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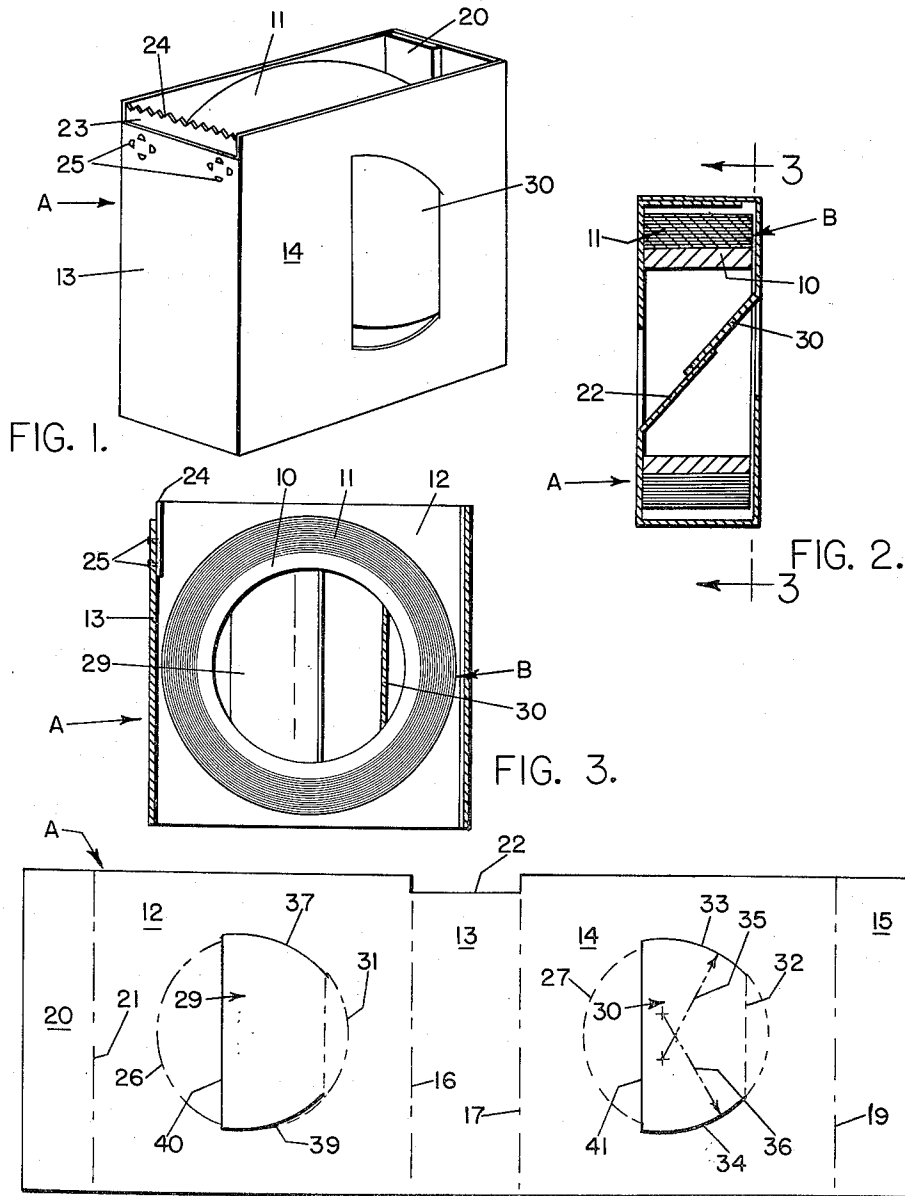


FIG. 4.

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TAPE ROLL HOLDER

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This invention relates to an improvement in tape roll holder and deals particularly with a carton for rotatably supporting a roll of tape or similar article.

Various means have been provided for holding rolls of tape so that the tape may be withdrawn as desired and torn off at the desired length. It is an object of the present invention to provide a device of this character capable of supporting with a roll of tape so that it is readily rotatable within the carton and so that it may be readily dispensed.

A feature of the present invention resides in the provision of a tape holding carton comprising a rectangular sleeve which may if desired be provided with open ends. A flap is cut from each of the panels overlying the hollow cylindrical core of the tape roll. The sides of the flaps are curved in form so that when the flap is bent to extend diagonally into the core of the roll, the side edges of the flap will bear against the inner surface of the core. Accordingly, the tape roll is permitted to rotate about the edges of the flap which are substantially arcuate in form.

A feature of the present invention resides in the provision of a simple tape roll holder in which the two flaps are held in proper relation merely by overlapping the ends of the flaps so that the end of each flap prevents the other flap from returning to the plane of the panel from which it is cut. Thus by flexing the flaps to the extent necessary so that the ends will overlap, the flaps will automatically remain engaged and form a substantial support for the roll of tape.

A feature of the present invention resides in the fact that the edges of the flaps are cut in such a manner that when the flaps are diagonally extending and in overlapping relation they form a circular outline when viewed axially of the tape roll. In other words, the edges of the flaps form a circular outline when they are flexed into angular relation from the panels from which they are cut and are overlapped.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification.

FIGURE 1 is a perspective view of the tape roll holder in readiness for use.

FIGURE 2 is a sectional view through the carton and through the tape roll showing the position of the flaps when they are overlapped.

FIGURE 3 is a sectional view, the position of the section being indicated by the line 3—3 of FIGURE 2.

FIGURE 4 is a diagrammatic view of the blank from which the carton is formed.

The form of carton which is employed is indicated in general by the letter "A" and is shown in its set up form in FIGURE 1. The carton A is designed to accommodate a tape roll which is indicated in general by the letter "B." The tape roll B in ordinary practice includes a hollow cylindrical core 10 having the tape 11 wound spirally thereupon. The core 10 and the tape 11 is preferably substantially equal to the width of the carton so that the roll is held from axial movement.

The carton A is shown as including a side wall panel 12, an end wall panel 13, a side wall panel 14, and an end wall panel 15 which are foldably connected along parallel fold lines. The panels 12 and 13 are connected

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by a fold line 16, the panels 13 and 14 are connected along a fold line 17, and the panels 14 and 15 are connected along a fold line 19. A glue flap 20 is foldably connected to one end panel of the series such as the panel 12 along a fold line 21, and this glue flap 20 is overlapped with the end wall 15 and is adhered thereto.

Also in the preferred form of construction, one end wall such as the end wall 13 is notched along its upper edge as indicated at 22 or in other words is not quite as high as the remaining panels. A metal cutting strip 23 having a serrated edge 24 is provided with prongs or ears 25 which are bent from the plane of the strip 23 and are forced through the end wall 13 to secure the cutting edge with the serrations 24 at substantially the level of the remaining walls 12, 14, and 15. In dispensing the tape, a portion of the tape is unrolled from the roll B, pulled over the serrated edge 24, and torn off.

Each of the side wall panels 12 and 14 is provided with a flap which may be folded out of the plane of the panels from which they are cut. With reference to FIGURE 4 of the drawings, the circular broken lines 26 and 27 indicate the inner diameter of the tape roll core 10. The flaps 29 and 30 which are formed in the panels 12 and 14 respectively are foldably connected to these panels along parallel lines of fold 31 and 32 respectively which are substantially chords of the circular outlines 26 and 27. In view of the fact that the flaps 29 and 30 extend diagonally through the core 10, these flaps must have their widest points somewhat offset from the axis of the core so that when these flaps are folded diagonally, the widest points will be at the center of the core. Accordingly, the arcuate edges 33 and 34 extend from the ends of the chord 32 along the radii 35 and 36 respectively, which are of slightly greater radius than the radius of the circle 27. The arcuate edges 37 and 39 are similarly cut along a radius which is somewhat greater than the radius of the circle 26. As a result, when the flaps are folded into diagonal relation as indicated in FIGURE 2 of the drawings, they provide a circular outline when viewed axially of the tape roll core.

The ends of the flaps 29 and 30 are defined by cut lines 40 and 41 parallel to the fold lines 31 and 32. The fold line 40 connects the ends of the cut lines 37 and 39 while the cut line 41 connects the ends of the cut lines 33 and 34. The flaps are of a proper length to slightly overlap when in the diagonal position indicated in FIGURE 2.

The tape is assembled in the carton A by folding the carton into rectangular form and inserting the tape roll B into the sleeve. The flaps 29 and 30 are then flexed down into the tape roll core, the flaps flexing into somewhat concave form during this process. When the ends 40 and 41 of the flaps are depressed sufficiently so that the end of one flap is clear of the other, the pressure is released and the flaps are permitted to flex back toward the plane of the panel from which they are cut. This flexing action is limited by the engagement of the ends of the flaps as they flex back into contact. When overlapped in the manner illustrated in FIGURE 2 of the drawings, neither of the flaps will flex back into the plane of the panel from which it is cut due to this inner engagement.

Once the tape roll is inserted and the flaps are flexed into the position illustrated in FIGURE 2, the tape roll is in readiness for use. The end of the tape is unrolled from the roll and pulled over the serrated edge 24 of the cutting strip 23. This permits the tape to be unrolled to the desired extent and cut off to provide the proper lengths of tape.

In accordance with the patent statutes I have described the principles of construction and operation of my tape roll holder.

And while I have endeavored to set forth the best em-

bodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A tape roll holder for holding a cylindrical roll having a hollow cylindrical core, the holder including a sleeve including four rectangularly arranged panels, two of which overlie the ends of said core, and a flap hingedly connected to each of said two panels along parallel lines of fold on opposite sides of the center of the core and extending beyond the center of the core, said flaps having edges diverging from said fold lines and engaging the walls of the core when folded at an acute angle to the planes of the panels from which they are folded, said flaps extending into overlapping relation.

2. The structure of claim 1 and in which the overlapping ends of the flaps hold the flaps from returning to the planes of the panels from which they are folded.

3. The structure of claim 1 and in which the side edges of the flaps are curved to fit against the walls of the core when the flap ends are in overlapping relation.

4. A tape roll holder for holding a cylindrical roll having a hollow cylindrical core, the holder including a sleeve including four rectangularly arranged panels, two of which overlie the ends of said core, and a flap hingedly connected to each of said two panels along parallel lines of fold on opposite sides of the center of the core, the flaps extending beyond the core center and being folded into the core to extend diagonally across the core, the ends of the flaps overlapping and the ends of the flaps interengaging to hold the same from folding back to the plane of the panels from which they are connected, and edges on said flaps engaging the inner surface of said core.

5. The structure of claim 4 and in which the flap edges are curved to fit the contour of the core surface when in overlapped relation.

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