

Oct. 17, 1961

E. R. STIRES

3,004,699

ENVELOPE

Filed Sept. 7, 1960

Fig. 1.

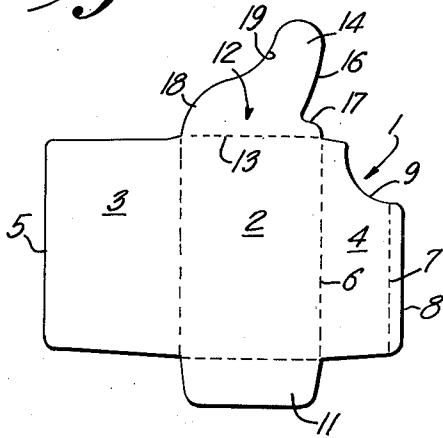


Fig. 2.

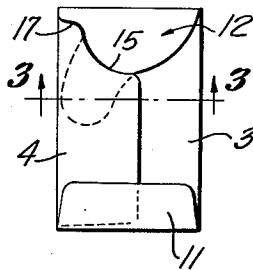


Fig. 3.

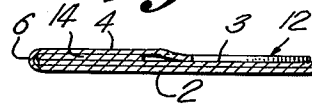


Fig. 4.

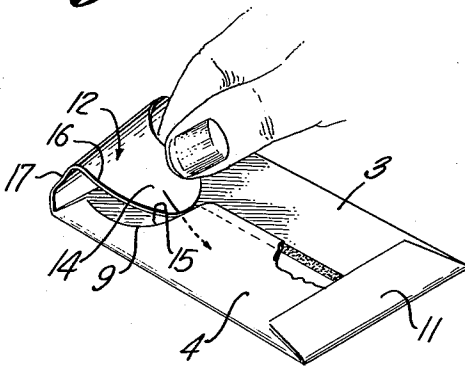


Fig. 5.

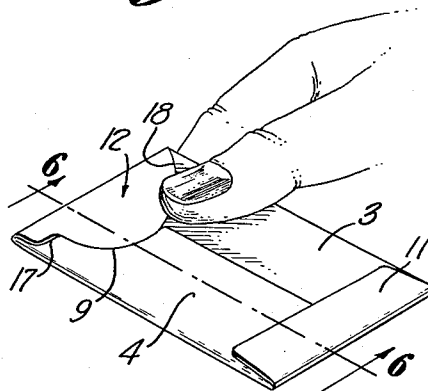
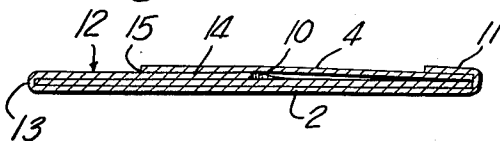


Fig. 6.



INVENTOR

Eldon Stires

BY *Mason, Fenwick & Lawrence*
ATTORNEYS

1

3,004,699

ENVELOPE

Eldon R. Stires, Columbus, Ohio, assignor to The Central Ohio Paper Company, Columbus, Ohio, a corporation of Ohio

Filed Sept. 7, 1960, Ser. No. 54,410

4 Claims. (Cl. 229—84)

This invention relates to envelopes of the flat tubular type, which are open at one end and have a closure flap for the open end, with means for holding the flap in closed position. The present invention is an improvement over the envelope disclosed in the patent to James J. McCarthy, 2,289,058, issued July 7, 1942.

The envelope to which the prior patent and the present invention relate, is particularly adapted for use in dispensing pills and tablets, or any other small articles which are usually removed from an envelope singly, or in small numbers, and the remainder kept in the envelope until used. Such an envelope will be opened a number of times, and, if the envelope is of the tuck flap type, it must be capable of repeated opening and closing without damage, and continue to provide a tight closure.

The envelope covered by the above-mentioned patent has a closure flap terminating in a hook-like locking tab which enters a slot in the closure seam of the envelope in a direction transversely of the envelope. While this envelope provides a positive securing means, an extremely long locking tab is required, and considerable twisting of the tab is necessary for locking or release.

The general object of the present invention is to provide an envelope of the character described which will have an improved tuck flap.

A more specific object of the invention is to provide such an envelope wherein a locking tab is used which operates in a much more nearly straight line motion in opening or closing the flap, but which requires sufficient twist in operation to maintain the holding characteristics of the tab of the prior envelope.

Another object is the provision of an envelope of the lock tab type in which the tab does not extend into the interior of the envelope but is positioned in a pocket separated from the envelope interior.

A further object is to provide an envelope having a lock tab flap wherein the engagement between the tab and the envelope body is relatively close to the fold line of the closure flap so that the flap is held close to the body when closed.

Other objects of the invention will become apparent from the following description of one practical embodiment thereof, when taken in conjunction with the drawings which accompany, and form part of, this specification.

In the drawings:

FIGURE 1 is a view of the blank from which the envelope is formed;

FIGURE 2 is a rear view of the improved envelope, showing the flap closed;

FIGURE 3 is a horizontal section through the envelope, taken on the line 3—3 of FIGURE 2;

FIGURE 4 is a perspective view, illustrating the manner of inserting the locking tab in the tab-receiving pocket formed on the back of the envelope;

FIGURE 5 is a view similar to FIGURE 4, showing the final step in closing the flap; and

FIGURE 6 is a longitudinal section through the envelope, taken on the line 6—6 of FIGURE 5.

Referring to the drawings in detail, and first advertising to FIGURE 1, there is shown a blank 1 from which the envelope is folded up. The blank has a central front panel 2, with rear panels 3 and 4 extending laterally from

2

the side edges of the front panel. The rear panel 3 is substantially the width and height of the front panel so that, when folded over upon the front panel, its free edge 5 will extend to the fold line 6 between the front panel and the rear panel 4. The panel 3, therefore, provides a complete back wall for the tubular envelope.

Rear panel 4 is only slightly more than half the width of front panel 2, and is designed to be folded over on top of rear panel 3 and be adhered to that panel by means of a glue line 7 along the free edge 8 of panel 4. The upper corner of rear panel 4 is cut away along an arcuate line to provide a concave lip 9, defining an entrance into a tab-receiving pocket 10 formed between the overlapping rear panels 3 and 4 intermediate the fold line 6 and the glue line 7. Pocket 10 and the tubular envelope body are closed at the bottom by bottom flap 11, which is adhered to the underlying portions of panels 3 and 4.

A closure flap 12 emanates from the top edge of the front panel and is foldable along a line 13 to overlie the back of the envelope body. Flap 12 terminates in a locking tab 14, insertable in the pocket 10 through the entrance 15 at the concave lip 9.

The closure flap and locking tab are of particular shape and position relative to the pocket 10, its entrance 15 and the entrance lip 9 to permit smooth entry of the tab into the pocket and to hold the flap close against the envelope body when the tab is so inserted. The locking tab is offset to one side of the closure flap so that the tab side edge 16 lies substantially at the fold line 6 when the flap is closed. The flap edge is notched, as at 17, in the side to which the tab is offset to a depth slightly greater than the width of rear panel 4 from the fold line 6 to the point of intersection of the curved lip 9 with the top edge of the panel. This defines the juncture of the closure flap and locking tab. The tab edge 16 curves convexly from the bottom of the notch to the end of the tab. The opposite side of the closure flap and tab describe a compound curve, with the flap edge 18 being convex and the tab edge 19 in continuation of the flap edge 18, being concave to define a gently curving locking tab. The juncture of the convex flap edge 18 and the concave tab edge 19 is positioned from the flap fold line 13 a distance slightly less than the point of intersection of the free edge of rear panel 4 and the concave lip 9 from the top of the envelope body. Thus, when the tab is inserted in the pocket 10, the concave lip 9 at the entrance of the pocket will lie across the flap from the bottom of the notch 17 to the juncture of the curving edges 18 and 19.

When the flap is to be closed, it is folded about the line 13, and the end of tab 14 inserted in the entrance 15 of the pocket. In order to accomplish this, it is necessary to twist the flap sufficiently to place the tab end at the pocket entrance. Once the end of the tab is inserted, the companion curves of the side 16 of the tab and the lip 9 will guide the tab into the pocket. A smoothing pressure along the exposed area of the flap (in the manner shown in FIGURE 5) will cause the flap to move into close adjacency to the envelope body. In view of the fact that the tab must swing in a slight arc in moving out of the pocket, there will be no danger of accidental opening of the flap. It is simply necessary to insert a finger under the curved edge 18 of the flap to withdraw the tab from the pocket and open the flap.

While in the above one practical embodiment of the invention has been disclosed, it will be understood that the precise details of construction shown and described are merely by way of example, and the invention may take other forms within the scope of the appended claims.

3

What is claimed is:

1. An envelope comprising, a front panel having side edges and top and bottom ends, an underlying rear panel of approximately the size and shape of the front panel joined to the front panel at a fold line along one side edge, an overlying rear panel joined to the front panel at a fold line along the opposite side edge and folded to lie over the underlying rear panel, the overlying rear panel being of less width than the underlying rear panel and overlapping a part only of the underlying rear panel so that its free edge lies intermediate the side edges of the underlying rear panel, the two rear panels being joined by a glue line along the free edge of the overlying rear panel to form a pocket between the overlapped portions of the rear panels, a bottom flap emanating from the bottom end of the front panel and folded over and adhered to the rear panels to close the bottom of the envelope, and a top closure flap joined to the top end of the front panel and terminating in an elongated locking tab, the top closure being adapted to fold over the rear of the envelope to close the top end and the tab being so located as to be inserted in the top of the pocket to hold the closure flap in closed position.

2. An envelope as claimed in claim 1 wherein the overlying rear panel has a concavely curved lip extending from the top edge of the overlying rear panel near the juncture of the overlying rear panel with the front panel to the free edge of the overlying rear panel spaced from

4

th top edge of the front panel to provide an upwardly opening entrance to the pocket.

3. An envelope as claimed in claim 2 wherein the locking tab projects from the top closure flap at one side of the center line of the envelope to traverse the entrance to the pocket.

4. An envelope comprising, a flat tubular body open at one end having front and back walls, the back wall being of double thickness along one side edge providing a pocket having an entrance opening toward the open end of the envelope, the pocket entrance being defined by a lip on the outer thickness of the double thickness back wall, the lip slanting from a point at the open end of the envelope near the envelope side edge to a point spaced downwardly from the envelope open end at the inner edge of the pocket, and a flap closure foldable over the open end and having a projecting locking tab traversing the pocket entrance lip and curving downwardly to lie within the pocket.

References Cited in the file of this patent

UNITED STATES PATENTS

579,077 Price Mar. 16, 1897

FOREIGN PATENTS

312,997 Italy Dec. 1, 1933
674,983 Great Britain July 2, 1952