Dec. 5, 1939. E. HAMMERLING 2,181,993

CIGARETTE AND SIMILAR CASE

Filed July 19, 1939

Fig. 1.

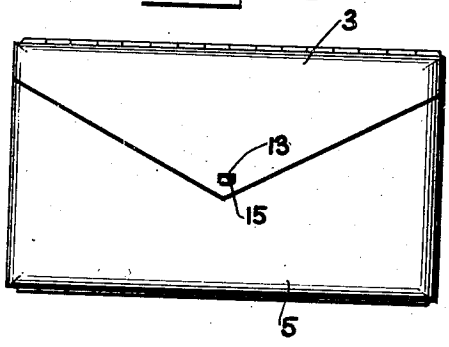


Fig. 2.

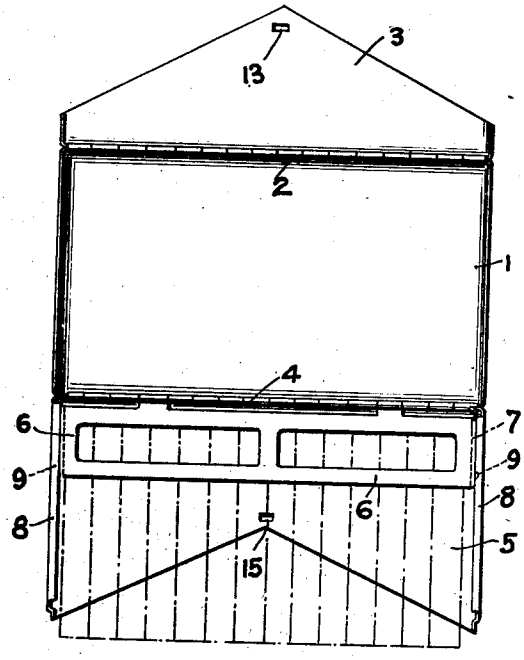


Fig. 3.

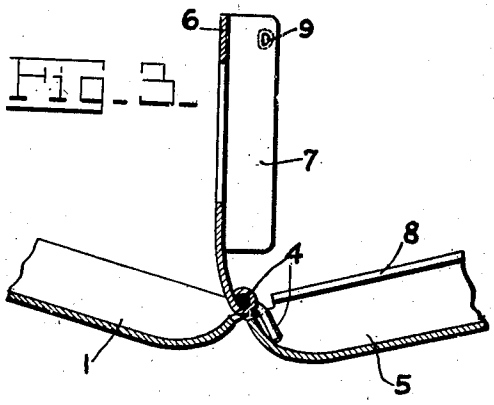


Fig. 5.

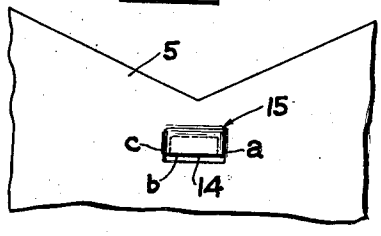


Fig. 4a.

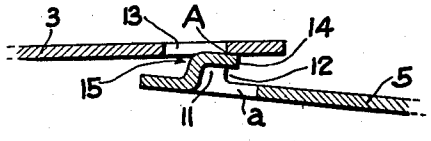
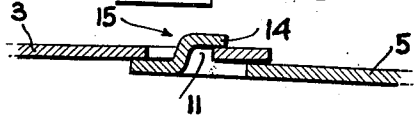


Fig. 4b.



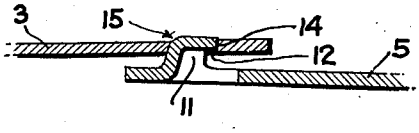
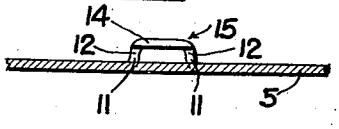


Fig. 4c.

Fig. 6.



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CIGARETTE AND SIMILAR CASE

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Application July 19, 1939, Serial No. 285,274

1 Claim. (Cl. 206—41)

This invention relates to cigarette cases of the type having a rectangularly shaped and dished plate forming one closure side of the case and a pair of flap sections or covers, which are likewise dished, hingedly connected to parallel edges of the plate and forming the closure for the other side of the case. The aspect ratio of the plate and the shapes of the pair of flap covers or sections are usually made so that the case strikingly resembles a mailing envelope. One of the objects of this invention is to provide a simple and inexpensive catch or fastening arrangement for the two flap covers which, in addition, will be sturdy and made so that it will not be put out of order by the rather abusive and careless treatment devices of this character usually received. An allied object is to provide a catch arrangement which would dispense with the need of a separate pin or other extra part, and in which one of the catch element is an aperture and the other cooperative element is punched out of the metal of the flap cover; not only is this a less expensive catch means but the possibility of the pin becoming loose and inoperative is obviated. It is a further object of this invention to devise a catch or fastener that will facilitate and make easier in operation, the one-hand opening and closing of the case, which is a desirable feature of this type of cigarette case. Another object of the invention is to provide a simple retainer for holding the cigarettes in place within the case, and to provide such a retainer and arrangement that when the case is opened, the end portions of the cigarettes will be exposed for ready and facile abstraction from the case. A still further object of the invention is to provide a simple arrangement for the retainer enabling it to be snapped into position retaining the cigarettes firmly in place and out of retaining position when it is desired to reload the case with cigarettes.

While the above statement of some of the objects of the invention and the ensuing description and illustration refer to a cigarette case, it is evident, and so intended, that the invention may apply equally well to any other case, container or compact, and irrespective of the particular article or articles contained therein.

For the attainment of these and such other objects as may appear or be pointed out, I have shown an embodiment of my invention on the accompanying drawing, wherein:

Fig. 1 is a rear view of the case with the flap sections in closing position;

Fig. 2 is a rear view of the case with the flap sections in open extended position;

Fig. 3 is an elevational view of a portion of the case, showing particularly the retainer plate in loading position.

Fig. 4*a* is an enlarged detail, in section, of the catch mechanism, in the position of the flaps as they are about to be snapped close; Fig 4*b* shows the flaps in closed or locking position; Fig. 4*c* shows the flaps in position as the case is being opened;

Fig. 5 is an enlarged detail, in plan, of the protuberant element of the catch arrangement; and

Fig. 6 is a front view of the protuberance shown in Fig. 5.

The rectangularly shaped and dished plate 1 constitutes one of the closing sides (more particularly, the front) of the case. Along one (preferably the larger, as shown) edge of the front plate 1 there is articulated, as by a spring-pintle hinge 2, a minor flap cover 3; to the parallel edge of the plate is articulated by a similar spring-pintle hinge 4, a major flap 5. In the usual manner in which the case would be held and operated, the minor flap 3 would be the upper one, as shown in Fig. 1. Also, in the closing position of the two flaps, the minor flap 3 will overlie the major flap 5 as likewise appears in Fig. 1; so that the minor and major flaps may be termed, respectively, "upper" and "lower" in both the sense of positional relation and also in the sense of overlying relation.

The upper or minor flap 3 is considerably smaller than flap 5 and also differs therefrom in outline, as will be at once apparent from Fig. 2. For one thing, flap 3 has a V-shaped outline coming to a central point as shown, closely in the manner of the closing flap of a mailing envelope; flap 5, on the other hand, has a V-shaped cut-out or re-entering angle as shown, the intersecting point of which, like the tip of flap 3, is centrally positioned. The reasons for this particular formation of the flaps will be presently set forth. The dimensions of the two flaps are such that there is a slight overlapping, as shown in Fig. 1, with the smaller or minor flap 3 in overlying relation to simulate the appearance of an envelope.

The front plate 1 and the pair of rear flaps 3 and 5 are dished so that sufficient clearance is provided within the case when the plate and flap sections are brought into closing relation, for holding cigarettes.

Within the case I provide a retaining member

in the form of a short plate 6 (which may have cut-out portions as shown) conveniently hinged by the pin or pintle of the hinge 4, see Fig. 2. At both ends of retainer plate 6 are provided flanges 7, the edges of which rest upon the major flap cover 5 when in retaining position as shown in Fig. 2. The width of flanges 7 is made such that the space between the retaining plate 6 and the cover section 5 will be of the proper distance to hold the cigarettes firmly in place. The two side edges of flap section 5 are provided with inwardly turned lips 8. The flanges 7 of the retainer are provided with punched detent points 9, which snap past the lips 8 of the cover section when the plate 6 is pressed to retaining position, the detent points underlying the lips and thus holding the retainer in position. When it is desired to load the case with cigarettes, the retainer plate is simply turned away from the flap 5, as shown in Fig. 3. It should be observed that the retainer plate need not be disturbed in abstracting cigarettes from the case, as these may be readily removed as will now be described.

The width of the major or lower flap 5, i. e. from its hinged edge (4) to its distal edge, see Fig. 2, is made shorter than the length of cigarettes, shown in dot-and-dash lines in the said figure, so that a cigarette, or several of them, may be grasped by the exposed end portion and readily withdrawn in a lengthwise direction. It should be further observed that the V-shaped cutout or re-entering angular distal edge of major cover section 5 provides clearance and exposes considerable length of the cigarettes for grasping.

Cigarette cases of this type are intended for single hand operation, that is, holding the case in one hand—say, the right hand—the case may be opened by pressing (with the thumb) upon the major or lower flap 5; whereat, the minor or upper flap 3, urged by the spring hinge 2, flies open. By a movement of the thumb away from the palm of the hand, the lower flap 5, urged by the spring hinge 4, will follow the thumb and swing open. The cigarettes are thus presented for facile abstraction, the ends extending from the major flap, but retained between the flap and retainer plate 6. In closing, the major or lower flap 5 is first closed against spring 4, by the thumb, and then the upper, smaller flap 3 is closed, against spring 2, by the fingers. To recapitulate, the case is opened by pressing upon the flap 5 and closed by pressing upon the flap 3.

The fastener or catch of this invention will not only achieve this effect but does so in a manner that makes the device commercially and practically useful. More particularly, I have provided a very simple and inexpensive fastener, comprising an aperture 13, preferably of rectangular shape as shown, in the minor or upper flap 3 and a very specially designed protuberance 15 punched out of the major or lower flap 5 and cooperative with the aperture, as will now be described.

Protuberance 15, see Fig. 4*a*, is punched out of the metal of the flap 5 to rise an extent above the top surface of the flap a trifle greater than the thickness of the upper flap 3 (or flap 5, for that matter, since the flaps and perhaps also plate 1, would be fabricated of the same gauge metal). The protuberance is punched out so that its arch or hump faces the intersecting point of the re-entrant cutout of flap 5, see Fig. 5, the leading edge 14 of the protuberance being turned away from that point. The thickness of leading edge 14 is substantially (or a little less) the thickness of the metal of the flaps. The protuberance is punched out to provide side walls or braces 11, see Figs. 4*a* and 5, which side braces are undercut (12) to form the said leading edge 14 into a projecting lip.

The parts, namely, upper flap 3 and lower flap 5, are shown in Fig. 4*a* in their respective and cooperative positions as the case is being closed. It will be observed that the upper flap 3 rests at a point A, which is the distal edge of aperture 13, upon the top of protuberance 15. As the upper flap 3 is pressed downwardly the lower flap 5 is caused, by the transmission of pressure at point A, to bow slightly. This causes a movement of the resting point A of the upper flap relative to the top surface of the protuberance, in a rightward direction (as viewed in Fig. 4*a*) until point A, which is the leading edge of aperture 13 as already mentioned, falls off the top of the protuberance and snaps over the leading edge or lip 14 as shown in Fig. 4*b*. It should be noted that the flaps are held in locked position by reason of both the bowing or springing of the lower flap (as mentioned) and the urgency of the two hinge springs 2 and 4.

In opening the case, pressure is exerted upon the lower flap 5 which becomes bowed slightly under the direct pressure of the finger (or thumb) and causes a movement of the protuberance 15 downwardly in aperture 13 of the upper flap. Inasmuch as the extent of the undercutting or recess 12 is slight and the overhanging lip 14 very thin, a small movement (or pressure upon the lower flap) suffices to remove the protuberance from underlying relation to the apertured edge of the upper flap (see Fig. 4*c*). Continued pressure on the lower flap removes its protuberance entirely from the abutting relation of Fig. 4*c*, and frees the upper flap which thereat flies open under the urgency of hinge spring 2.

Cigarette cases are subjected to rather rough and careless treatment and, in order that a fastening arrangement be commercially useful, it must be made in a manner to withstand rough treatment and abuse. Unless the catch mechanism is properly devised, it will soon go out of commission. Consider, for example, the protuberance 15, Fig. 4*a*; it must, for one thing, withstand considerable pressure at the point A as pressure is placed upon the upper flap in the closing operation; which pressure, as already explained, is transmitted by the protuberance 15 to the lower flap 5 of which the protuberance is an integral part. Unless protuberance 15 is properly made, this exertion of pressure at point A will inevitably and soon squash the protuberance by pushing it down, back into the plate from which it had been punched. I have been able to devise and make a protuberance which will withstand this rather severe punishment. A three-sided or U-shaped slit *a*, *b*, *c*, Fig. 5, is made and the tongue of the slit is punched and formed into the protuberance 15 as shown, Figs. 5, 6, and 4*a*. The said walls or braces 11 of the protuberance, in addition to serving as abutments at their recessed points 12, Fig. 4*a*, also serve to support and strengthen the arch or bump of the protuberance.

I claim:

In a device of the class described, the combination of a rectangular dished plate, major and minor dished flaps connected to parallel edges of the said plate by spring hinges, the minor flap being centrally provided with an aperture spaced

from the distal edge of the flap to provide a distal portion and the major flap being centrally provided near its distal edge with a protuberance punched out of the metal of the major flap with brace walls at each side, the arch of the protuberance facing the distal edge of the major flap with the leading edges of the protuberance including its said side brace walls faced away from the said distal edge of the major flap, the said side braces of the protuberance being provided with a slight recess to form the said leading edge of the protuberance into a slightly projecting lip, the said flaps overlapping each other with the minor flap overlying the major flap, the said aperture and said protuberance being so distanced from the hinged connections of the respective flaps to the said plate that as pressure is applied to the minor flap to turn it in a clockwise direction relative to its hinge conection, the said distal portion of the minor flap rests upon the said arch of the protuberance to turn the major flap in a counterclockwise direction relative to its hinge connection and against the spring thereof, the two flaps turning relatively to each other until the said distal portion of the said flap slips off the said protuberance arch of the major flap and snaps under the said projecting lip of the protuberance.

EMANUEL HAMMERLING.