

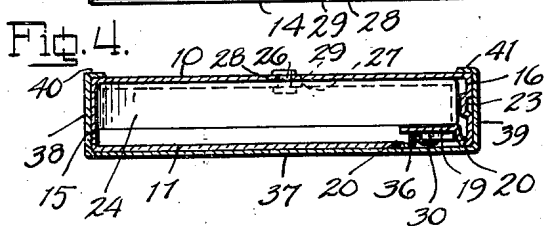
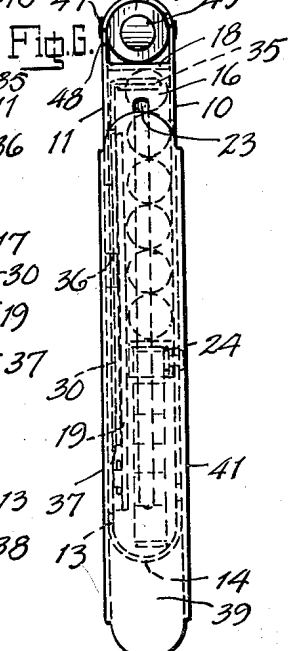
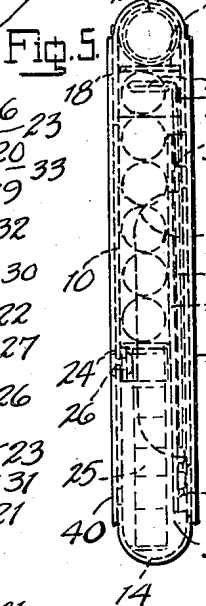
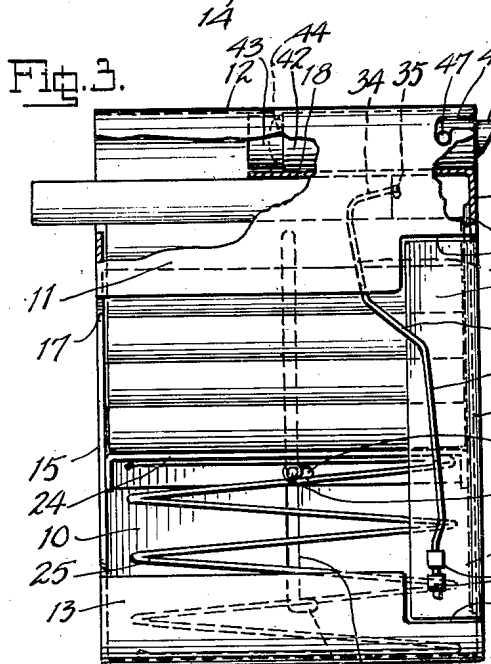
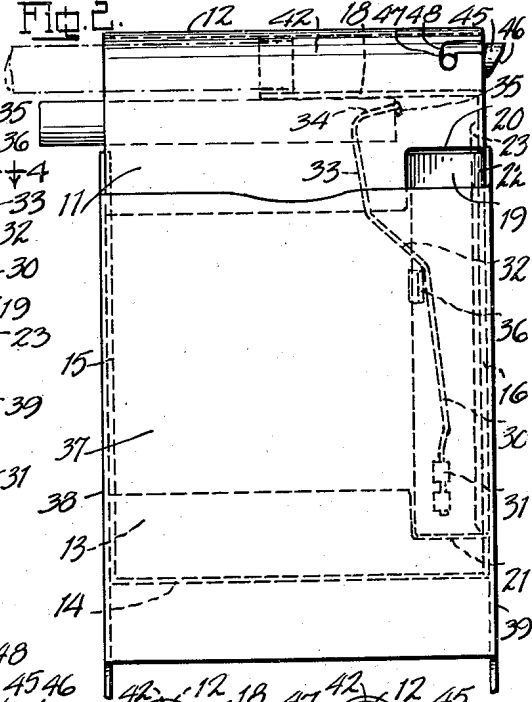
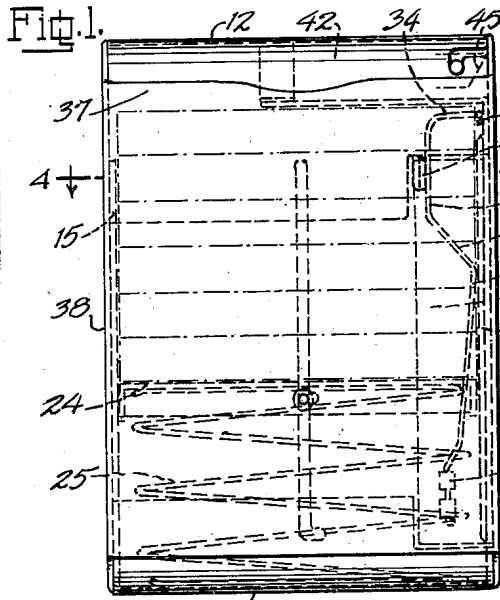
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CIGARETTE DISPENSING CONTAINER AND LIGHTER

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CIGARETTE DISPENSING CONTAINER AND LIGHTER

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2 Claims. (Cl. 206—41.3)

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The present invention relates to a combination container and lighter for cigarettes, and has for an object to provide a device wherein a quantity of cigarettes may be carried, and which is adapted by the operation of the device to individually project the cigarettes into relation with a lighting element. It is particularly proposed to provide the lighting element in such arrangement that the projected end of the cigarette may be placed in the smoker's mouth while the cigarette remains in the device in operative relation with the lighting element, enabling the smoker to draw upon the cigarette to cause it to ignite and to thereupon withdraw it completely from the device in a lighted condition while still held in the mouth.

Another object is to provide such a device which may be conveniently operated by one hand, and, through the function of the device of automatically positioning the cigarette into lighting relation to the lighting element, the device will be especially useful for automobile drivers, enabling the cigarette to be projected, lighted, and withdrawn with the use of one hand and without requiring the driver to take his eyes from the road.

With the above and other objects in view, an embodiment of the invention is shown in the accompanying drawings, and this embodiment will be hereinafter more fully described with reference thereto, and the invention will be finally pointed out in the claims.

In the drawings—

Fig. 1 is a front elevation of a combination container and lighter for cigarettes, the same being shown in its closed position.

Fig. 2 is a similar view showing the device in its open operative position, a cigarette being shown in the projected position where it may be engaged by the mouth of the smoker, and showing in dot-and-dash lines the position of the cigarette in relation to the lighting element and to which it is automatically moved through the operation of the device.

Fig. 3 is a front elevation of the casing member of the device with the cover removed.

Fig. 4 is a horizontal sectional view taken along the line 4—4 of Fig. 1.

Fig. 5 is an end elevation from the cigarette ejecting side, i. e., looking toward the left hand end of the device as shown in Fig. 1.

Fig. 6 is a side elevation from the opposite side, looking toward the right hand end of the device as shown in Fig. 2, the device being shown in the open operative position illustrated in Fig. 2.

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Similar reference characters indicate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, the combination container and lighter for cigarettes, according to the exemplary embodiment of the invention illustrated therein, comprises a case consisting of a rectangular back portion 10, an upper front portion 11, preferably formed as an integral extension of the back portion and connected thereto by a curved top portion 12, a lower front portion 13, also preferably formed as an integral extension of the back portion and connected thereto by a curved bottom portion 14, and left and right hand side wall portions 15 and 16, each bent forwardly from a side edge of the back portion and abutted with the inner surfaces of the top and bottom front wall portions 11 and 13, and preferably secured thereto by soldering, or the like.

The edges of the front wall portions 11 and 13 are spaced apart a considerable distance to provide a relatively large opening in the case for convenience in filling it with cigarettes, as will hereinafter more fully appear, and to further facilitate this filling operation, the forward edge of the left hand side wall portion 15 is recessed inwardly, as at 17, between the edges of the front wall portions to provide an end space through which the cigarettes may be conveniently inserted. The upper edge of the side wall portion 15 terminates in spaced relation to the curved top wall portion 12, as shown clearly in Fig. 3, to provide a vertically elongated space through which the uppermost cigarette in the container is adapted to be projected to enable it to be gripped by the mouth of the smoker, and thereupon after being partially withdrawn automatically moved upwardly in the space into alignment with a lighter element, as will hereinafter more fully appear.

The upper end of the side wall portion 16 also terminates in spaced relation to the curved upper end wall 12, and a horizontal partition wall 18 is bent inwardly therefrom in spaced relation to the top wall 12, its forward end terminating at a point substantially inwardly spaced from the left hand edge of the case. The space above this wall 18 constitutes a receptacle portion for the lighter element, while its lower surface constitutes an upper abutment for the cigarettes, the uppermost cigarette in the case being normally pressed against this lower surface.

The side wall 16 has connected to its front edge a vertically extending flange portion 19, the upper and lower ends of which are respec-

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tively disposed within angular cut-outs 20 and 21 of the upper and lower front wall portions 11 and 13, this flange portion being inwardly offset from the front wall portions by means of a bead-like outer edge formation 22, the inward offsetting of the flange being such as to provide a slot opening in a plane between the planes of the flange and the upper and lower front wall portions within which the ejection spring member is adapted to operate, as will presently more fully appear. This flange also has for its purpose to provide retaining means for the ends of the cigarettes to retain them in engagement with the back wall portion 10.

The side wall portion 16 is provided with an inwardly embossed rib 23 extending from a point spaced downwardly from the partition wall 18, substantially to the bottom of the side wall and has for its purpose to provide for an abutment against which the ends of the cigarettes at one side are engaged, the space between the upper end of the rib and the partition wall 18 providing a pocket outwardly offset from the ends of the cigarettes in which the end of the ejecting spring is engaged, as will presently more fully appear, so that it is normally disposed behind the uppermost cigarette, as the latter moves against the partition wall into alignment with the ejecting spring.

The cigarettes are fed upwardly by means of a push shoe 24, of box-like form open at its under and forward sides, and between which and the base of the case there is engaged an expansion spring member 25, the push shoe being slidably retained in engagement with the back wall 10 by having one end portion slidably disposed beneath the flange 19. A button member 26, headed at each end, is engaged in a short horizontal slot 27 in the longitudinal side wall of the push shoe and is also engaged in a vertical slot 28 in the back wall 10 of the case, this slot being provided at its lower end with a horizontally extending bayonet portion 29, so that when cigarettes are being placed in the case the push shoe may be retained in its lower position by sliding the button horizontally into the bayonet slot 29, the push shoe being released simply by moving the button horizontally out of engagement with the bayonet slot 29 into alignment with the vertical slot.

The ejection spring 30 is secured upon the forward side of the flange 19 at its lower end by means of retaining band portions 31 preferably lanced out of the flange portion and pressed outwardly therefrom, this spring being provided with an inclined camming portion 32 intermediate its ends, an upper vertically disposed portion 33, and an outwardly bent upper end portion 34 at the outer end of which there is provided a right angularly bent ejection finger 35 adapted in the closed position of the container to be disposed in the pocket portion above the upper end of the rib 23. The ejection spring is retained in this position by a lug 36 provided upon the front wall 37 of the cover member, this cover member being of substantially rectangular form and constituting a slidable front for the case, being provided at its side edges with rearwardly extending side walls 38 and 39, respectively provided at their rearward edges with in-turned retaining lip flanges 40 and 41. The side walls in the normal closed position of the cover extend above and below the upper edges of the front wall so that they conform to the

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curved upper and lower end walls 12 and 14 of the case.

The lighter unit is disposed within the receptacle portion above the partition wall 18 and comprises a cylindrical body portion 42 provided at its forward end with a cylindrical socket 43 in which the lighting element 44 is provided, the body portion being provided with a spring pressed actuating plunger 45 normally projecting from the body portion and provided at its under side with an inclined cam face 46. While the lighter unit may be of any suitable type, the type illustrated is one in which the lighting element 44 consists of sponge platinum which becomes incandescent when a fluid, such as alcohol, is released into contact therewith, the body portion being provided with a suitable container for the liquid and being further provided with suitable fluid releasing means in the form of a valve which is normally closed when the plunger 45 is depressed and is open when it is projected. The opening of the valve releases the liquid so that the sponge platinum becomes incandescent. Such lighter units are well known so that a further description of its structure and operation is not thought necessary. According to the invention, the cam face 46 of the plunger 45 is in operative alignment with the upper end of the side wall 39 of the cover so that when the cover is in closed position as shown in Fig. 1 this upper end retains the plunger 45 in its retracted position within the body of the lighter, this being the position when the lighter is inoperative, upward closing movement of the cover causing the upper end of the side wall 39 to engage the plunger to thus move it inwardly. Upon moving the cover to its open position the upper end of the side wall 39 moves downwardly and releases the plunger 45 allowing it to be projected as shown in Fig. 2, this being the operative condition of the lighter causing it to become incandescent.

The lighter unit is retained in the casing with its inner end substantially in line with the inner end of the partition wall 18 by means of diametrically opposed projecting pins 47 engaged in bayonet slots 48 in the front and rear sides of the upper end of the casing and opening in the right hand edge thereof, these bayonet slots being such that upon inserting the lighter and imparting a slight turning movement thereto the lighter is locked in its operative relation in the device. The arrangement permits the lighter unit to be readily removed for the purpose of filling it with lighter fluid and also to enable the lighter to be used independently from the container when desired.

The operation is as follows:

As shown in Fig. 1 the device is in its normal closed position. When it is desired to remove a cigarette therefrom the cover member is moved downwardly to the position as shown in Figs. 2 and 6, where the upper end of the left hand side wall 38 is in line with the upper end of the side wall 15 of the case, and the ejection and lighting opening is fully exposed. During this opening movement of the cover the upper end of the right hand wall 39 moves below the plunger 45 of the lighter unit allowing the plunger to project and cause the lighter to become incandescent. As the cover moves downwardly its lug 36 first moves along the vertical portion 33 of the ejection spring and thereupon moves along the inclined cam portion 32, this latter movement occurring as the upper end of the side wall 38 moves across the end of the uppermost cigarette in the case,

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the movement of the lug along the camming portion allowing the spring to move inwardly as shown in Fig. 2, so that its finger end 35 disposed behind the uppermost cigarette causes this cigarette to be projected. The projection by means of the spring is only partially along the partition wall 18 but is sufficient to project the end portion of the cigarette so that it may be conveniently gripped by the mouth of the smoker. Thereupon the cigarette is partially withdrawn to the point where its inner end leaves the inner end of the partition wall 18 whereupon it is caused to move upwardly into alignment with the lighter unit by the propelling force of the following cigarette, this action occurring before the cigarette can be completely withdrawn. As the cigarette moves upwardly into alignment with the lighter unit the smoker simply presses the cigarette into engagement with the incandescent lighting element and draws upon it until it becomes lighted, the cigarette being then completely withdrawn. Upon closing the cover the spring is caused to be moved to its retracted position behind the uppermost cigarette and the lighter unit is rendered inoperative by causing the plunger to be retracted by engagement therewith of the upper end of the side wall 39 of the cover. At the same time the upper end of the side wall 38 closes the ejecting and lighting opening. Closing movement of the cover is limited by engagement of the lug 36 with the edge of the cut-out 20 of the upper front wall portion 11.

In order to refill the container with cigarettes the cover is moved downwardly to its lower limit which is determined by engagement of the lug 36 with the edge of the cut-out 21 of the lower front wall portion 13, the filling opening being thereupon exposed so that cigarettes may be slid into place, the push shoe 24 being retained in its lower position by engaging the button 26 in the bayonet slot 29.

I have illustrated and described a preferred and satisfactory embodiment of the invention, but it will be understood that changes may be made therein, within the spirit and scope thereof, as defined in the appended claims.

Having thus described my invention, what is claimed and desired to be secured by Letters Patent is:

1. In a combined container and lighter for cigarettes, a case including vertical side and end walls and adapted to contain a plurality of vertically superimposed side by side cigarettes with the ends of said cigarettes substantially in guided engagement with said end walls, a fixed horizontal cigarette guiding abutment wall in said case extending partially across it and terminating in inwardly spaced relation to one of said end walls and vertically abutting the upper side of a portion of the uppermost cigarette in the case between its end to be lighted and a point substantially inwardly spaced from its mouth engaging end, said one end wall having a lateral ejection

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passage in lateral alignment with the end of said uppermost cigarette and a cigarette receiving lighter compartment vertically offset above said ejection passage and vertically continuous therewith, and a lighter unit vertically above said abutment wall and disposed in lateral alignment with said cigarette receiving lighter compartment.

2. In a combined container and lighter for cigarettes, a case including vertical side and end walls and adapted to contain a plurality of vertically superimposed side by side cigarettes with the ends of said cigarettes substantially in guided engagement with said end walls, abutment means in said case extending partially across it and terminating in inwardly spaced relation to one of said end walls and vertically abutting the upper side of a portion of the uppermost cigarette in the case between its end to be lighted and a point substantially inwardly spaced from its mouth engaging end, said one end wall having a lateral ejection passage in lateral alignment with the end of said uppermost cigarette and a cigarette receiving lighter compartment vertically offset above said ejection passage and vertically continuous therewith, a lighter unit vertically above said abutment means and disposed in lateral alignment with said cigarette receiving lighter compartment, spring pressed feed means adapted to exert upward vertical pressure on the cigarettes in the case and movable ejection means normally disposed behind the uppermost cigarette in the case adapted to be actuated to project said uppermost cigarette partially along said abutment means and partially through said ejection passage, said partially ejected cigarette adapted to be further partially withdrawn from said case to disengage it from said abutment means whereby it moves vertically upward under the force of said feed means from said ejection passage to said cigarette receiving lighter compartment in lateral alignment with said lighter unit.

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