

April 23, 1935.

E. F. McDONALD

1,999,140

SMOKING STAND AND ACCESSORIES THEREFOR

Filed Nov. 23, 1931

4 Sheets-Sheet 1

Fig. 1.

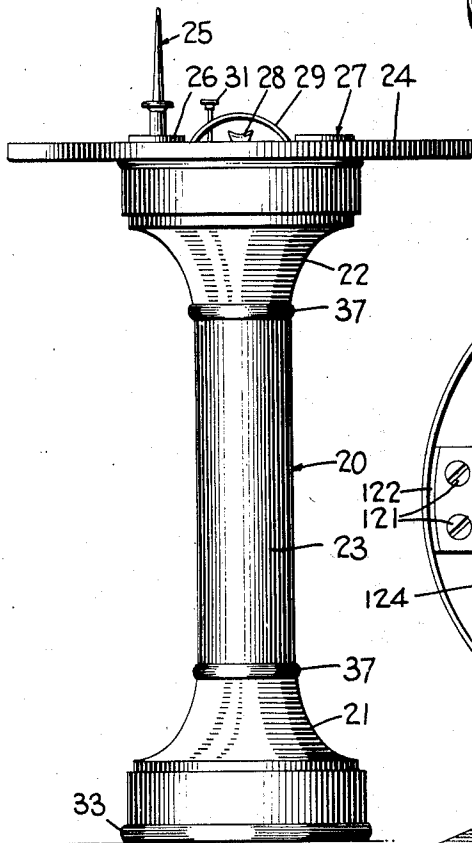


Fig. 9.

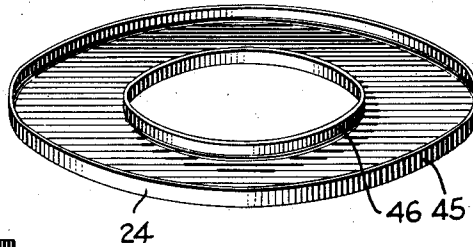


Fig. 10.

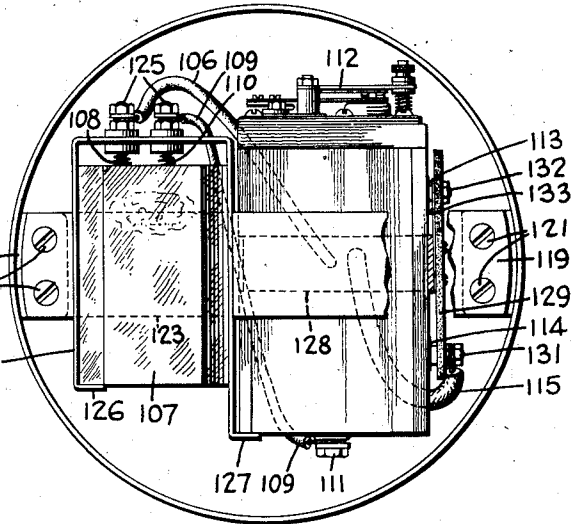
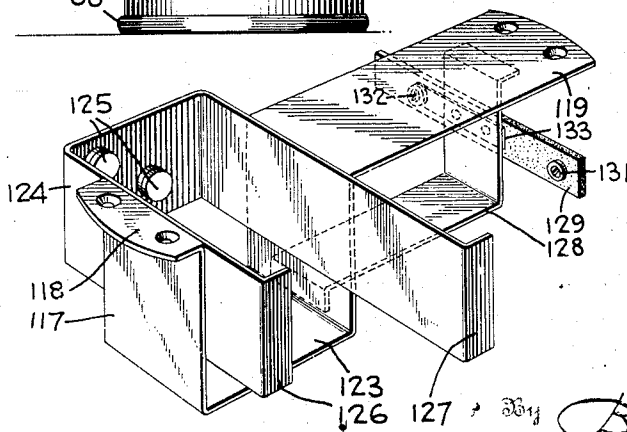


Fig. 11.



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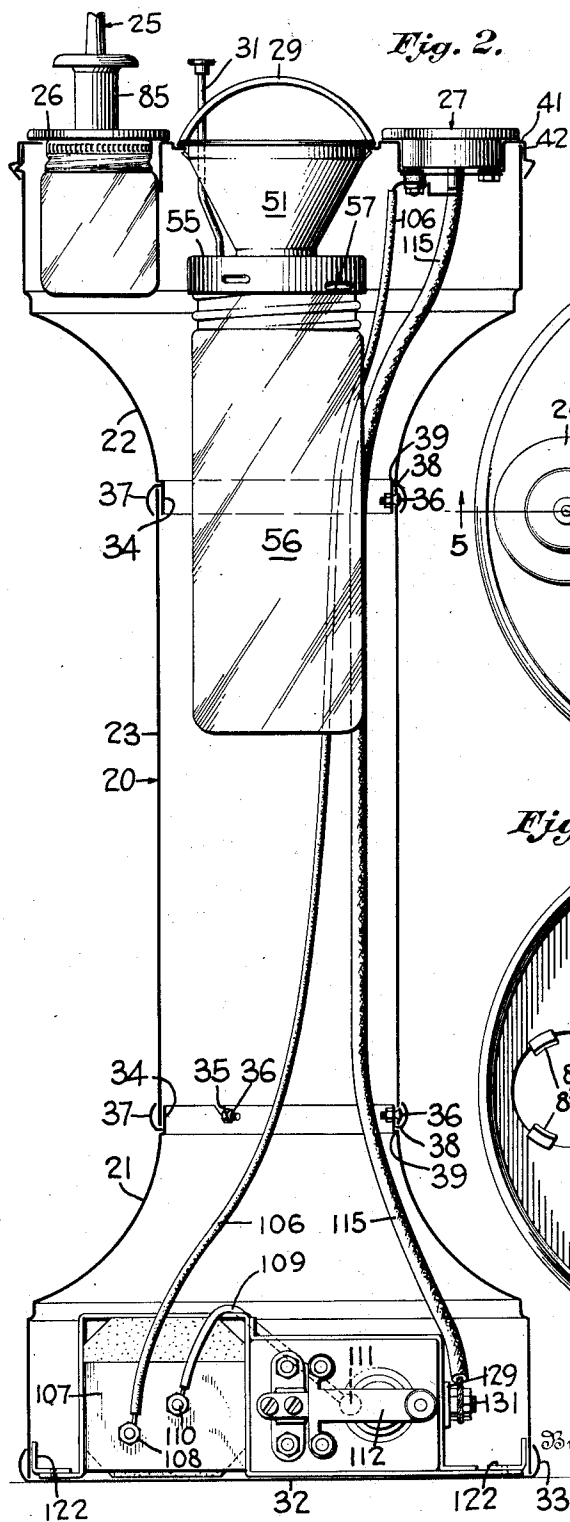


Fig. 3.

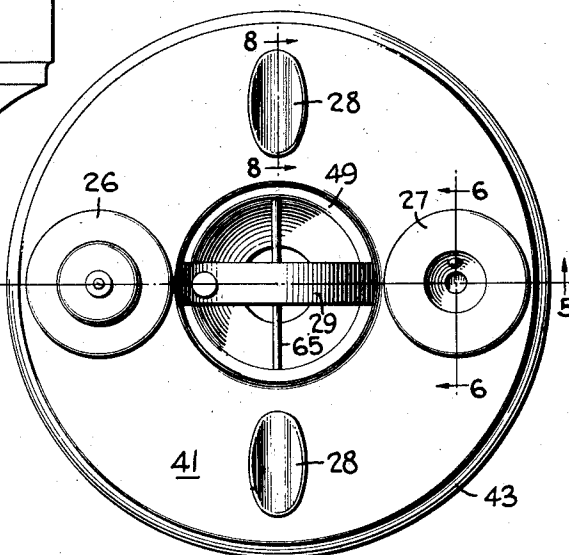
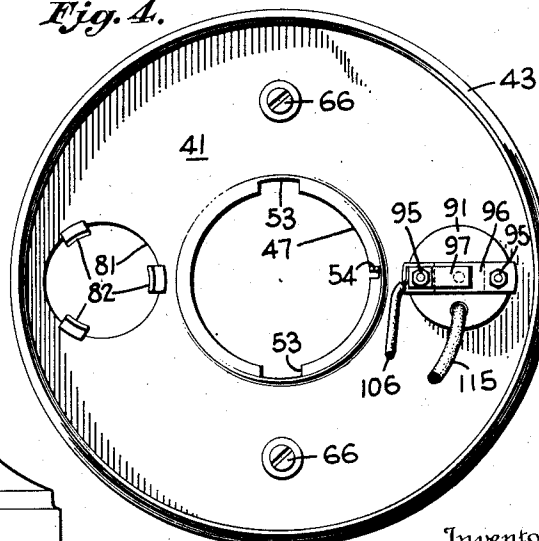


Fig. 4.



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4 Sheets-Sheet 3

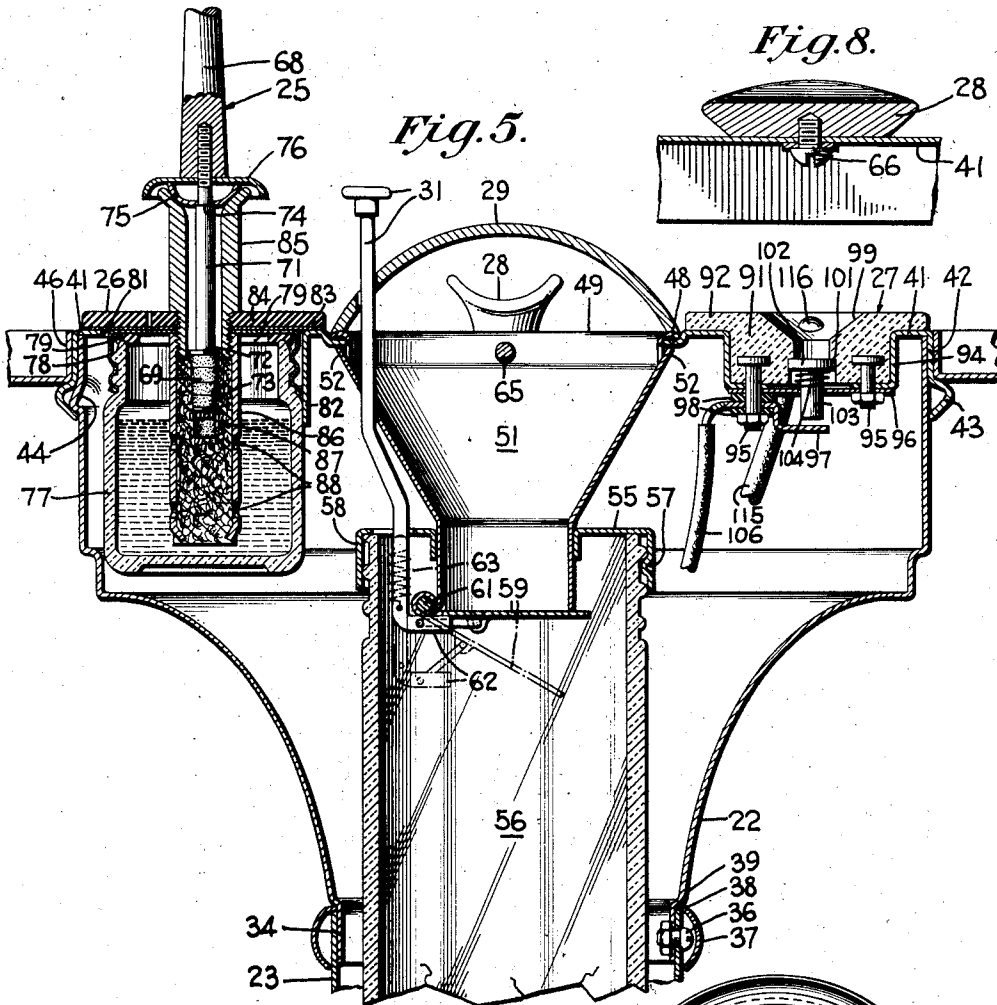


Fig. 8.

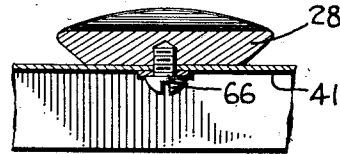
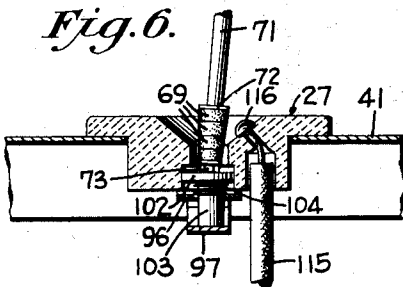
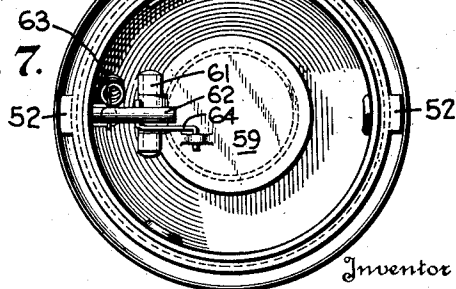


Fig. 7.



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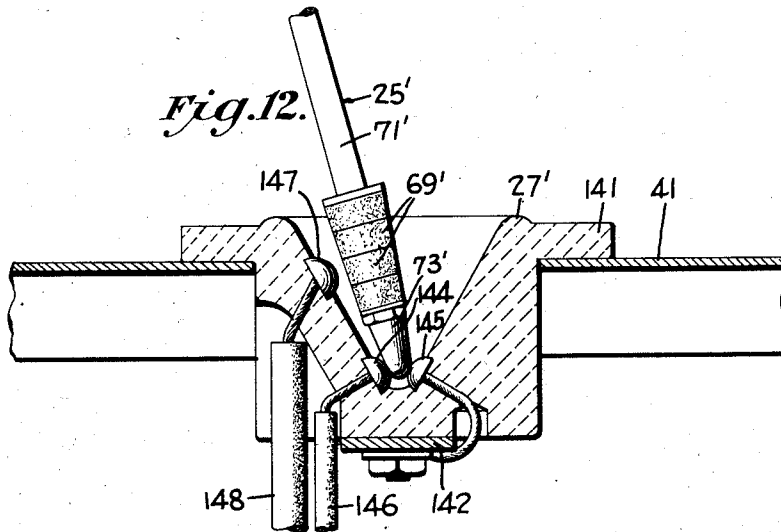
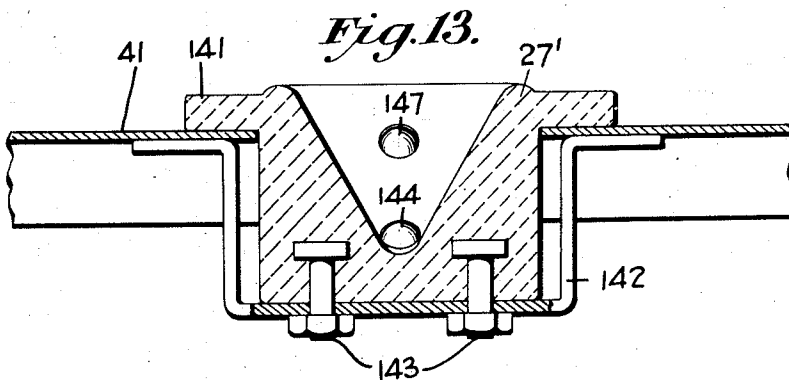
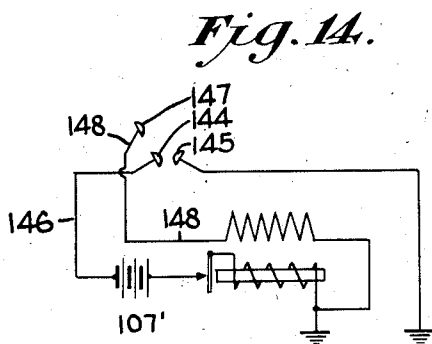
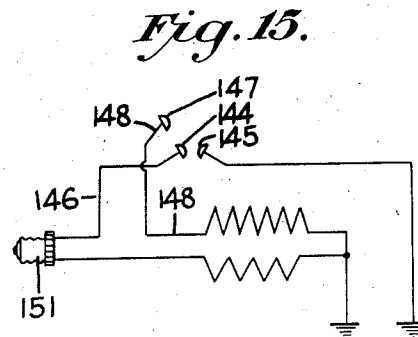
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SMOKING STAND AND ACCESSORIES THEREFOR

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4 Sheets-Sheet 4



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SMOKING STAND AND ACCESSORIES
THEREFOREdward F. McDonald, Buffalo, N. Y., assignor to
Faries Manufacturing Company, Decatur, Ill.

Application November 23, 1931, Serial No. 576,923

7 Claims. (Cl. 175—296)

This invention relates to an article of furniture having particular utility for tobacco smokers.

It comprehends, generally, a portable stand of suitable height having at its top an electric ignitor, cigar rests, and an ash receptacle, all grouped together so as to be within easy reach of a person or persons desiring to smoke. A removable annular tray is provided to engage the stand, extending about the smoking utilities, to support drinks, candies, tobacco, or other refreshments, which it may be desired to serve. The tray, being removable from the stand, may be used for the same purposes as an ordinary portable tray.

These and other objects and advantages, including those residing in the arrangement, formation, and novel manner of supporting the smoking utilities, will become apparent from the following description of typical embodiments of the invention, reference being made to the accompanying drawings, wherein:

Fig. 1 is a side elevation of a complete smoker's stand including a detachable tray;

Fig. 2 is a vertical sectional view through the article depicted in Fig. 1, the tray being omitted;

Fig. 3 is a plan view of the device of Fig. 1;

Fig. 4 is a bottom plan view of the cover part appearing in Fig. 3;

Fig. 5 is a sectional view taken on line 5—5 of Fig. 3, illustrating the upper portion of the smoker's stand, a central fragmentary portion of the tray being shown;

Fig. 6 is a fragmentary vertical section taken on line 6—6 of Fig. 3 through the ignitor element;

Fig. 7 is a bottom plan view of the funnel and associated means for supporting the ash or waste receptacle within the stand;

Fig. 8 is a sectional view taken along line 8—8 of Fig. 3, depicting the manner of mounting a cigar holder upon the cover plate of Figs. 3 and 4;

Fig. 9 is a perspective view of the removable tray portion of the article depicted in Fig. 1;

Fig. 10 is a bottom plan view of the lower section of the tubular standard, showing the electrical means mounted therein for supplying current to the ignitor;

Fig. 11 is an inverted perspective view of the mounting bracket for the electrical means shown in Fig. 10;

Figs. 12 and 13 are central vertical sectional views taken at right angles to each other, illustrating another form of ignitor;

Fig. 14 is a wiring diagram of a device having the ignitor of Figs. 12 and 13; and

Fig. 15 is a modified wiring diagram of a device having the ignitor of Figs. 12 and 13.

As shown in Fig. 1, a slender upright standard 20, having enlarged base and head members 21 and 22 connected by a tubular member, has at its top a tray 24, and a group of smoking accessories or utilities including a torch 25, normally supported in a fuel container 26, an electric ignitor 27, cigar or cigarette rests 28, and an ash or waste receptacle having thereabove a lifting handle 29 and a depressible rod 31 for actuating a plate which is normally closed to prevent smoke or fumes arising from the receptacle.

A removable plate 32 closes the bottom of the tubular base member 21, the walls of which are engaged by an upwardly extended peripheral flange 33 of the plate. The head and base members are reduced to telescope within the connecting tube 23, as indicated at 34, and have inclined or semi-bayonet slots 35 for receiving bolts 36 extending through the tube 23. Beads 37, each having an inturned flange 38 engaged between the ends of the tube 23 and the shoulders 39 adjacent the reduced extremities 34 of the head and base, serve to conceal the bolt heads. As will be noted, the flange 33 of the base closure plate and the beads 37 are of rounded conformation in order to add to the symmetry of the standard and to provide space for the heads of the bolts 36.

A cover plate 41 for the head member 22 has a depending peripheral flange 42, a peripheral bead 43 being formed on the flange for the purposes of resiliently engaging pressed-out protuberances, 44, to removably retain the cover upon the head, and seating the tray 24. The tray may have an outer upstanding flange 45 for retaining articles thereupon and an inner flange 46 for frictionally engaging the flange 42 of the cover plate. The upper edge of flange 46 is preferably flush with the upper surface of the cover plate. The latter has an opening 47 with a depressed wall 48 for seating an annular flange 49 of a funnel 51, which is thereby suspended within the standard 20.

Struck out fingers 52 are provided on the funnel for engaging the wall 48 of the cover plate, the latter having notches 53 with which the fingers 52 may be aligned, upon rotation of the funnel by turning the handle 29 affixed thereto, to allow the funnel to be removed from or replaced within the standard. As shown in Fig. 4, a stop 54 on the wall 48 limits the rotational movement of the funnel 51. To the latter is affixed an annular plate 55 having a depending flange 56 for receiving an ash or waste receptacle 56, which has a threaded upper end releasably

engaged by detents 57 on the flange 58. A closure plate 59, hinged to the funnel at 61, normally seals the container 55 from the outside atmosphere, being held against the bottom of the funnel by a laterally extending portion 62 of rod 31. The latter extends through openings in the plate 55, funnel 51 and handle 29, being constantly urged upwardly by a spring 63 connecting it to the plate 55.

- 10 A link 64 pivoted to both the rod 31 and the closure plate 59, causes the plate to open, to the position indicated in dotted lines in Fig. 5, upon depression of rod 31, so that ashes or other waste in the funnel may drop into the container 55.
- 15 A bar 65 is provided at the upper mouth of the funnel for the purpose of enabling a smoker to knock ashes from a cigar, cigarette, or pipe. The cigar and cigarette rests 23, one or more of which may be provided, may be affixed to the cover plate 41 by screws 66, as depicted in Fig. 8.

20 The portable torch 25, comprises a handle 68 and a torch portion 69 consisting, preferably, of rings of asbestos or like substance mounted upon a stem 71, being retained thereon by a shoulder 72 and other retaining means 73 at the lower end of the stem. The upper end of the stem is preferably threaded into the handle and is reduced to provide a shoulder 74 for retaining a convex sealing ring 75. A shield 76 is clamped between the sealing ring and handle. Normally the torch is supported in a fuel container, which includes a jar 77 having a threaded cover 78 and a sealing gasket 79. The fuel container extends through an opening 81 in the cover plate 41 of the standard, resilient fingers 82, depending from the cover, engaging the sides of the jar 77, to retain it in place.

A supporting plate 83, which may have an ornamental surfacing 84 of bakelite, or similar composition, overlies the cover plate 41, being clamped to the cover 78 of the fuel jar by a torch supporting tube 85, the latter having a shoulder engaging the upper surface of the supporting plate. Abutting the lower surface of the jar cover 78 is a wick supporting tube 86 which is threaded to the torch supporting tube. The wick tube 86 is restricted at its lower end to retain felt, or other suitable wick material, 87, openings 88 in the tube permitting fuel in the jar to infiltrate the wick. As shown in Fig. 5, the torch portion 69 is normally disposed in and contacts the walls of a pocket within the wick. The upper end of the torch tube 85 is convex so as to contact on a continuous line with the sealing ring 75 of the torch, to provide a gas tight seal between the torch and fuel container regardless of the angular position that the stem 71 may assume in engaging in the pocket within the wick. An air vent is provided through the members 78, 83 and 84 in order to prevent the pressure of vapor of the fuel from forcing the liquid fuel about the gasket 79 or raising it above the wick 87.

65 The ignitor 27 shown in Figs. 2, 5 and 6 is substantially like that shown in my co-pending application Serial No. 576,922 filed of even date herewith. It comprises a base 91 of insulating material having a flange 92 extending through an opening in the cover plate 41 and overlying the cover plate. The latter has depending lugs 94 through which bolts 95, embedded in base 91, extend. A guide plate 96, having a central guide aperture, is also supported by the bolts, and an electric contact finger 97 is supported by one

of them, being electrically insulated from the bolt and guide plate by washers 98.

The base 91 has a funnel shaped well 99, the bottom of which is shouldered at 101 to confine a movable contact member 102, the stem 103 of which is slidable in the guide aperture of the plate 96. A spring 104, extending about the stem 103, normally urges the contact member against shoulder 101, out of contact with finger 97. An electric lead wire 106, connected to finger 97, extends to one pole, 108, of a battery 107 disposed within the base 21. The opposite pole 110 of the battery is connected by wire 109 to one terminal 111 of the primary winding of an induction coil, including a circuit interrupter 112, the other terminal 113 of primary winding of the induction coil being grounded to the standard and thus being in electrical circuit, through the standard, top cover 41 and guide plate 96, with the movable contact member 102. The secondary winding of the induction coil has one terminal grounded and the other, 114, connected by wire 115 to a spark button 116 disposed on the diverging side walls at the top of the well in the ignitor base.

25 The battery and induction coil are supported in the base 21 of the standard by the bracket, depicted in Fig. 11, which includes a strap 117 having ends 118 and 119 apertured for the reception of bolts 121 which secure the bracket to angle brackets 122 anchored to the base. A portion, 123, of strap 117, is formed to provide a saddle for receiving the battery 107 and for supporting a generally U-shaped strap 124, which carries binding posts 125 adapted to contact the terminals of the battery and flanges 126 and 127, respectively, for engaging and giving lateral support to the battery and the induction coil. A third bracket section, 128, extends from the saddle portion 123 to the end 119 of strap 117, to embrace the induction coil and to retain it in place. Member 128 supports an insulating bar 129 which carries a binding post 131 in contact with terminal 114 of the secondary winding, and a contact member 132 for contacting the joint primary and secondary terminal 113. A metal strip 133 serves to ground the latter terminal to the bracket.

In use, the tray may obviously be removed from or supported by the standard, as the user desires. When it is desired to light a cigar or cigarette, the torch with its torch portion 69 saturated with fuel, from the container 77 and wick, such as alcohol or other readily ignitable hydro-carbon or hydro-carbon derivative, may be withdrawn from the supporting tube 85 and inserted in the well of the ignitor base, as shown in Fig. 6, to depress the movable member 103 into contact with finger 97. This will complete an electrical circuit through the battery and primary winding of the induction coil which may be traced as follows: terminal 108 of the battery, wire 106, finger 97, contact member 102, guide plate 94, the standard, the battery bracket, strip 133, the primary winding of the induction coil (including the circuit breaker), and wire 108 to the other terminal of the battery.

A circuit having induced current of high voltage will simultaneously be created, the induced current arcing between the spark button 116 and the portion of stem 71 of the torch covered by or adjacent the fuel saturated torch portion 69. The induced current circuit may be traced as follows: from the secondary winding of the induction coil, terminal 113, the battery bracket, the standard, guide plate 96, movable contact 75

103, stem 71 of the torch, button 116, wire 115 to terminal 114 of the secondary winding. The fuel on the torch will be ignited by the electric spark or arc, so that the torch may be used to light a cigar, cigarette or for other purposes. Upon replacement of the torch within the tube 85, the flame will be extinguished and the supply of fuel on the torch portion 69 replenished.

Accumulated ashes may be placed in funnel 51 by striking the cigar, cigarette or pipe against the rod 65, and any waste material in the funnel may be discharged into the container 56 by depressing the rod 31 to open the closure 59. Immediately upon release of the rod 31, the closure will resume its normal position shown in full lines in Fig. 5, thereby preventing smoke or fumes from arising from the container. The latter may be emptied by turning handle 29 to bring the fingers 52 of the funnel into registry with notches 53 in the cover and then, by the handle 29, withdrawing the funnel and the attached container 56, the latter being removable from the funnel by turning it. When the waste receptacle is in normal position, the handle 29 may be used to lift and carry the entire smoker's stand and tray.

The fuel container may be refilled by extracting it from the standard against the resistance of the resilient fingers 82 and by then unscrewing the jar 77 from its cover 78. The battery is likewise readily removed for replacement, this being accomplished by removing the bottom closure 32 from the standard and lifting the battery from its supporting bracket.

The ignitor shown in Figs. 12 to 15 inclusive, has an insulating base 27' extending through an opening in plate 41, the base having a peripheral flange 141 engaging the upper surface of the plate. Connected to the plate 41 is a strap 142 having openings for receiving bolts 143 which are embedded in the base for retaining the latter. A well, preferably of conical shape is formed in the base for receiving a portable torch 25' having at the lower end of its stem 71' a contact tip 73', above which is a torch portion 69'. Adjacent the bottom of the well are a pair of closely spaced contact buttons 144 and 145 connected respectively to lead wire 146 and the strap 142 which serves as a ground. Spaced from the buttons 144 and 145 and adjacent the upper end of the well is a spark button 147, connected to a lead wire 148.

As shown in Fig. 14, the wire 146 may connect to one pole of battery 107' the other pole of the battery being connected to one terminal of the primary winding of an induction coil, the other terminal of the primary winding being grounded, an interrupter 112' being included in the circuit. The lead wire 148 is connected to one terminal of the secondary winding of the induction coil, the other terminal thereof being grounded.

When the torch is placed in the position shown in Fig. 12 with the contact point thereof bridging the buttons 144 and 145, the primary circuit is closed, causing the interrupter to function. Secondary or induced current will therefore flow through the following circuit: From the secondary winding of the induction coil, wire 148, spark button 147, through the air to stem 71', contact tip 73', to contact button 145, and ground to the secondary winding. The electric spark between the button 147 and stem 71' will ignite fuel on the portion 69' of the torch.

The apparatus shown in Fig. 15, is adapted to operate on alternating current of the type

normally supplied to offices and homes. An alternating current transformer 149 replaces the induction coil of Fig. 14, and a plug 151, adapted to be plugged in a suitable electric receptacle or socket replaces the battery 107'. In all other respects the primary and secondary circuits are the same.

It will be understood that the devices herein described and illustrated are merely exemplary of the principles of the invention, which may be embodied in other devices having other structural characteristics and arrangements, all within the purview of the invention.

What is claimed is:

1. Apparatus comprising a torch having an electrical conductor portion and a torch portion containing an ignitable substance adjacent to said conductor portion, contact members adapted for simultaneous contact with said conductor portion, a spark button adjacent said torch and conductor portions when said conductor portion is in contact with said contact members, a source of current including a primary and a secondary winding, means connecting one terminal of said primary winding to one of said contact members, means connecting the other terminal of the primary winding to another of said contact members, means connecting one terminal of said secondary winding to one of said contact members, and means connecting the other terminal of the secondary winding to said spark button.

2. Apparatus comprising a portable torch having an electrical conductor portion and a torch portion adjacent said conductor portion, an ignitor member having a pair of fixed contact members adapted for simultaneous contact with the conductor portion, and a fixed spark button adjacent said torch and conductor portions when the latter contacts said contact members, a transformer having primary and secondary windings, an electrical circuit including a source of alternating current, said fixed contacts, said conductor portion and said primary winding, and means connecting the terminals of said secondary winding to one of said fixed contacts and to said spark button respectively.

3. Apparatus comprising a portable torch having an electrical conductor portion and a torch portion adjacent said conductor portion; an ignitor member having a pair of fixed contact members adapted for simultaneous contact with the conductor portion and a fixed spark button adjacent said torch and conductor portions when the latter contacts said contact members; a primary electrical circuit including a source of direct current, the primary winding of an induction coil having a circuit interrupter, said fixed contacts, and said conductor portion; said induction coil having a secondary winding with the terminals thereof connected respectively to one of said fixed contact members and to said spark button.

4. Ignitor apparatus comprising an insulating base having a well therein, a pair of spaced contact members mounted in said base adjacent the bottom of the well, a spark button mounted in said base upon a side wall of said well, and a torch having an electrical conductor member adapted to simultaneously contact said contact members, a portion of said member carrying a torch portion adapted to contain an ignitable substance, and the walls of said well being shaped to guide said member into contact with said contact members.

5. Ignitor apparatus comprising an insulating

base having a tapered well therein, a pair of contact members fixed in spaced relation at the bottom of said well, and a spark button carried by the base on a side wall of said well.

- 5 6. Ignitor apparatus for attachment to a supporting plate having an opening therein, comprising an insulating base extending through said opening, said base having a peripheral flange extending upon the upper surface of said plate, a strap secured to the under surface of said plate, a fastener embedded in said base and secured to said strap, said base having a well therein, a pair of contact members at the base of said well and a spark button on a side wall of said well, electric conductors extending through said base and connected to the spark button and one of said
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contact members, and means electrically connecting the other of said contact members with said strap.

7. In a smoking stand, or the like, a tubular member and a removable closure plate therefor, a bracket secured to said member adjacent said closure, said bracket having wall portions at right angles and parallel to said closure plate, a pair of contact members carried by one of said wall portions at right angles to the plate, and a battery received between said walls and said closure plate, said battery having terminals contacting said contact members, whereby upon removal of said closure plate, the battery may be removed.
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