

Jan. 9, 1962

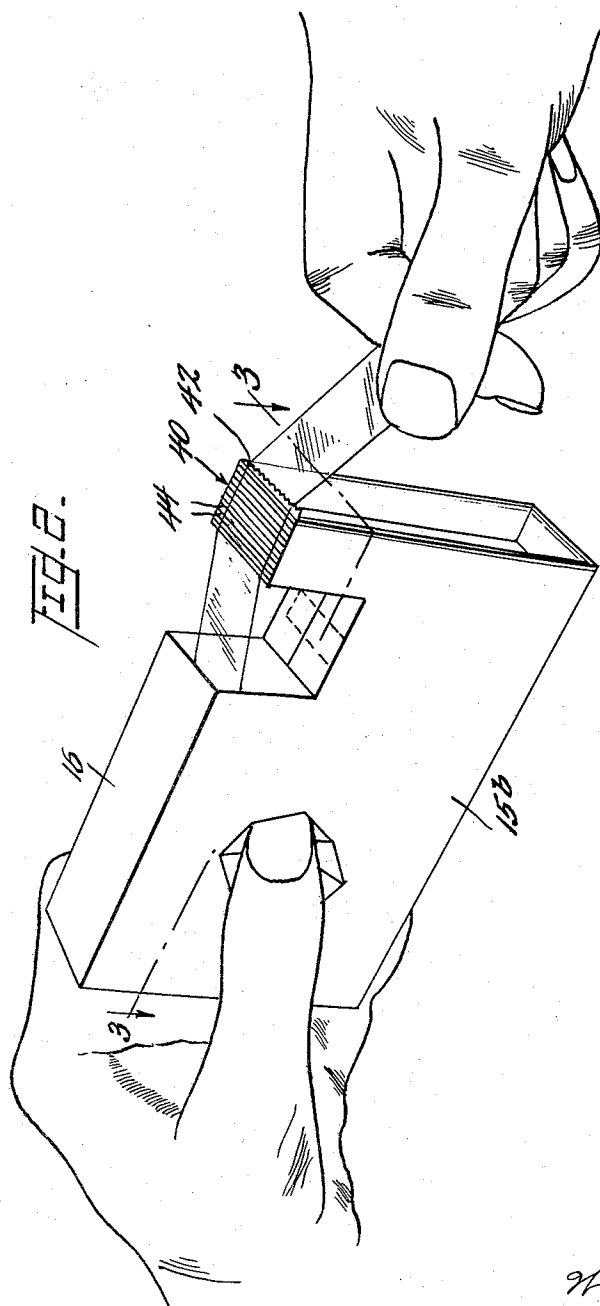
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3,016,174

ROLL TAPE DISPENSER AND CONTAINER

Filed Feb. 25, 1959

2 Sheets-Sheet 2



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3,016,174

ROLL TAPE DISPENSER AND CONTAINER

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Filed Feb. 25, 1959, Ser. No. 795,450

Claims priority, application Canada June 23, 1958

6 Claims. (Cl. 225-47)

This invention relates to a roll tape dispenser and container and deals particularly with a container made from a single blank of foldable material, provided with means for supporting a roll of tape and means of severing the tape.

It is common to supply rolls of tape material, such as pressure-sensitive tape, in dispensers having axial means on which the roll is rotated and a cutting edge for severing the tape. These prior dispensers have been made of either sheet metal, plastic or heavy paperboard material in order to supply the required rigidity to the axial means and cutting edge to make the dispensers workable. Sheet metal, plastic and heavy paperboard are expensive and dispensers made from these materials cannot be economically discarded when the roll of tape supplied with the dispenser is used up.

It is a feature of the present invention to provide a roll tape dispenser and container which may be made from a single blank of light cardboard or similar material which encloses and protects the roll of tape, rotatably supports the roll, adequately supports a cutting element and is disposable.

According to the present invention a roll tape dispenser and container is made from a single blank of form-retaining material, foldable into rectangular box form with a cutting element thereon, wherein said blank comprises: a main body portion scored to define two side walls with an interconnecting top wall, at least one bottom wall flap and at least one rear end wall flap; a cutting element fixed to the top wall and having its cutting edge at the front end of the top wall, a slot in the main body portion behind the cutting element and adjacent thereto adapted to enable tape within the container to be fed to the cutting element; at least one side wall being extended at the front end thereof, said extension being foldable to form a vertical reinforcing element to support that portion of the top wall carrying the cutting element; and at least one side wall being cut to form means inwardly foldable to provide an axis about which the roll tape may rotate.

In the drawings which illustrate one embodiment of the invention:

FIGURE 1 is a plan view of a blank, scored to be foldable into a container;

FIGURE 2 is a perspective view of a container formed of the blank shown in FIGURE 1, showing its manner of operation, and

FIGURE 3 is a cross section through line 3-3 of FIGURE 2.

Referring to the drawings, FIGURE 1 shows a finished blank having a cutting element attached to it. 10 generally indicates the main body portion of the blank which is scored to provide parallel fold lines 11, 12, 13 and 14, defining two rectangular side walls 15a and 15b, an interconnecting narrow rectangular top wall 16 and two narrow bottom wall flaps 17a and 17b. One end of side wall 15b projects to define a rear end wall 18 scored to provide parallel fold lines 19 and 20. A flap 21 projects from the rear end of top wall 16 and is scored at 22 to be foldable. A similar flap 23 projects from the rear end of bottom flap 17b and is scored at 24 to be foldable.

A rectangular extension 25 integral with the front end of side wall 15a and coextensive in width is scored at 26 to

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be foldable along the front edge of that side wall. Score lines 27 and 28 are positioned in extension 25 parallel to score line 26. The rectangular portions of extension 25 between lines 26 and 27, 27 and 28 and the portion between line 28 and the outer edge 29 of the extension are indicated by reference numerals 30, 31 and 32 respectively. The width of portions 30 and 32 is approximately equal to the width of a cutting element 40 between its outer edge 42 and a slot 43, the cutting element and slot being described below. The width of portion 31 substantially equals the width of top wall 16.

A rectangular extension 33, integral with the front end of the other side wall 15b and coextensive in width is scored at 34 to be foldable along the front edge of that side wall. A score line 35 is positioned in extension 33 parallel to line 34. The rectangular portions of extension 33 between lines 34 and 35 and between line 35 and the outer edge 36 of the extension are indicated by reference numerals 37 and 38 respectively. The width of portion 37 is slightly smaller than the width of portions 30 and 32 of extension 25 and the width of portion 38 substantially equals the width of portion 31.

A metal cutting element 40 is attached to the forward or table portion 16a of the top wall 16 by rivet-like projections 41 punched from the element itself. The front edge 42 of cutting element 40 is serrated or toothed and slightly overhangs the front edge of the table portion 16a.

A slot 43 is positioned in that portion of top wall 16 lying immediately behind the cutting blade 40 and extends into side walls 15a and 15b. At both ends of the slot 43, the side walls 15a and 15b are cut to provide tabs 47 and 48, scored by lines 45 and 46 so that the tabs are foldable. Tab 47 is provided with a recess 49 and tab 48 is provided with a cooperating lock tab 50.

At a point equidistant from lines 11 and 12 and spaced laterally midway between slot 43 and the rear end of the side wall 15a; said side wall is cut in a series of radial lines 51 extending outwardly to meet a substantially circular scoring 52. This provides a circular series of triangular tongues 53, each tongue 53 being scored at its base. A correspondingly positioned circular series of tongues 53 is provided in side wall 15b.

The following description recites the manner in which the blank of FIGURE 1 is folded into the form of a container shown in FIGURE 2. The main body portion 10 of the blank is folded along lines 11, 12, 13 and 14. Flaps 17a and 17b are then overlapped and fastened together by gluing or stapling or by other such means to form bottom wall 17. Flap 25 is folded along lines 26, 27 and 28 back into the body of the container so that portion 30 of flap 25 lies flush against the inside of adjacent side wall 15a, portion 31 is positioned between and at right angles to the two side walls 15a and 15b and portion 32 lies flush against the inside of side wall 15b. Flap 33 is then folded along lines 34 and 35 so that portion 37 of flap 33 lies over portion 32 of flap 25 and the portion 38 of flap 33 lies over portion 31 of flap 25. FIGURE 3 shows how extensions 25 and 33 are folded in the above manner to form a reinforcing channel member or strut underlying and bracing that intermediate portion of the top wall 16 or table which carries the cutting element 40. Flaps 47 and 48 are then folded along fold lines 45 and 46 and are interlocked to form a bridging member between the side walls 15a and 15b.

At this point the roll of tape may be inserted into the container and the end of the tape drawn through slot 43 to overlie the cutting element 40. Flaps 18, 21 and 23 are then folded along fold lines 19, 20, 22 and 24 to form a rear end closure member for the container.

The cutting element 40 is corrugated or knurled to provide a surface to which the tape will appropriately adhere.

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A cutting element with a flat upper surface has not proved satisfactory since the tape sticks too strongly thereto and it is difficult to remove the end of the tape to advance the next length. On the other hand, of course, a certain amount of adhesion between the tape and the top surface of the cutting element is desirable, in order to prevent the end of the tape from slipping back into the container. The corrugation is in the nature of ribs 44 lying parallel to the cutting edge 42 as shown in FIGURES 1 and 2.

In the operation of the device, the roll of tape, usually including a relatively solid cylindrical core, is placed in the container through the rear end and the flaps closed as mentioned above. The free end of the tape is fed through slot 43 and over the cutting element 40. To obtain lengths of tape the operator places his finger and thumb against each of the circular series of tongues 53 in walls 15a and 15b, as shown in FIGURE 3, thereby gripping the container and at the same time deflecting the tongues 53 inwardly to provide trunnion means for the core of the tape roll. The other hand is then free to pull the tape across the cutting element.

Examples of variations in the embodiment described above may be mentioned. For instance, the reinforcing member beneath the cutting element 40 may be formed in a trough-like manner rather than as a channel member. Also, the reinforcing member need only extend a distance back from the front end to provide vertical support for the cutting element. The length of slot 43 may be reduced so that it extends only a small distance into side walls 15a and 15b, and the width of the slot may, of course, be altered. Tongues 53 may be cut in only one side wall and the operator's finger inserted to touch the opposite wall to form axle means.

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

1. A roll tape dispenser and container made from a single blank of form-retaining material, foldable into rectangular box form with a cutting element thereon, said blank comprising: a main body portion scored to define two side walls with an interconnecting top wall, at least one bottom wall flap and at least one rear end wall flap; a cutting element fixed to the top wall and having its cutting edge at the front end of the top wall, a slot in the main body portion behind the cutting element and adjacent thereto adapted to enable tape within the container to be fed to the cutting element; at least one side wall having a forward extension at the front end thereof, said extension being provided with multiple vertical scorings to enable it to be folded to form a vertical reinforcing element disposed directly beneath that portion of the top wall carrying the cutting element to lend it rigid support.

2. A dispenser and container as claimed in claim 1 in which said blank includes an extension at the front end of both side walls; one of said extensions being scored parallel to the said front end to define rectangular inner, middle and outer portions, the middle portion having a width substantially equal to the width of the top wall; the other extension being scored parallel to the said front end to provide two rectangular portions, the portion adjacent the side wall having a width less than the outermost portion of said one extension and the other portion having a width substantially equal to the width of the top wall less twice the thickness of the blank.

3. A roll tape dispenser and container as claimed in claim 1 in which said slot extends into said side walls, and in which each of said side walls is cut at the end of said slot to provide a foldable tab, one of the tabs being provided with a lock tab at its free end and the other tab be-

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ing provided with a recess at its free end adapted to receive said lock tab.

4. A roll tape dispenser and container as claimed in claim 1 in which said cutting element comprises a metal strip having one edge toothed to provide said cutting edge and having a corrugated upper surface comprising ribs lying parallel to the cutting edge.

5. A combination package-dispenser for a roll of tape, said package-dispenser comprising a cardboard carton having spaced side walls, at least one end wall, a bottom wall, and a top wall, said side walls being the wider and adapted to confine the sides of the roll of tape while said end, top, and bottom walls are the narrower and confine the peripheral edge of said roll, one end wall comprising a closure for access to the interior of the carton, a vertically extending notch dividing said top wall into two separated sections and penetrating downwardly into adjacent portions of said side walls, the resulting section of said top wall further from the closure end of said receptacle comprising a table for supporting a section of tape during severance, a cutting element fixedly attached to the top of said table and extending no further inwardly of the carton than the inner edge of said table, whereby said notch affords a free and unobstructed gap between the table and the remaining portion of said top wall, and reinforcing means disposed beneath intermediate portions of said table, said reinforcing means for said table comprising at least one cardboard flap extending from one of said side walls and folded intermediate its length along a vertical line to provide bracing means of angular section extending transversely of said side walls and serving as a strut which extends from said bottom wall to said table.

6. A combination package-dispenser for a roll of tape, said package-dispenser comprising a cardboard carton having spaced side walls, at least one end wall, a bottom wall, and a top wall, said side walls being the wider and adapted to confine the sides of the roll of tape while said end, top, and bottom walls are the narrower and confine the peripheral edge of said roll, one end wall comprising a closure for access to the interior of the carton, a vertically extending notch dividing said top wall into two separated sections and penetrating downwardly into adjacent portions of said side walls, the resulting section of said top wall further from the closure end of said receptacle comprising a table for supporting a section of tape during severance, a cutting element fixedly attached to the top of said table and extending no further inwardly of the carton than the inner edge of said table, whereby said notch affords a free and unobstructed gap between the table and the remaining portion of said top wall, and reinforcing means disposed beneath intermediate portions of said table, said reinforcing means for said table comprising two of said cardboard flaps, one extending respectively from each of said side walls, both of said flaps being folded intermediately and interlocked one with the other.

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