Dec. 19, 1950 M. D. CURRY 2,534,953

ELECTRICAL INCINERATOR

Filed Nov. 13, 1947

Fig. 1

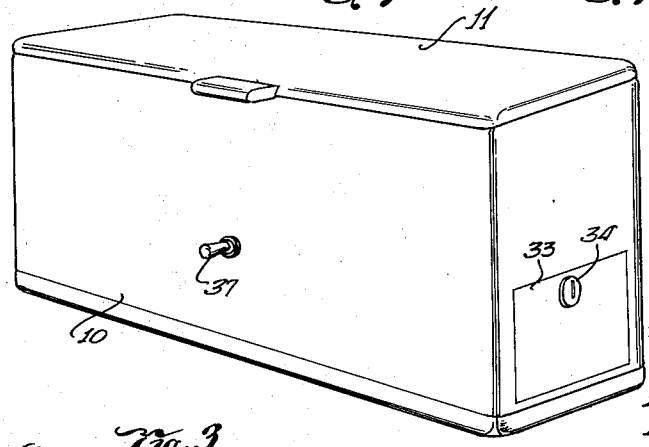


Fig. 2

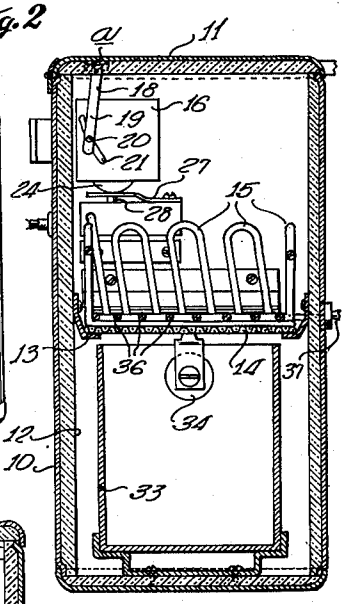


Fig. 3

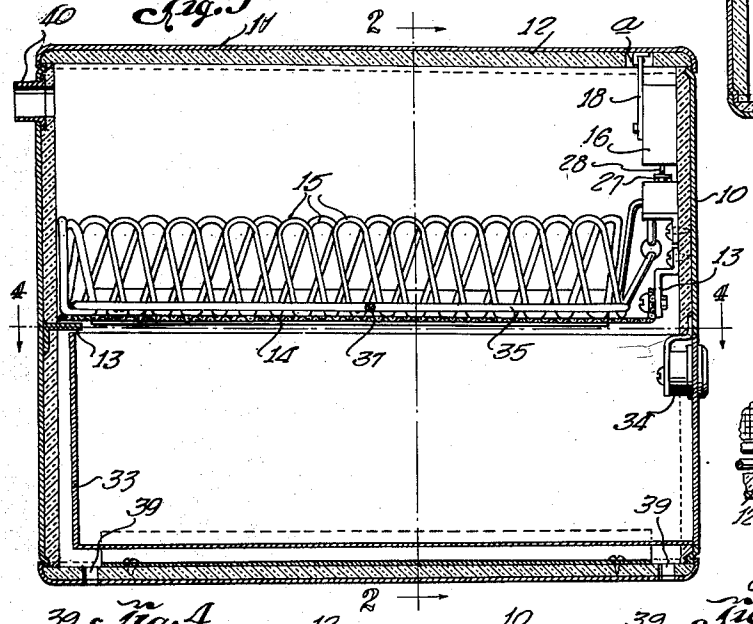


Fig. 4

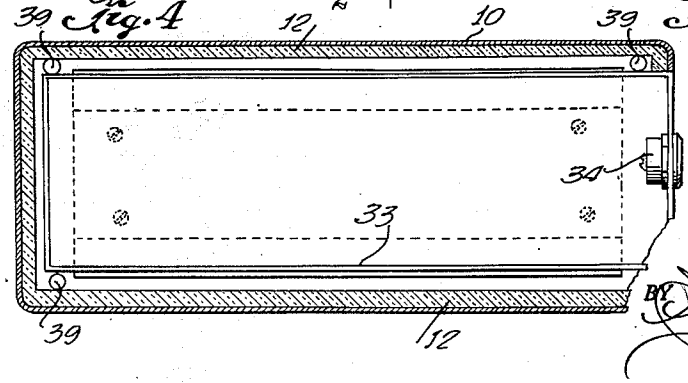


Fig. 5

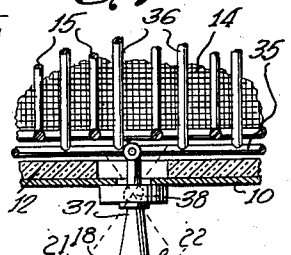
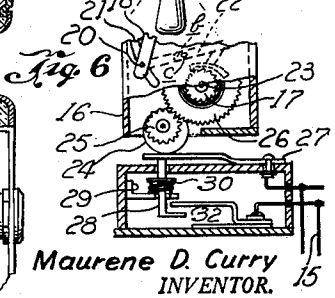


Fig. 6



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ELECTRICAL INCINERATOR

Maurene D. Curry, Dallas, Tex.

Application November 13, 1947, Serial No. 785,618

1 Claim. (Cl. 219—35)

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This invention relates to electrical incinerators and it has particular reference to an incinerator for disposing of catamenial napkins.

The principal object of the invention is to provide a safe and expedient means for the complete destruction of used and expendable articles of a burnable nature, such as sanitary napkins whose disposal has heretofore presented a problem. Careless disposal of these napkins, such as through the medium of the commode at home and in public rest rooms often results in impairmens of these facilities.

Another object of the invention is to provide a cabinet of pleasing appearance suitably insulated against dispersion of heat and adapted to be mounted on a wall and equipped with electric heating coils so designed and arranged within the cabinet as to quickly and effectively consume a sanitary napkin deposited therein. Moreover, through and by virtue of a clock mechanism controlled by the cabinet cover, the heating coils are energized for a predetermined period of time after the cover is closed sufficient to insure destruction of the napkin by the heat generated by the coils.

Still another object of the invention is to provide a reciprocable grate whose function is to disintegrate the charred residue of the napkins and to pass them through a reticulated support into a receptacle below the coils for periodic disposal.

With the foregoing objects in view, the invention has further reference to certain features of accomplishment which will become apparent as the description proceeds, taken in connection with the accompanying drawing wherein:

Figure 1 is a perspective view of an incinerator cabinet embodying the invention.

Figure 2 is a view in vertical section taken on line 2—2 on Figure 3.

Figure 3 is a longitudinal sectional view.

Figure 4 is a longitudinal sectional view taken on line 4—4 on Figure 3.

Figure 5 is a fragmentary plan view of the reciprocable grate and operating handle, and

Figure 6 is a fragmentary view, partly in section showing the coil energizing switch and clock controlled operating means therefor.

Continuing with a more detailed description of the drawing, reference numeral 10 denotes a cabinet having a hinged cover 11 and lined with suitable thermal insulating material 12.

Supported on brackets 13 affixed to the inner wall surfaces of the cabinet approximately midway between the top and bottom of the cabinet is a foraminous rack 14 and immediately above this rack is an electric coil 15 whose convolutions

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extend transversely across the rack and vertically at the sides and ends to define an enclosure for a napkin deposited in the cabinet. In this manner the napkin will be subjected to the heat of the coils at each end, sides and bottom to speed its destruction.

To control or predetermine the energized periods of the heating coil, a clock mechanism of conventional design is enclosed in a housing 16 mounted in one end of the cabinet 10 and which includes a mainspring 17 (Fig. 6). Energy is stored in the mainspring 17 through the medium of a link 18, the latter being pivoted at *a* at its upper end to the cover 11 and at its lower end to one end of a lever 19 by means of a pin 20 which latter travels in an arcuate slot 21 in one side of the housing 16. A ratchet arm 22 is actuated by the lever 19 on a ratchet wheel 23 which winds the spring to store therein sufficient energy to cause an eccentric disc 24 to make one complete revolution. The disc 24 is driven by a small gear 25 which enmeshes a larger gear 26, the latter being driven by the clock mechanism through the usual escapement control, not shown. A slot *b* in the lever 19 receives a stationary pin *c* to restrict lateral displacement of the lever but permitting longitudinal movement to change the position of the ratchet arm 22 in relation to the ratchet wheel 23.

The eccentric disc or cam wheel 24 bears on a leaf spring contact 27 and its normal position is as shown in Figures 2 and 6, i. e., depressing the contact 27. In turn, the contact 27 depresses a pin 28 which is normally held in raised position by a coil spring 29 bearing against a stop 30, thus separating the contact 31, on the lower end of pin 28 from a spring contact 32, which opens the circuit to the coils 15.

Raising of the cover 11 of the cabinet, as stated, stores sufficient energy in the clock mainspring 17 to cause the disc 24 to make one complete revolution which is calculated to allow sufficient time for heat of the coil 15 to completely consume the napkin deposited into the cabinet, or to reduce it to a charred mass preparatory to its being passed through the grid 14 into a refuse receptacle 33, the latter being slidable through an opening in one end of the cabinet and secured by a key lock 34.

In order to disintegrate the charred residue of a napkin burned in the cabinet, a grate is arranged in the latter to overlie the grid or foraminous rack 14, which consists of a rectangular wire frame 35, having spaced, transverse bars 36. The grate 35 is reciprocable longitudinally in the

cabinet as by a lever 37, pivotally attached midway between its ends and extending through an opening in the front wall of the cabinet and in which it is pivoted at 38 (Fig. 5). By reciprocating the lever 37, the grate 35 is agitated to break up the charred residue on the rack 14, causing it to pass into the receptacle 33 for ultimate disposal.

During periods when the coil 15 is energized, it is desirable to influence sufficient oxygen through the cabinet to stimulate combustion therein. The heat generated in the cabinet will cause air to enter the latter through apertures 39 in its bottom and products of combustion will emerge from the cabinet through a flue connection 40 in one end thereof, to which is attached a flue extending to a suitable outlet.

Manifestly, the construction as shown and described is capable of some modification and such modification as may be construed to fall within the scope and meaning of the appended claim is also considered to be within the spirit and intent of the invention.

What is claimed is:

In an electric incinerator the combination comprising an insulated cabinet having a hinged cover, a foraminous rack removably disposed longitudinally in said cabinet, an electric circuit, a heating coil in said circuit whose convolutions

transversely overlie said rack and are disposed vertically at the ends and sides thereof to enclose an article for incineration, a switch in said circuit, a clock spring and winding gear train, ratchet means adapted to be operated by the opening and closing action of the cover of said cabinet to wind said spring, an arm pivotally connected between said cover and ratchet means for actuating the latter, a cam rotated by said gear train to actuate said switch to energize and deenergize said circuit, a reciprocable grate overlying said foraminous rack, means exteriorly of said cabinet for actuating said grate and means in said cabinet below said rack for receiving the residue of charred articles passing through said rack.

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