows the igniting unit, partly in section, of another modification wherein the heat guard is spring urged, and can be locked in retracted position. In this figure the guard is in extended position.

Fig. 15 is a similar view but showing the guard in retracted position, and

Fig. 16 is a top plan view of the heat guard of Figs. 14 and 15.

Referring to Figs. 1 through 4, there is shown a lighter illustrating one embodiment of the invention, wherein the igniting unit is provided with a guard tube extending about the heating element. As shown, the lighter includes a holding device 20 adapted to pass through an aperture in a panel 21 and to be supported thereby, said holding device carrying a removable igniting unit 22 provided at its inner end with a spiral coil heating element 23 mounted in a metal cup 24.

The holder 20 includes a tubular shell 25 having at its forward end a flange or bead 26 engaging the panel 21, said shell having at its rear an integral transverse wall 27. The shell 25 is preferably of metal, forming a conductive element in the grounded side of the electrical lighter circuit, and said shell is provided with a live contact by means of which the heating element 23 is energized. For supporting this live con-

tact, the transverse wall 27 carries a tubular boss 28 extending rearwardly from a plate 29 secured to said wall. The boss 28 insulatedly carries a stud 30 under the head of which is secured a contact clip 31, preferably of bimetallic material, adapted to engage and hold the cup 24 of the igniting unit when the latter is moved to closed-circuit position.

The stud 30 passes through the boss 28, and is threaded at its rear end to accommodate nuts for securing the stud in the boss and for securing a connection lug 32 to said stud, all in the conventional manner. The stud 30 and clip 31 are insulated from the boss 28 by a pair of insulating washers and an insulating sleeve, as shown.

The shell 25 is secured in place by a U-shaped clamp 33 apertured to slide over the boss 28, which latter is externally threaded to carry a nut 34 for driving the clamp 33 against the panel 21.

The igniting unit 22 is a generally cylindrical member to fit within the shell 25, and has a knob portion 35 adapted to project from the holder, by means of which knob the igniting unit is grasped for operation, and handling when in use. The knob 35 has integral therewith a short tubular body portion 36 which is internally threaded to receive and have fastened thereto a metal tube 37. The tube 37 is of smaller diameter than the outside of the body portion 36, as shown, and the rear end of said tube is externally threaded to hold a metal cap 38 on which the heating element 23 and metal contact cup 24 are mounted.

As shown in Fig. 2, the coil 23 is of the usual type, being spiral in form with its outer end mechanically and electrically connected to the cup 24 and its inner end held in the slitted head of a stud 39 passing through the bottom of the cup 24 and through the cap 38 and headed over on the latter, said stud serving to hold the heating element in place and to electrically connect the inner end of the coil to said cap. The coil, cup and cap are insulated by suitable washers, as shown.

According to the present invention, there is provided a heat-insulating guard carried by the igniting unit and adapted to extend about the heating element so that when the igniting unit is being used there is prevented any likelihood of human contact with the slitted parts of the element. Also, the organization is such that, while the tube is shown as extended about the heating element there is provided electrical connection means from said element through the igniting unit to the shell 25 and panel 21.

The igniting unit 22 is provided with a tubular metal sleeve 40 adapted to encircle the metal tube 37 of the unit, the sleeve 40 having a large-diameter front portion adapted to closely fit over the body 36, and the rear portion 41 of the reduced diameter to closely fit about the tube 37. Between the large-diameter and a smaller-diameter portion of the sleeve 40 there is an internal shoulder 42. The body 36 and tube 37 are thus slidable within the shell 40, the rear portion 41 of said sleeve being adapted to abut the front edge of the cap 38 carried by the tube to limit movement of said sleeve in the rearward direction. For the purpose of yieldingly urging the sleeve rearwardly against the cap 38 there is provided a helical compression spring 43 carried by the tube 37, one end of said spring engaging

the shoulder 42 of the sleeve and the other end engaging the rear edge of the body 36.

For guiding the heating element the igniting unit is provided with a heat-insulating tube 44 adapted to extend above the element as shown, said tube being internally threaded at its foremost end to be carried by the sleeve 40, the rear reduced portion of said sleeve being externally threaded for this purpose, as shown, said threaded portion being of slightly larger diameter than the rest of the rear sleeve portion as shown.

According to the invention the tube 44 not only serves as a heat guard for the heating element carried therein, but also serves to position the igniting unit within the holder 20, and for this purpose the shell 25 is provided with a plurality of tongues 45 lanced inwardly therefrom to engage the rearmost edge of the tube 44. Thus, referring to Fig. 1, it will be seen that when the igniting unit is inserted in the holding device the tube 44 engages the tongues 45 and position the unit thereby.

For the purpose of insuring electrical connection between the tube 37 connected to the heating element and the shell 25, the latter is provided with a resilient finger 46 lanced therefrom and biased inwardly to engage under pressure the outer surface of the sleeve 40, and the inner surface of said sleeve is similarly engaged by a tongue 47 lanced from the tube 37 and biased outwardly for this purpose.

When the igniting unit is in the holder in the position of Fig. 1, the circuit through the heating element will be opened and no energizing thereof will result. However, when the unit is depressed by means of the knob 35 so that the cup 24 will be grasped and held by the clip 31, the unit will remain in this position and energization thereof will take place. Current will flow through the lug 32, stud 30, clip 31, cup 24, heating coil 23, stud 39, cap 38, metal tube 37, finger 47, sleeve 40, finger 46, shell 25, and through the panel 21 connected with the ground circuit.

Upon the heating element reaching a predetermined useful temperature the clip 31 will spread in response to heat from said element and release the igniting unit whereupon it will snap back to the open-circuit position of Fig. 1 again in readiness for use. When the igniting unit is withdrawn it will be noted that the heating element is surrounded by the tube 44, and therefore inadvertent contact with the heated portions of said element is prevented. However, the element is readily accessible for lighting the end of a cigar or a cigarette. Should it be desired to ignite the tobacco in a pipe, this can be readily effected by moving the guard and the sleeve 42 to retracted position on the igniting unit against the urging of the spring 43, whereupon a protrusion of the heating element relatively to the guard will have been effected. With the element thus protruding it can be inserted into a bowl of a pipe without difficulty.

An important feature of the invention which should be noted, is that when the igniting unit is in the closed-circuit position of Fig. 2, so that the heating element is energized and is becoming hot, said element is protruding from the guard tube 44 and therefore said tube will remain relatively cool. Thus, after energization of the heating element and removal of the igniting unit for use it will be found that the guard 44 is quite cool to the touch.

Another embodiment of the present invention is shown in Figs. 5, 6, and 7, wherein the guard

tube carried by the igniting unit surrounds substantially the entire body portion of the unit.

Referring to these figures it will be seen that the holding device 20 is similar in all respects to that in Figs. 1 and 2, and already described, except that the shell 25 does not now have the inwardly biased resilient finger 46.

The igniting unit is different from that just described however and comprises a knob 35a integral with a substantially cylindrical body portion 36a, the rear end of which is tubular and internally threaded to receive and be carried by a metal tube 37a. The rear end of said tube is enlarged in diameter to substantially that of the portion 36a, providing shoulders, as at 48, and said enlarged portion is internally threaded to receive and carry a metal end closure 38a on which is mounted the heating element coil 23 and cup 24. The end closure 38a and tube 37a carrying said closure are electrically connected to the inner end of the heating coil 23 in the usual manner.

According to this embodiment the igniting unit 22a is provided with a heat-insulating guard tube 44a adapted to slidably fit over the body portion 36a and enlarged rear portion of the tube 37a, and to surround the cup 24 of the heating element. For the purpose of yieldingly holding the tube 44a in extended position on the igniting unit, and for effecting electrical connection between the tube 37a and the shell 25, said guard tube is provided with a plurality of pairs of resilient metal arms 49 and 50, the ends of which are bent in the form of yokes, as shown. The arms 49 and 50 are attached to the inner wall of the tube 44a by pins passing through said wall, said arm 49 extending through an aperture 51 in the guard tube and engaging and pressing against the inside surface of the shell 25, and said arm 50 extending inwardly and engaging and pressing against the external surface of the tube 37a. If desired, the resilient arms 49 and 50 may be formed of one piece, as shown. The tube 37a carries a helical compression spring 43a the front end of which engages the rear edge of the body portion 36a, and the rear end of which engages and is carried in yoke portions of the arms 50. Thus it will be seen that the guard tube 44a is continually yieldingly urged to extend position on the igniting unit 22a, as in Fig. 5.

Another embodiment of the invention is shown in Figs. 8, 9, and 10, wherein the igniting unit is provided with a plunger-operated heating element protrudable from the heat guard by pressure on a plunger extending through the knob.

The holding device 20 of this embodiment is similar in all respects to that of Figs. 1 and 2, already described. The igniting unit 22b comprises a knob 35b having an integral tubular body portion 36b which is externally threaded to carry a tubular metal body portion 37b having reduced neck portions 52 and 53, each externally threaded, the latter to carry a metal cap 38b. The cap 38b is centrally apertured and formed to provide a tubular boss 54 in which is slidably carried a plunger 55. The heating coil 23 and cup 24 are carried on the rear end of the plunger 55, as clearly shown in Fig. 9, said plunger being electrically connected by means of a stud 39b to the inner end of the heating coil, and said stud serving to secure the coil and cup to the plunger. The cup 24 is insulated from the plunger by insulating washers, as shown, the washer 56 also serving to insulate the cup from the cap 38b. The inner end of the plunger 55 is provided with

a head 57 against which a helical compression spring 43b acts, said spring being disposed about the plunger and also engaging the inside of the cap 38b to continually yieldingly hold the heating element in the retracted position of Fig. 8. The head 57 of the plunger 55 is provided with a threaded stud 58, see Fig. 9, by means of which a second plunger or operating rod 59 is joined to the plunger 55, said rod 59 passing through an axial hole bored in the knob 35b and projecting beyond said knob as shown. Thus, the heating element may be moved relatively to the igniting unit from the retracted position of Fig. 8 to the extending position of Fig. 9 by depressing the rod or plunger 59.

According to this embodiment the igniting unit is provided with a guard tube 44b adapted to surround the heating element, the foremost end of said tube being internally threaded to receive the externally threaded neck 52 of the tubular body 37b and to be supported thereby.

When the igniting unit and heating element are in the position of Fig. 8, the circuit through the element will not be closed. However, when the rod 59 is depressed the heating element will be protruded and grasped and held by the clip 31, and the circuit through said element will be completed. As the element reaches a predetermined useful temperature the clip will spread in response to said heat and will release the element to open-circuit position. When the igniting unit is withdrawn for use the guard tube 44b will prevent accidental touching by a user of the heated element or parts thereof. If it is desired to ignite the tobacco in a pipe, the heating element may be protruded, as shown in Fig. 10, whereupon the protruded element can be inserted in the pipe bowl without difficulty.

Still another embodiment of the invention is shown in Figs. 11, 12 and 13, wherein the guard tube carried by the igniting unit is movable thereon from an extended position to a retracted position.

The holding device 20 shown in Fig. 11 is substantially similar to that shown in Figs. 1 and 2, already described, except that there are no tongues 45 lanced inwardly in the shell 25. Instead, the igniting unit is positioned in the holder by a flange engaging the bead 26.

The igniting unit 22c includes a knob 35c having an integral tubular body portion 36c which is externally threaded to be carried by a metal tube 37c. The tube 37c has a neck portion 53c of reduced diameter, the rear end of which is internally threaded to carry a metal end wall 38c, which latter is centrally apertured and provided with a tubular boss 54c in which is slidably mounted a plunger 55. The plunger 55 carries the heating coil 23 and cup 24 at the rear end thereof, as in the embodiment of Figs. 8 and 9 and the inner end of said plunger is provided with a head 57 engaging a coil spring 43c which latter yieldingly holds the heating element in retracted position.

The plunger 55 is connected with a push rod 59 which passes through a central bore in the knob 35c and projects from the front face thereof for the purpose of moving the heating element to extended position for energization of the lighter.

The front or outer edge of the metal tube 37c is flared outwardly, as at 60 to engage the bead 26 for positioning the igniting unit in the holding device. When, with the parts and the position shown in Fig. 11, it is desired to energize

the lighter, the push rod 59 is depressed to cause the heating element to be grasped and held by the clip 31. When the element reaches a predetermined temperature the clip will release it to open-circuit position.

In this embodiment there is provided a guard tube 44c adapted to slidably fit on the neck 53c of the tube 37c, and be movable thereon to extended position, as in Fig. 11 or retracted position as in Fig. 12. For the purpose of yieldingly holding the tube in either of said positions, there is provided a transverse or diagonal slot 61 in the side wall of the tube, the ends of the slot terminating in circular apertures which are counter-bored from the inside. The neck 53c has resiliently mounted thereto a pin 62 by means of a resilient arm 63, said pin extending through an aperture in the neck and having at its end a mushroom head adapted to engage the inner edges of the slot 61. When the head of the pin 62 is engaging either of the circular apertures at the end of the slot it will partially enter said apertures because of the counter-bore, and therefore serve as a detent to yieldingly hold the tube 44c in either extended or retracted position.

Thus, when the tube 44c is kept in extended position the lighter is used as has been already described in the previous embodiments. Should it be desired to use the igniting unit without having the heating element guarded, the tube 44c may be turned to bring it into the retracted position, as shown in Fig. 12, for this position it is possible to effect considerable protrusion of the heating element relative to the tube by depressing the push rod 59.

Still another embodiment of the invention is shown in Figs. 14, 15 and 16, wherein the guard tube is yieldingly urged to and held in the extended position, and can be moved to retracted position and locked thereat. The igniting unit is substantially similar in detail to that shown in Figs. 11 and 12, except that the reduced neck 53c of the tube 37c carries a fixed pin 64 instead of the resiliently mounting pin 62. The guard tube 44d is adapted to slidably fit on the neck portion 53c, and said tube has a bayonet slot 65 into which the pin 64 extends.

For the purpose of yieldingly urging the tube 44d to extended position on the igniting unit there is provided a helical compression spring 66 carried by the neck 53c, one end of the spring engaging the inner edge of the tube 44d and the other end of the spring engaging a shoulder in the tube 37c, as shown. Referring to Fig. 14, the guard tube 44d is yieldingly held in extended position by the spring 66. Should it be desired to retract the tube 44d, it is merely necessary to move it against the spring 66 and turn it so that the pin 64 locks the tube, all as shown in Figs. 15 and 16.

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 an electric cigar lighter, a holding device; an igniting unit carried by the holding device and completely removable therefrom for use, comprising a body having a recess therein; a heating element; means for movably mounting the heating element in the recess of the body so that it can be protruded therefrom; and means for completing a circuit through the heating element when in protruded position, said means including heat-responsive means on the holding

device for engaging the element in said position and for making electrical connection thereto and for opening the circuit when the heating element has attained a desired heat.

2. In an electric cigar lighter, a holding device; an igniting unit carried by the holding device and completely removable therefrom for use, comprising a body having a recess therein; a heating element; means for movably mounting the heating element in the recess of the body so that it can be protruded therefrom; and means for completing a circuit through the heating element when in protruded position, said means including a latch on the holding device for holding the element in said position and for making electrical connection thereto.

3. In a cigar lighter, a substantially tubular holding device presenting a well-like cavity; an igniting unit in the form of a plug, supported in the cavity of the holding device and completely removable therefrom for use; a heat-insulating tube carried by the igniting unit at the insertable end thereof; a heating element; means for movably mounting the heating element on the igniting unit in the end of the heat-insulating tube thereof so that the element can be protruded from said tube; and means for completing a circuit through the heating element when in protruded position, said means including detent means on the holding device for holding the element in said position and for making electrical connection thereto.

4. In an electric cigar lighter, a holding device; an igniting unit carried by the holding device and completely removable therefrom for use, comprising a plug-like body having a recess therein; a heating element; means for movably mounting the heating element in the recess of the body so that it can be protruded therefrom; means for yieldingly urging the heating element to retracted position within said recess; and means for completing a circuit through the heating element when in protruded position, said means including a heat-responsive detent carried by the holding device in heat-receiving relation with the element for holding said element in protruded position and making electrical connection thereto, and for releasing the element to retracted position when the latter reaches a predetermined temperature so that the circuit therethrough is opened.

5. In an electric cigar lighter, a holding device; an igniting unit carried by the holding device and completely removable therefrom for use, comprising a body having a recess therein, and having a knob attached thereto; a heating element; means for movably mounting the heating element in the recess of the body so that it can be protruded therefrom, including a manually operable plunger extending through said knob; and means for completing a circuit through the heating element when in protruded position, said means including a latch on the holding device for holding the element in said position and for making electrical connection thereto.

6. In a cigar lighter, a substantially tubular holding device presenting a well-like cavity; an igniting unit in the form of a plug supported in the cavity of the holding device and completely removable therefrom for use; a heat-insulating tube movably carried by the igniting unit at the insertable end thereof; means for yieldingly holding the heat-insulating tube in extended or retracted position on the igniting unit; a heating

element; means for movably mounting the heating element on the igniting unit in the end of the heat-insulating tube thereof so that the element can be protruded from said tube when the latter is in extended position; and means for completing a circuit through the heating element when in protruded position, said means including a detent on the holding device for holding the element in said position and for making electrical connection thereto.

7. In an electric cigar lighter, a holding device; an igniting unit carried by the holding device and completely removable therefrom for use, comprising a body having a recess therein; means carried by the holding device for positioning the igniting unit body therein; a heating element; means for movably mounting the heating element in the recess of the body so that it can be protruded therefrom; and means for completing a circuit through the heating element when in protruded position, said means including a bimetallic contact on the holding device for engaging the element in said position and for making electrical connection thereto and for opening the circuit when the heating element has attained its desired heat.

8. In a cigar lighter, a substantially tubular holding device presenting a well-like cavity; an igniting unit in the form of a plug, supported in the cavity of the holding device and completely removable therefrom for use; a heat-insulating tube carried by the igniting unit at the insertable end thereof; means carried by the holding device and engaging said tube for positioning the igniting unit on the holder; a heating element; means for movably mounting the heating element on the igniting unit in the end of the heat-insulating tube thereof so that the element can be protruded from said tube; and means for completing a circuit through the heating element when in protruded position, said means including detent means on the holding device for holding the element in said position and for making electrical connection thereto.

9. The invention as defined in claim 8, in which the means for positioning the igniting unit comprises tabs lanced inwardly from the tubular holder.

10. In an electric cigar lighter, a holding device; an igniting unit carried by the holding device and completely removable therefrom for use, comprising a body having a recess therein; a heating element; means for movably mounting the heating element in the recess of the body so that it can be protruded therefrom, including a knob movably carried by the igniting unit body; and means for completing a circuit through the heating element when in protruded position, said means including heat-responsive means on the holding device for engaging the element in said position and for making electrical connection thereto and for opening a circuit when the heating element has attained the desired heat.

11. The invention as defined in claim 6, in which the heat-insulating tube has a transverse slot in its side wall, and in which the means for yieldingly holding the tube comprises a detent pin carried by the igniting unit and engaging said slot.

12. In a cigar lighter, a substantially tubular holding device presenting a well-like cavity; an igniting unit in the form of a plug supported in the cavity of the holding device and completely removable therefrom for use; a heat-insulating tube movably carried by the igniting unit at the

insertable end thereof, to be in either extended or retracted position; means for yieldingly urging the tube in extended position on the igniting unit; a heating element; means for movably mounting the heating element on the igniting unit in the end of the heat-insulating tube thereof so that the element can be protruded from said tube when the latter is in extended position; and means for completing a circuit through the heating element when in protruded position, said means including a detent on the holding device for holding the element in said position and for making electrical connection thereto.

13. In a cigar lighter, a substantially tubular holding device presenting a well-like cavity; an igniting unit in the form of a plug supported in the cavity of the holding device and completely removable therefrom for use; a heat-insulating tube movably carried by the igniting unit at the insertable end thereof, to be in either extended or retracted position; means for yieldingly urging the tube in extended position on the igniting unit; means for locking the tube in retracted position; a heating element; means for movably mounting the heating element on the igniting unit in the end of the heat-insulating tube thereof so that the element can be protruded from said tube when the latter is in extended position; and means for completing a circuit through the heating element when in protruded position, said means including a detent on the holding device for holding the element in said position and for making electrical connection thereto.

14. The invention as defined in claim 13, in which the heat-insulating tube has a bayonet slot in its side wall, and in which the means for locking the tube in retracted position includes a pin carried by the igniting unit and engaging said slot.

15. In a cigar lighter, a substantially tubular holding device presenting a well-like cavity; an igniting unit in the form of a plug supported in the cavity of the holding device and completely removable therefrom for use, said unit having a knob for handling purposes; a heat-insulating tube movably carried by the igniting unit at the insertable end thereof; means for yieldingly holding the heat-insulating tube in extended or retracted position on the igniting unit; a heating element; means for movably mounting the heating element on the igniting unit in the end of the heat-insulating tube thereof so that the element can be protruded from said tube when the latter is in extended position; and means for completing a circuit through the heating element when in protruded position, said means including a detent on the holding device for holding the element in said position and for making electrical connection thereto.

16. In a cigar lighter, a substantially tubular holding device presenting a well-like cavity; an igniting unit in the form of a plug supported in the cavity of the holding device and completely removable therefrom for use, said unit having a knob for handling purposes; a heat-insulating tube movably carried by the igniting unit at the insertable end thereof, to be in either extended or retracted position; means for yieldingly urging the tube in extended position on the igniting unit; a heating element; means, including a manually operable plunger extending through said knob for movably mounting the heating element on the igniting unit in the end of the heat-insulating tube thereof so that the element can be protruded from said tube when the latter is

in extended position; and means for completing a circuit through the heating element when in protruded position, said means including a detent on the holding device for holding the element
5 in said position and for making electrical connection thereto.

17. In an electric cigar lighter, an igniting unit comprising a plug-like body; a heat-insulating tube movably carried by the igniting unit at
10 one end thereof; means for yieldingly holding the heat-insulating tube in extended or retracted position on the body; a heating element; and means for movably mounting the heating element on the body in the end of the heat-insulating
15 tube thereof so that the element can be protruded from said tube when the latter is in extended position, and so that the element will be further protruding when the tube is retracted.

18. In an electric cigar lighter, an igniting unit
20 comprising a plug-like body; a heat-insulating tube movably carried by the igniting unit at one end thereof, to be in either extended or retracted position; means for yieldingly urging the tube to extended position on the body; a heating ele-
25 ment; means for movably mounting the heating element on the body in the end of the heat-insulating tube thereof so that the element can be protruded from said tube when the latter is in extended position, and so that the element will
30 be further protruding when the tube is retracted.

19. In an electric cigar lighter, an igniting unit comprising a plug-like body having a knob for handling purposes; a heat-insulating tube mov-
35 ably carried by the igniting unit at one end thereof; means for yieldingly holding the heat-insulating tube in extended or retracted position on the body; a heating element; means, including a manually operable plunger extending through the knob of the igniting unit, for movably mounting
40 the heating element on the body in the end of the heat-insulating tube thereof so that the element can be protruded from said tube when the latter is in extended position, and so that the element will be further protruding when the tube
45 is retracted.

20. In a cigar lighter, a holding device; an

igniting unit carried by the holding device and completely removable therefrom for use, compris-
ing a body having a recess therein and having a knob attached thereto; a heating element; means
5 for movably mounting the heating element in the recess of the body so that it can be protruded therefrom; and means for completing a circuit to the heating element when in projected position, including heat-responsive contact means for
10 making an electrical engagement therewith only when the heating element is in said projected position and adapted to open the circuit when the heating element reaches the desired heat.

21. In a cigar lighter, a substantially tubular holding device presenting a well-like cavity; an
15 igniting unit in the form of a plug supported in the cavity of the holding device and completely removable therefrom for use; a heat-insulated tube carried by the igniting unit; a heating ele-
20 ment carried by the igniting unit; means for movably mounting the heating element on the igniting unit in the end of the heat-insulated tube so that the element can be protruded from
25 the tube; and means for completing a circuit through the heating element when in protruded position, including a detent means on the hold-
ing device for element, and a contact adapted to extend through the heat-insulating tube and into
30 contact with the holder.

22. In an electric cigar lighter, a holding de-
30 vice; an igniting unit carried by the holding device and completely removable therefrom for use, comprising a body having a recess therein; a heating element; means for movably mounting
35 the heating element in the recess of the body so that it can protrude therefrom, including a manually operable member mounted for sliding movement on the body; and means for complet-
40 ing a circuit through the heating element when in protruded position, including heat-responsive means for making an electrical engagement
45 therewith only when the heating element is in protruded position and for opening the circuit when the heating element has attained its pre-determined heat.

ARTHUR A. JOHNSON.