June 2, 1953 R. GUYER 2,640,657

TAPE DISPENSER

Filed Feb. 21, 1951

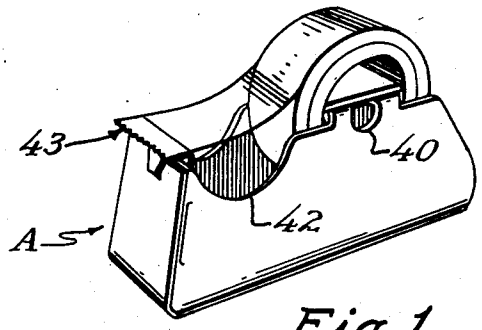


Fig. 1

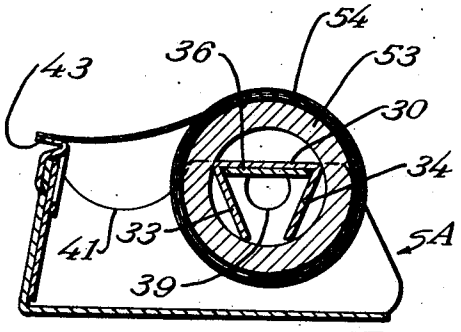


Fig. 2

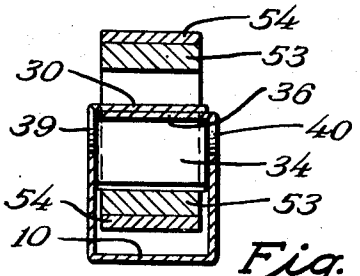


Fig. 3

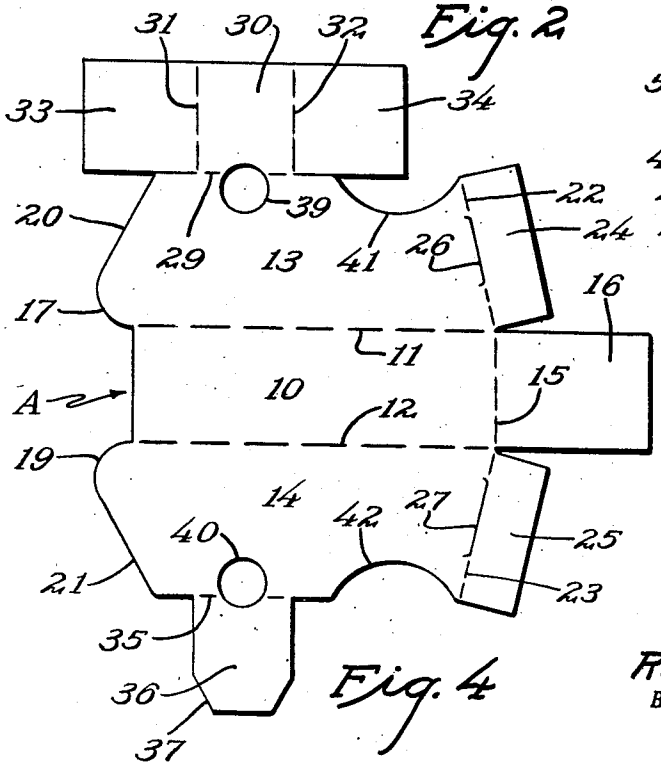


Fig. 4

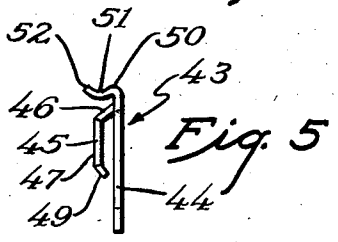


Fig. 5

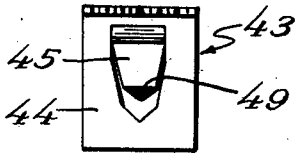


Fig. 6

INVENTOR.
Reynolds Guyer
BY
Robert M. Dunning
ATTORNEY

Patented June 2, 1953

2,640,657

UNITED STATES PATENT OFFICE

2,640,657

TAPE DISPENSER

Reynolds Guyer, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a corporation of Minnesota

Application February 21, 1951, Serial No. 212,174

6 Claims. (Cl. 242—55.5)

1

This invention relates to an improvement in tape dispenser and deals particularly with a support for a roll of pressure sensitive tape or the like which may be formed of paper or similar material.

Pressure sensitive tape is often sold in conjunction with a dispenser supporting the tape roll in such manner that the tape may be dispensed from the roll. In view of the fact that the complete unit is sold for a nominal sum, the dispenser must of necessity be produced at low cost. Thin sheet metal has often been used in the manufacture of such dispensers. The construction of the usual dispenser does not lend itself readily to the use of other materials, such as paperboard or the like.

An object of the present invention lies in the provision of a dispenser for pressure sensitive tape or the like which may be inexpensively produced of paperboard or the like. The construction of the dispenser is such that the roll of tape is rotatably supported so that it may be dispensed as required.

A feature of the present invention lies in the provision of a generally channel shaped body including a bottom panel and side wall panels between which the tape roll is supported. The side wall panels and the bottom panel are provided with overlapping flanges or flaps thereupon which may be folded into contacting relation. The thickness of stock thus produced may be secured together by a toothed cutting member of simple design. When thus produced the cutting member may serve to form a support for the tape and also to hold the body of the dispenser in proper relationship.

A feature of the present invention lies in the provision of a dispenser of channel shaped form including generally parallel side panels and in providing means for holding these panels in proper spaced relation. This means includes flaps or flanges on the side panels which extend toward one another in overlapping relation or in coplanar relation and in providing a flap or flange on the bottom panel of the channel which engages the side wall flaps or flanges in such a manner as to hold these parts in proper relation. Thus a rigid body is formed of relatively light paperboard.

An added feature of the present invention lies in the provision of a tape roll support including overlapping tongues which act to enter the core of the tape roll to support the same. These flaps or flanges extend inwardly from opposite side walls and are held in overlapping relation

2

by side flanges on one of the tongues which partially enclose the other of the tongues.

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

In the drawings forming a part of my specification:

Figure 1 is a perspective view of the dispenser with the tape roll supported thereby.

Figure 2 is a longitudinal section through the dispenser illustrated in Figure 1.

Figure 3 is a cross sectional view through the dispenser of Figure 1.

Figure 4 is a diagrammatic view of the blank from which the dispenser is formed.

Figure 5 is a side elevational view of the cutting element used in holding the dispenser assembled.

Figure 6 is a front elevation view of the cutting element shown in Figure 5.

The dispenser body is indicated in general by the letter A. As illustrated in Figure 4 of the drawings, the dispenser includes a bottom panel 10 which is connected along two generally parallel fold lines 11 and 12 to side wall panels 13 and 14 respectively. The bottom panel 10 is also connected along a fold line 15 to an end panel 16. The fold line 15 preferably extends at substantially right angles to the fold lines 11 and 12.

The side wall panels are usually tapered in form to enhance the appearance of the structure and to provide an elongated base upon which the dispenser may stand. The panels 13 and 14 are provided with rounded end portions 17 and 19 respectively which merge into inclined edge portions 20 and 21. The end panels 13 and 14 are also connected along inclined fold lines 22 and 23 to flaps or flanges 24 and 25 respectively. The fold lines 22 and 23 may if desired include cut portions 26 and 27 respectively to simplify the folding of these flaps.

The side panel 13 is connected at its upper edge along a fold line 29 to a finger or tongue 30. The tongue 30 is connected along paralled fold lines 31 and 32 to opposed flanges 33 and 34. The upper edge of the wall panel 14 is connected along a fold line 35 to a tongue or finger 36, preferably having a tapered extremity 37.

An aperture 39 is provided in the upper extremity of the wall panel 13 extending across the fold line 29. A similar aperture 40 is formed in the wall panel 14, the aperture 40 extending across the fold line 35. In folded condition of the dispenser, as illustrated in Figures 1 and 2 of the

drawings, these apertures 39 and 40 are in alignment and are located at approximately the center of the tape roll for a purpose which will be later described. The upper edges of the side wall panels 13 and 14 are also preferably notched as indicated at 41 and 42 respectively.

A cutting element 43 is supported by the dispenser body for use in cutting off the tape to the proper length. The cutting element 43 includes a panel 44 having a prong 45 struck therefrom. The prong 45 extends outwardly from the panel 44 as shown at 46 and the central portion 47 of the prong usually extends generally parallel to the panel 44. A pointed end 49 is provided on the prong, this pointed end inclining toward the panel 44. This prong 45 may be partially bent during the formation of the cutting element and may be further bent during the assembly of the dispenser to clamp certain portions of the dispenser together.

The panel 44 is connected along a rounded upper edge 50 to a trough shaped portion 51 which terminates in upwardly and outwardly inclined teeth 52. The tape is designed to bridge the trough-shaped portion 51 and to engage the rounded surface 50 so that the tape may be readily disengaged from the cutting element.

In the formation of the dispenser the flaps or flanges 33 and 34 are folded into converging relation as shown in Figure 2 of the drawings and the core 53 of the tape roll 54 is threaded over these angularly bent members. During this process the tongue 30 is folded into right angular relation with the wall panel 13.

The body is next folded along the fold lines 11 and 12 and the tongue 36 is inserted between the flanges 33 and 34 as best illustrated in Figure 2 of the drawings. The dimensions of the tongues 30 and 36 and of the flanges 33 and 34 are such as to rotatably support the core 53.

The flanges 24 and 25 are next folded into substantially coplanar relation with the free edges of these flanges abutting. The member 16 is next folded upwardly to overlie the flanges 24 and 25 so as to overlie and overlap these flanges. The cutting element 43 is next applied to the folded flanges. The prong extends into the material forming the flange 16 and the panel 44 overlies the inner surface of the flaps 24 and 25 and thus clamps the elements in proper relation. When in assembled form the cutting element is arranged with the teeth 52 directed away from the tape roll.

As the tape is unwound from the core 53 it is drawn over the cutting element 43 and by pulling downwardly upon the tape the teeth will perforate the tape so that it may be easily torn off. When this action takes place the tape is bridging the trough shaped portion 51 of the cutter so as to minimize the adhesive contact between the tape and this portion of the cutting element. The tape also bridges the notched portion of the side walls so that a finger may be inserted between the tape and the notches 41 and 42 so that the tape may be disengaged from the cutting element and unrolled and dispensed.

The apertures 39 and 40 are located at approximately the center of the tape core 53 and are provided at this location so that the dispenser may be easily grasped. In view of the fact that the dispenser is formed of paperboard or similar material, it is extremely light in weight and therefore usually should be held between the thumb and a finger of one hand while the tape is being unrolled and cut off by manipulation of the other hand. The apertures 39 and 40 act to center the location of the tips of the finger and thumb while grasping the dispenser and so that the side wall panels 13 and 14 will not be pressed against the sides of the tape roll to hold the tape roll from rotating. As the tongue 36 engages the opposite side wall panel 13 and as the edges of the flanges 33 and 34 bear against the side wall panels 13 and 14, considerable clamping pressure may be applied at the location of the apertures 39 and 40 without locking the tape roll from rotation.

In accordance with the patent statutes, I have described the principles of construction and operation of my tape dispenser, and while I have endeavored to set forth the best embodiment 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 dispenser including a channel shaped body including a base and generally parallel sides connected to opposite edges thereof, a pair of flaps foldably connected to said side panels and extending toward each other in opposed relation, a flap on said bottom panel foldable over said first named flaps, means securing said flaps together, and tape roll supporting means on said side panels.

2. The structure described in claim 1 and in which the means holding the flaps together comprises a cutting element.

3. A tape dispenser including a channel shaped body including generally parallel sides and a connecting base, means connecting said sides at one end thereof, the connecting means including opposed flanges on said sides at one end thereof and a flap connected to said base and folded into overlapping relation with said flaps, means for holding said flanges and said flap together, and tape roll supporting means on said sides for supporting the tape roll between said sides.

4. The structure described in claim 3 and in which the means for holding said flap to said flanges comprises a cutting element.

5. A tape dispenser for a tape roll including a channel shaped body having generally parallel sides and a connecting base, means connecting said sides to hold said sides in parallel relation, a tongue extending inwardly from one of said sides toward the other side, and a tongue on the other of said sides extending toward the first named side and into contact therewith, said tongues being spaced from the base and from the connecting means and rotatably supporting a roll of tape encircling the same.

6. The structure described in claim 5 and including a tape cutting element secured to said means connecting said sides.

REYNOLDS GUYER.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
2,369,958	Fox	Feb. 20, 1945