

May 12, 1953

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2,638,209

CIGARETTE LIGHTER AND CASE

Filed June 6, 1950

3 Sheets-Sheet 1

Fig. 2.

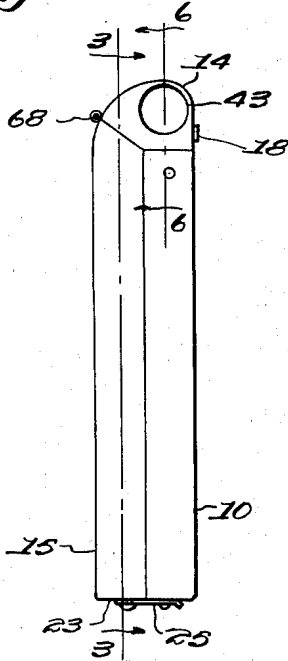


Fig. 1.

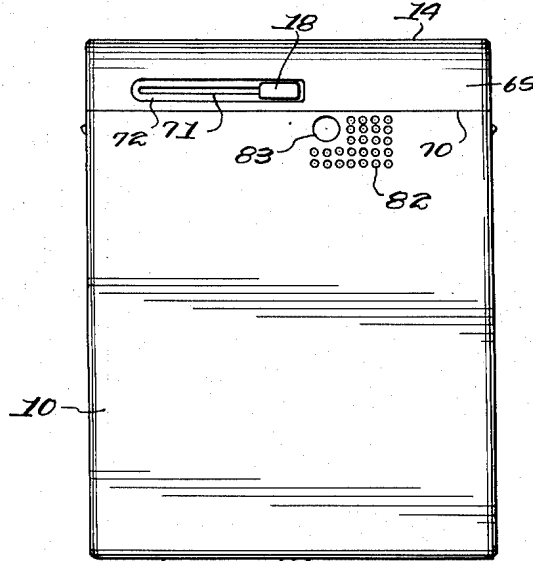


Fig. 3.

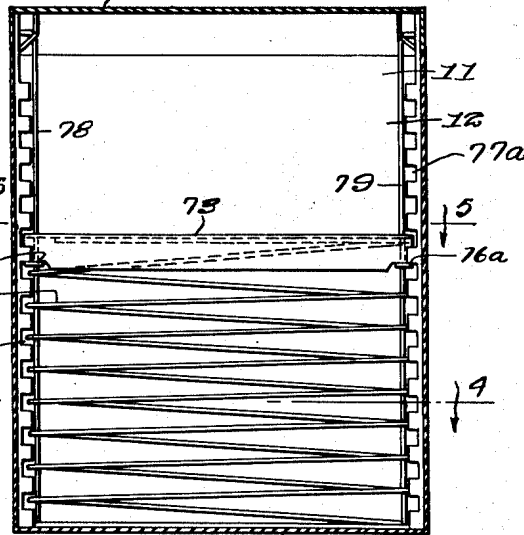


Fig. 4.

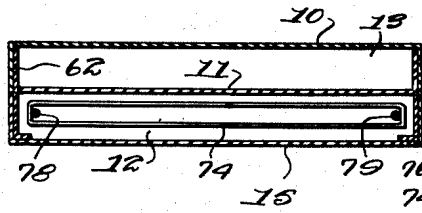
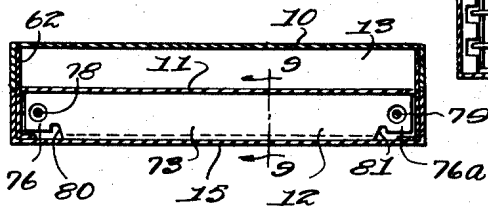


Fig. 5.



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Fig. 8.

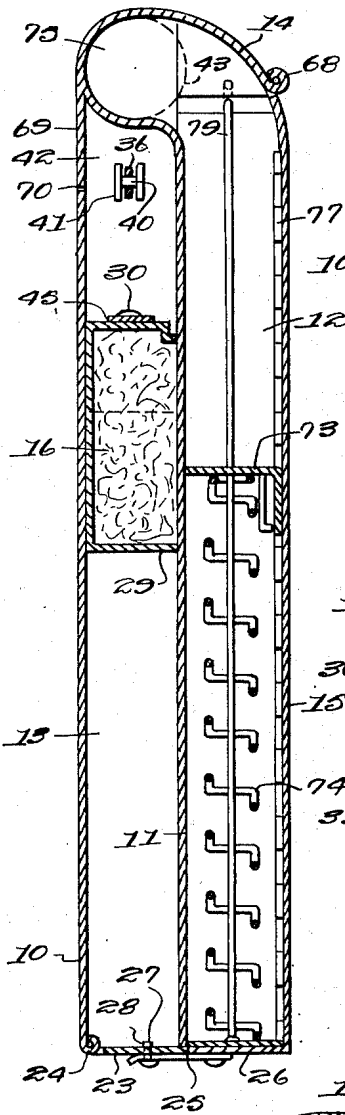


Fig. 9.

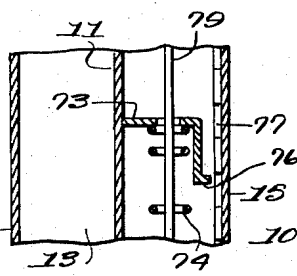


Fig. 10.

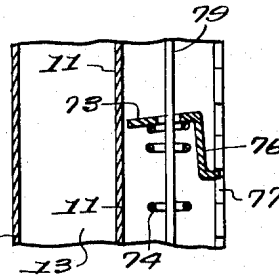


Fig. 11.

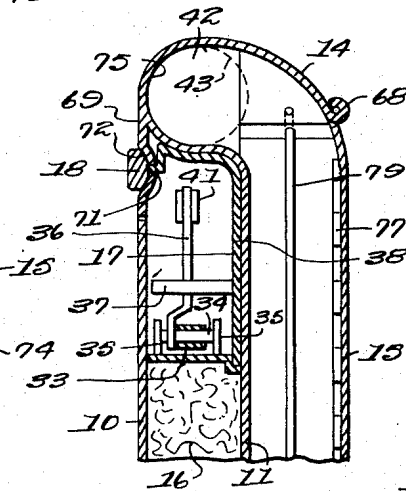


Fig. 12.

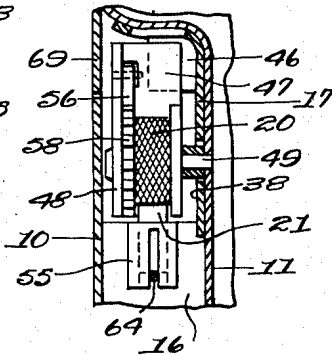
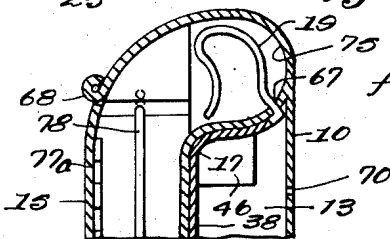


Fig. 12a.



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CIGARETTE LIGHTER AND CASE

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1 Claim. (Cl. 206—41.3)

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This invention relates to cases for cigarettes, and the like, of the type having means for lighting cigarettes therein, and in particular a cigarette case having a storage chamber in one side with lighter elements on the opposite side of an intermediate partition and with the upper end of the storage chamber provided with an arcuate section through which cigarettes pass to a position over the section in which the lighter elements are installed whereby the lighter elements are actuated to light a cigarette as one end of the cigarette is ejected from the case.

The purpose of this invention is to provide a combination cigarette lighter and case wherein a lighted cigarette is ejected by actuating a button on one side of the case.

Various attempts have been made to install lighters in cigarette cases so that cigarettes may be lighted before being ejected therefrom but the soot and carbon resulting from a burning flame interfere with continuous operation of the device. With this thought in mind this invention contemplates a cigarette case having a lighter incorporated therein with means for actuating the lighter to light a cigarette being ejected from the case in which the operating instrumentalities are removed from the flame by which the cigarette is lighted and in which the parts around the flame may readily be cleaned.

The object of this invention is, therefore, to provide means for installing lighter elements in a cigarette case so that the cigarettes are ejected in a horizontal position and a lighting flame in the case is remotely situated from the small levers, springs and other mechanism and in which cigarettes remaining in the case are protected from the flame.

Another object of the invention is to provide a cigarette lighting case in which a cigarette is partially ejected and lighted by a single sliding movement of a button projecting on one side of the case.

A further object of the invention is to provide a combination cigarette lighter and case which is of a simple and economical construction.

With these and other objects and advantages in view the invention embodies a comparatively thin rectangular shaped case having a longitudinally disposed partition extended therethrough with an upper end of the partition formed to coact with an outer wall of the case to provide a chute for guiding cigarettes from a storage chamber in one side of the case to a position over lighting elements in the other side and in which means is provided for ejecting

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a cigarette and providing a light as a button is manually actuated.

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

Figure 1 is a side elevational view of the combination cigarette case and lighter with the button for operating the projecting and lighting instrumentalities therein in the retracted position.

Figure 2 is an end view of the case shown in Figure 1 looking toward the end from which cigarettes are ejected.

Figure 3 is a vertical section through the storage chamber of the case being taken on line 3—3 of Figure 2.

Figure 4 is a cross section through the case taken on line 4—4 of Figure 3.

Figure 5 is a similar section taken on line 5—5 of Figure 3.

Figure 6 is a vertical section taken on line 6—6 of Figure 2 showing the upper end of the case and illustrating the parts on an enlarged scale.

Figure 7 is a similar view illustrating the position of the parts with the lighting elements in operation.

Figure 8 is a vertical cross section through the case taken on line 8—8 of Figure 6.

Figure 9 is a section showing the detail in which a latch is provided for holding the follower upon which cigarettes are positioned when the cover is open to refill the case.

Figure 10 is a similar detail showing the latch in engagement with notches in the side of the case.

Figure 11 is a detail showing a section through the upper part of the case being taken on line 11—11 of Figure 6 and illustrating the snuffer actuating arm.

Figure 12 is a similar section taken on line 12—12 of Figure 6 showing the abrading wheel and flint.

Figure 12a is a similar section taken on line 12a—12a of Figure 6 showing the pusher for ejecting cigarettes from the case.

Referring now to the drawings wherein like reference characters denote corresponding parts the combination cigarette lighter and case of this invention includes a comparatively thin rectangular shaped case having a cover 10 on one side with an intermediate partition 11 dividing the case into a cigarette storage chamber 12 and a lighter chamber 13 and the casing is provided with a stationary arcuate end 14 with a cover 15 hinged to the edge of the plate 14. By this means the covers 10 and 15 provide the

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sides of the case. A lighter fluid tank 16 is positioned in the compartment 13 and the parts are actuated through a slider 17 having a button 18 thereon and the inner end of the slider is provided with an extension providing a pusher 19 that engages the end of a cigarette. The slider 17 also actuates an abrading wheel 20 and the wheel coacts with a flint 21 to light a wick 22 extended from the lighter fluid tank 16.

The cover 10 is hinged to a base plate 23 of the case by a hinge 24 and a latch 25 pivotally mounted on a flange 26 of the cover 15 is provided with a pin 27 that extends through an opening 28 in the plate 23 to secure the cover 15 in the closed position.

The lighter fluid tank 16 is mounted on a partition 29 in the upper part of the chamber 13 and the tank is provided with a filling plug 30. The wick 22 extends through a nipple 31 on the upper end of the tank and the wick is positioned to be covered by a snuffer 32 carried by a spring arm 33 that is pivotally mounted on a pin 34 in projections 35 on the upper surface of the tank. The pin 34 is also provided with an arm 36 that is positioned to be engaged by a shoe 37 on a panel 38 of the slider 17 and the outer end of the arm 36 is provided with a bifurcated slot 39 that extends over a pin 40 in projections 41 extended inwardly from the sliding door 42. The door 42 is slidably mounted in the end of the case and with the elements in the inoperative positions the door extends upwardly to close an opening 43 in the upper corner of the case and through which cigarettes as indicated by the dotted lines 44 extend with the cigarettes in the lighting position. The arm 36 is resiliently held upwardly by a spring 45 and as the shoe 37 moves toward the arm the arm moves downwardly from the position shown in Figure 6 to that shown in Figure 7 and in this movement the spring arm 33 on which the snuffer 32 is carried also moves from the position shown in Figure 6 to that shown in Figure 7.

In this movement a projection 46 on the slider 17 engages the end 47 of a frame 48 that is pivotally mounted on a shaft 49 in the case and as the frame moves from the position shown in Figure 6 to that shown in Figure 7 a link 50 pivotally mounted therein by a pin 51 draws a spring 52 to which it is connected by a pin 53 to the position shown in Figure 7 and as the projection 46 rides over the tip of the end 47 the spring rotates the frame 48 about the shaft 49 with a snap action wherein the abrading wheel 20 on the shaft 49 travels across the flint 21 in the tubular case 55, thereby providing a spark that lights the wick 22. The frame 48 is provided with a pawl 56 that is pivotally mounted on a pin 57 and the pawl is positioned to engage the teeth of a ratchet wheel 58 so that it snaps over the teeth in the cocking action with the projection 46 engaging the end 47 and in the snap or return action the pawl rotates the ratchet wheel and abrading wheel, returning both elements to the position shown in Figure 6.

The spring 52 is mounted upon a pin 53 and the end 60 thereof is positioned to be held by a projection 61 on the end wall 62 of the case. A projection 63 is also provided to receive the opposite end 52 of the spring.

The flint 21 is resiliently held against the abrading wheel 20 by a spring 64 that extends through the slots 54 of the tube 55 and the spring 64 is mounted upon a pin 65 with an end 66 thereof bearing against the wall 62 of the case.

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The side wall 38 of the slider 17 is provided with an elongated slot 67 that passes over the shaft or pin 49 when the slider is returned to the position shown in Figure 6.

The pusher 19 which is substantially U-shaped extends through a slot 67 in the upper end of the partition 11 and the end thereof, extended through the slot, is formed integral with the upper wall of the slider.

The cover 15 is pivotally mounted on the upper end of the case by a hinge 68 and a flange 69 on the opposite side of the case extends downwardly to a point 70 where it meets the upper edge of the cover 10. The button 18 extends through a slot 71 in a recess 72 in the face of the case whereby the pusher for rejecting a cigarette and the lighter elements are actuated as the button is moved from one position to another in the slot.

A follower 73 is provided in the compartment 12 and a spring 74 urges the follower upwardly whereby the top cigarette is urged into a substantially cylindrical recess 75 in the end 14 of the case and when the cover is opened the follower assumes the position shown in Figure 10 whereby latches 76 and 76a extended downwardly from one side thereof are held in one of a plurality of notches 77 and 77a in a corner of the outer wall 15 of the storage chamber 12.

The follower 73 and also the ends of the spring 74 extend over bars 78 and 79, in the ends of the case which provide guide means therefor. The outer edge of the follower 73 is provided with notches 80 and 81 and the latches 76 extend downwardly from the ends.

The case 10 is provided with perforations 82 through which the flame may be observed and also an opening 83 through which cigars or cigarettes on the outside of the case may be lighted, and also through which air may be supplied to the flame.

With the parts arranged in this manner cigarettes stored in the compartment 12 are continuously urged upwardly by the spring 74 so that the top cigarette is positioned in the chamber 75 and when a cigarette is desired the button 18 is moved to the opposite end of the slot 71, in which movement the pusher 19 slides a cigarette to the position shown in Figure 7 with one end extended and with the opposite end positioned over an opening 84 in an arcuate wall 85 that separates the chamber 75 from the compartment 13 and in this movement a snuffer 32 is removed from the wick 22 and the abrading wheel is rotated from the position shown in Figure 6 to that shown in Figure 7 and at this time the tip or the end 47 is released so that the spring 52 snaps the abrading wheel across the flint, causing a spark to ignite the wick 22 and the flame resulting therefrom passes through the slot 84 lighting the inner end of the cigarette. The outer end of the cigarette may be placed in the mouth whereby air may be drawn therethrough to facilitate burning and as soon as the cigarette is completely lighted it may be withdrawn.

This action is continued until the cigarettes are used from the storage compartment and at this time the cover 15 is opened so that the compartment 12 may be refilled with cigarettes.

It will be understood that modifications may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

1. A cigarette case having a rectangular shape, a partition arranged in said case and defining

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a lighter chamber and a cigarette storage chamber, a fluid tank positioned in said lighter chamber and including a top, a wick extending from said fluid tank, a tube arranged contiguous to said wick and provided with a longitudinally extending slot, a flint slidably arranged in said tube, a spring extending through said slot and engaging said flint, a shaft arranged in said case, an abrading wheel arranged in engagement with said flint and mounted on said shaft, a frame mounted on said shaft and including an extension, a follower slidably arranged in said storage chamber, a spring for urging said follower upwardly, there being a cylindrical recess above said lighter chamber and parallel with the top of said case for receiving cigarettes singly from said storage chamber, a slider reciprocally arranged in said case for movement in a direction parallel to the cylindrical recess, a manually operable member arranged exteriorly of said case for actuating said slider, a projection carried by said slider for engaging the extension of said frame to rotate said abrading wheel, a cigarette ejector carried by said slider, there being an opening in said case at one end of said recess for the egress there-through of a lit cigarette, a sliding door mounted for movement into and out of closing relation with respect to said opening, an arm having its lower end pivotally mounted on said tank and

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its upper end operatively connected to said door, a spring member interposed between said arm and the top of the tank for urging said door towards closed position, a panel connected to said slider, a shoe fixed on said panel for engaging said arm to depress said arm against said spring member, and a snuffer pivotally mounted on said tank for movement into and out of closing relation with respect to said wick upon manual actuation of said slider whereby movement of said slider in a direction towards said opening will simultaneously open said door, eject a cigarette and ignite said wick.

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