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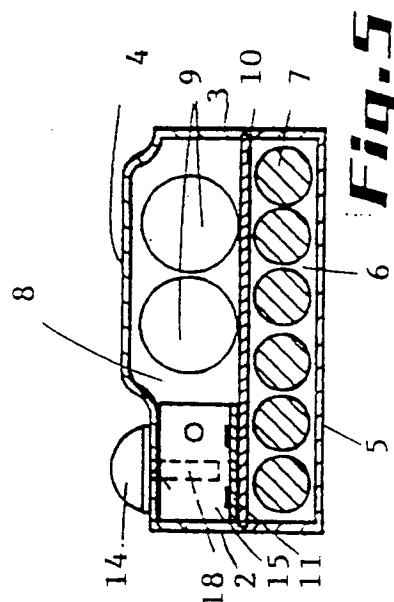
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(54) **Cigarette dispenser.**

(57) The invention relates to a cigarette dispenser which is formed by a first chamber (6) in which the cigarettes (7) are stacked, a second chamber (8) to accommodate at least one battery (9), an internal wall (10) which separates the two chambers and has electrical means of contact which form part of an electrical circuit with resistance wire (12), a small plate (11) movable along the internal wall provided with contact means which, together with the contact means on said wall, close said electrical circuit, when said plate is moved to its extreme position, said resistance wire being mounted on said plate.



The present invention relates to a cigarette dispenser.

It is an object of the present invention to prescribe a novel dispenser, by means of which the cigarettes can be moved one by one and offered lighted by making use of technically reliable structures which have the result of simplifying the components of the dispenser.

In order to make this possible according to the invention, the dispenser according to the invention is formed by a parallelliped-shaped housing with longitudinal and transverse walls comprising :

- a) a first chamber in which the cigarettes are stacked, said chamber having a lateral opening through which one cigarette at a time can be moved;
- b) a second chamber to accommodate at least one battery;
- c) an internal wall which at least partially separates the two chambers and has electrical means of contact which form part of an electrical circuit in which is arranged a resistance wire for lighting a cigarette;
- d) a small plate movable along the internal wall referred to provided with contact means which, together with the contact means on said internal wall, close said electrical circuit, whenever the said plate is moved, against the action of a spring, to its extreme position, said resistance wire being mounted on said plate, whereby at least one pressure-pin is arranged in direct proximity to this resistance wire on said plate, said pressure-pin projecting into said first chamber.

Still in accordance with the invention said movable plate is provided with a button projecting out of said housing of the dispenser, which button protrudes through a longitudinal slot in one of the walls of the housing.

In a preferred embodiment said resistance wire has its two ends clamped between interlocking male and female elements of a current-transferring component between a battery and the resistance wire referred to.

Other details and advantages of the invention will become apparent from the further description of a cigarette dispenser according to the invention. This description is given exclusively as an example and does not restrict the invention thereto. The references relate to the attached figures.

Figure 1 is a perspective view of the dispenser housing according to the invention in an initial embodiment.

Figure 2 is a top view of the dispenser according to the invention.

Figure 3 is a longitudinal cross-section along the line III-III from figure 2.

Figure 4 is a longitudinal cross-section along the line IV-IV from figure 2.

Figure 5 is a transverse cross-section along the line V-V from figure 2.

Figure 6 is a side view of the dispenser according to the invention.

Figure 7 is a perspective view of the dispenser housing according to the invention in another embodiment.

Figure 8 shows one part of the dispenser according to the invention on a much enlarged scale.

The dispenser illustrated by the various figures consists of a parallelliped-shaped housing 1 of which two longitudinal walls 2 and 3 and two transverse walls 4 and 5 are clearly visible in Figure 3.

Internally the housing is divided into two chambers. The first chamber 6 is intended to accommodate the cigarettes 7. In the second chamber 8 are fitted one but preferably two batteries 9.

The two chambers 6 and 8 are separated by an internal wall 10. The internal wall 10 need not stretch over the whole width of the housing. On the internal wall 10 are fitted electrical contact means, for example in the form of a small printed-circuit board. These contact means form part of an electrical circuit in which is arranged a resistance wire for lighting a cigarette. On a movable plate 11 are arranged similar electrical contact means. The resistance wire 12 of an electrical resistance is fitted on the movable plate 11 together with at least one, but preferably with two pins 13 which are situated in direct proximity to the resistance wire 12 (Figures 2, 3 and 6).

Pushing the movable plate 11 along the internal wall 10 of the dispenser is done by the longitudinal positioning, along the outside, of a push-button 14 which is connected by means of a small block 15 to the movable plate 11. The block 15, and therefore also the push-button 14, are moved against the action of a tension spring 16 which is fixed between said block 15 and the transverse wall 3 of the housing (Figures 2, 5 and 6). Preferably the movable pushbutton 14 is conducted in its longitudinal movement along the longitudinal wall 2 in a slot 17 to which the push-button 14 with the block 15 is connected by means of a pin 18. This pin 18 moves in the longitudinal slot 17 arranged in the longitudinal wall 2 of the housing. This longitudinal slot 17 is visible in Figure 2.

At the end of the travel of the movable plate 11 (Figure 6) a cigarette 7 slightly projects out of the housing 1. The cigarette, meanwhile, during the movement outwards, has been in the immediate proximity of the resistance wire 12 and can be regarded as lighted as soon as the user has drawn on the cigarette for the first time via the filter section which projects from the housing. In this condition the push-button 14 is at the end of its travel as illustrated in Figure 6 and the tension spring 16 is completely tightened. The cigarettes 7 are ejected out of the housing through an opening 19 provided in the transverse wall 2. The circular opening 19 according to Figure 1 may

also be a square opening 19' (Figure 7). A light strip-spring 20 can prevent the cigarettes from being completely ejected from the dispenser, but the spring force of this strip 20 is too weak to prevent a cigarette from being pushed outwards. The user can place the cigarettes one by one in the chamber 6 by moving them through the said opening 19, 19'. In the embodiment according to Figure 7, a movable or hinged side-wall section 21 may be provided. The cigarettes can also be placed in the chamber 6 in question through this movable wall section. If the user keeps the dispenser in the correct position, the cigarettes can reach their correct place in the chamber 6 by force of gravity. Conversely, the cigarettes can then be presented by force of gravity in their correct position opposite the opening 19 or 19' respectively.

The displacement of the cigarettes opposite the opening 19 or 19' can also occur under the influence of light pressure spring.

The resistance wire 12 lies with its two ends between the male and female elements 22 and 23 respectively of a current-transfer component 24 (Figure 8) which is connected into the electrical circuit of the dispenser. From a constructional aspect it is worth recommending whenever possible that both male and the female elements of the current-transfer component should each form a whole.

Claims

1. Cigarette dispenser, characterized in that it is formed by a parallelliped-shaped housing with longitudinal and transverse walls comprising :
 - a) a first chamber in which the cigarettes are stacked, said chamber having a lateral opening through which one cigarette at a time can be moved;
 - b) a second chamber to accommodate at least one battery;
 - c) an internal wall which at least partially separates the two chambers and has electrical means of contact which form part of an electrical circuit in which is arranged a resistance wire for lighting a cigarette;
 - d) a small plate movable along the internal wall referred to provided with contact means which, together with the contact means on said internal wall, close said electrical circuit, whenever the said plate is moved, against the action of a spring, to its extreme position, said resistance wire being mounted on said plate, whereby at least one pressure-pin is arranged in direct proximity to this resistance wire on said plate, said pressure-pin projecting into said first chamber.

2. Dispenser according to claim 1, characterized in

that said internal wall is arranged in said housing in such a way that the cigarettes accommodated in the chamber 10 can one by one be brought level with said opening by force of gravity.

3. Dispenser according to any of the claims 1 - 2, characterized in that said movable plate is provided with a button projecting out of said housing of the dispenser, which button protrudes through a longitudinal slot in one of the walls of the housing.
4. Dispenser according to one of the claims 1 - 3, characterized in that the opening through which a cigarette can be moved is arranged in one of the side walls of said housing.
5. Dispenser according to one of the claims 1 - 4, characterized in that said chamber is provided with an opening wall through which the cigarettes may be placed in said chamber.
6. Dispenser according to one of the claims 1 - 5, characterized in that said resistance wire has its two ends clamped between interlocking male and female elements of a current-transferring component between a battery and the resistance wire referred to.
7. Dispenser according to claim 6, characterized in that said current-transfer component is formed by two conductors which are electrically connected along one end to said battery and terminate along the other end in said male and female elements.
8. Dispenser according to one of the claims 1 - 7, characterized in that said battery is a rechargeable battery.
9. Dispenser according to claim 8, characterized in that said rechargeable battery can be recharged by means of a solar cell.

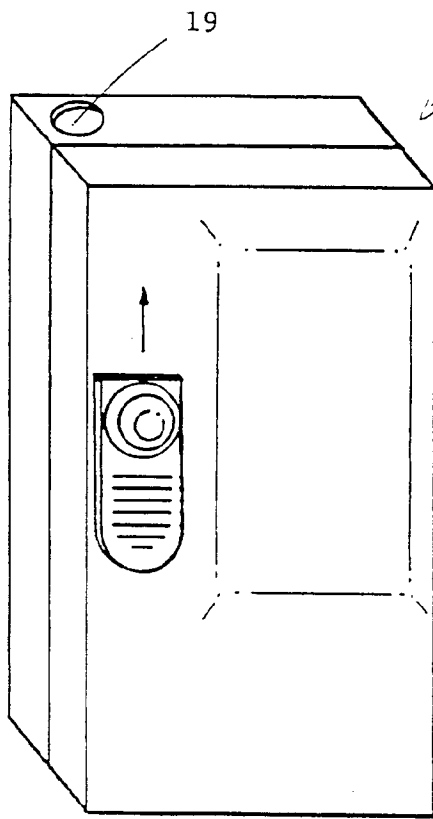


Fig.1

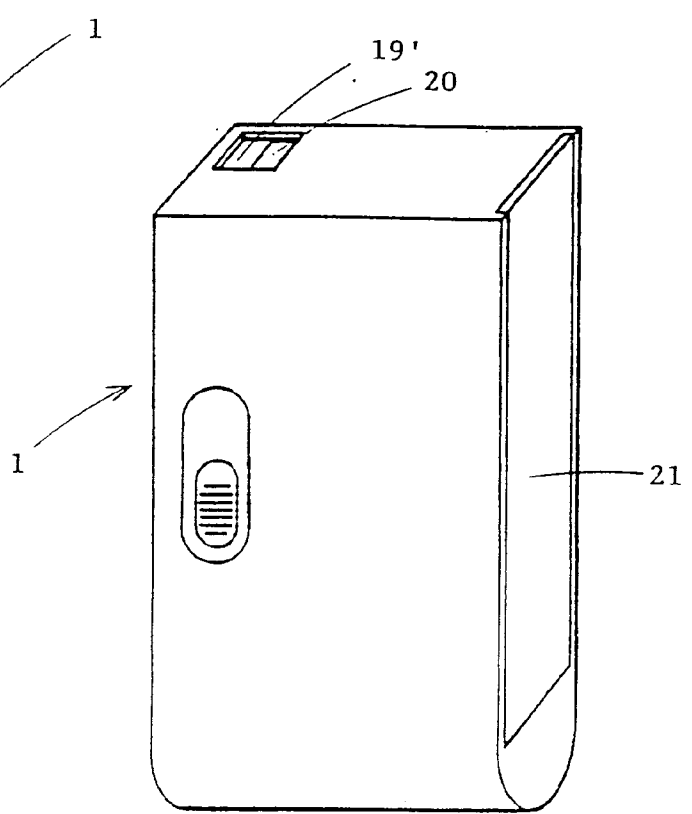


Fig.7

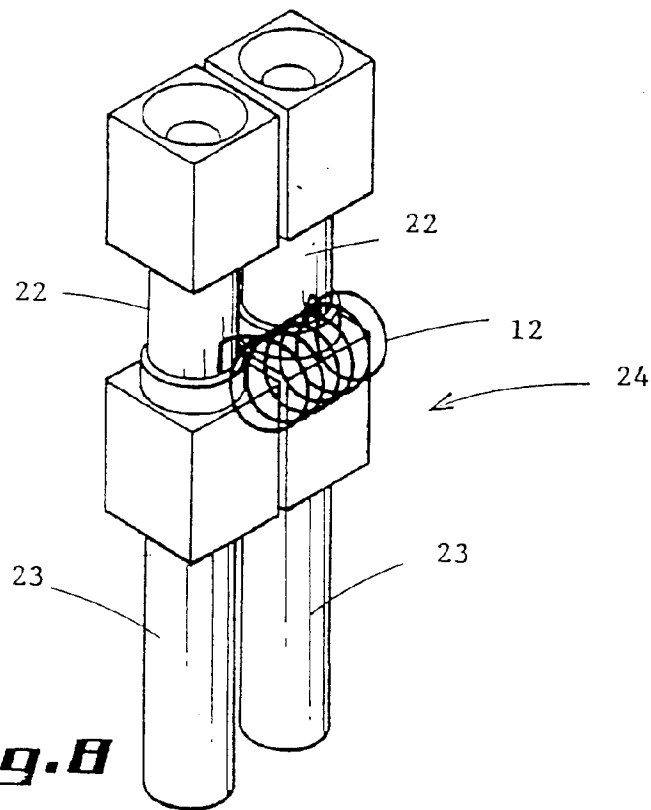


Fig.8

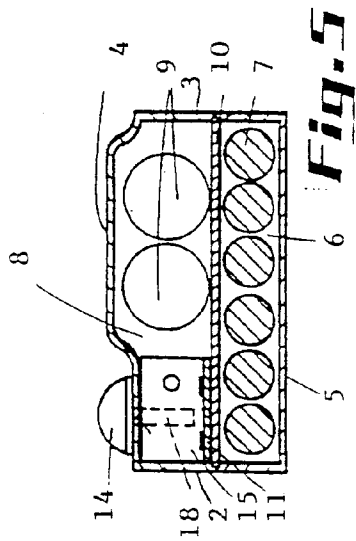


Fig. 3

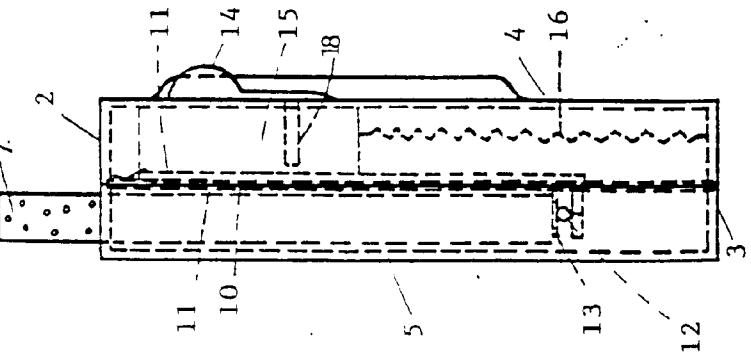
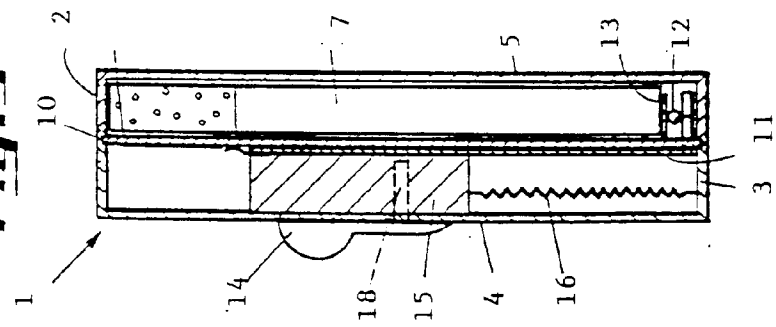


Fig. 6

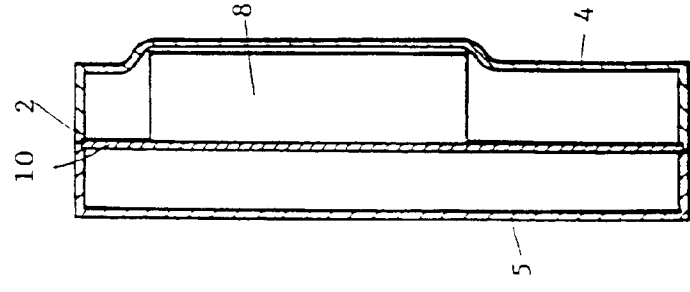


Fig. 4

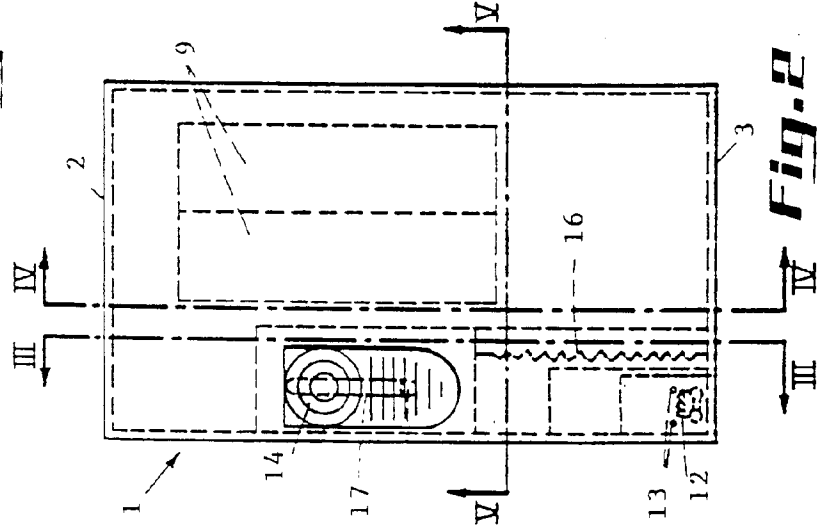


Fig. 2



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 94 87 0086

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
A	US-A-2 638 209 (CAMPBELL) * the whole document * ---	1	A24F15/14
A	FR-A-1 483 895 (DUBOIS) * the whole document * ---	1	
A	US-A-4 507 704 (CHUANG) * the whole document * ---	1	
A	FR-A-2 050 237 (FAYOLLE) ---		
A	US-A-4 342 902 (WU PING) -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			A24F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20 April 1995	Examiner Riegel, R
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