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DISPENSER FOR ADHESIVE TAPE

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Fig. 1.

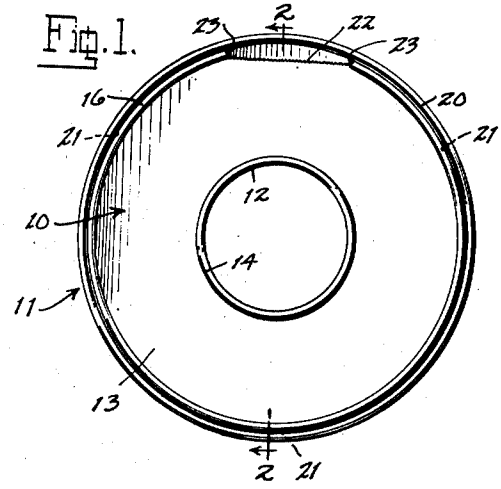


Fig. 2.

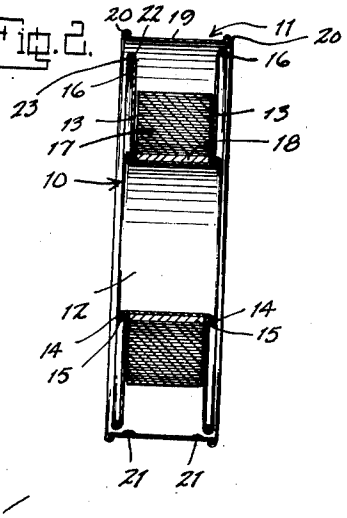


Fig. 3.

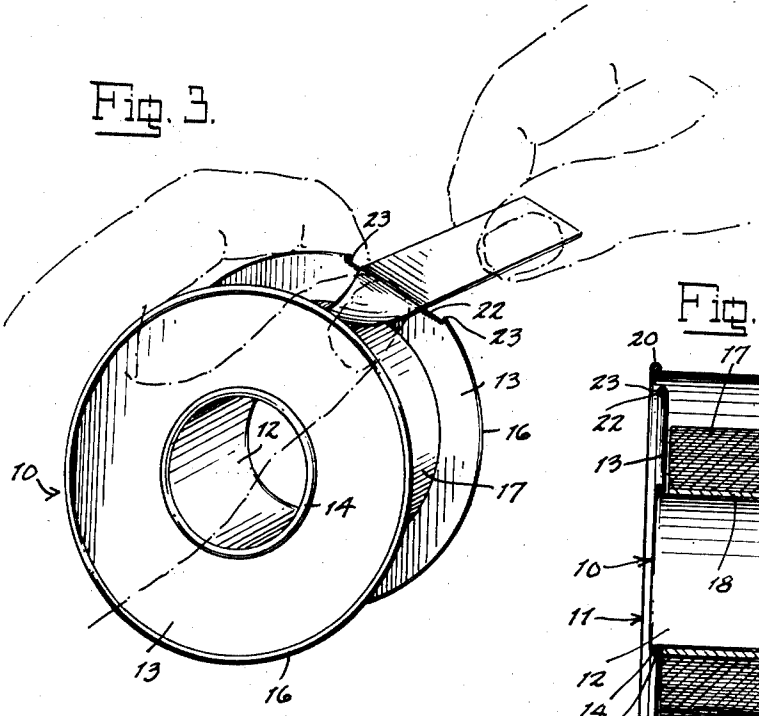
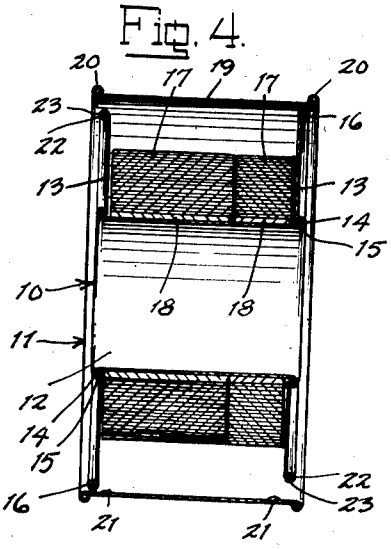


Fig. 4.



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DISPENSER FOR ADHESIVE TAPE

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2 Claims. (Cl. 206—59)

This invention relates to a dispenser for adhesive tape, particularly of the type consisting of a flanged spool upon which the tape is wound and a cylindrical cover band removably engaged about the periphery of the spool.

In the normal use of such dispensers heretofore, the cover band is first removed from the spool for the purpose of unwinding a length of tape therefrom, and thereupon the length of tape is usually severed by tearing it between the fingers or cutting it with a pair of scissors.

It is proposed in the present invention to provide a cutting means for the tape incorporated in the side flange of the spool, such cutting means consisting of a straight cutting edge integrally formed with the side flange in such relation that, in the closed condition of the spool with the cover band in place, the cover band constitutes a protective covering for the cutting edge so that there is no danger of cutting the hands during handling of the dispenser.

While tape severing means have been heretofore employed in connection with such tape dispensers, these have usually involved a number of moving parts, attachments, etc., which were both complicated and expensive and therefore their use has been prohibitive where it has been necessary to maintain the relatively inexpensive cost of the dispenser.

It is therefore an object of the invention to provide a cutting means which will not add appreciably to the cost of the dispenser, and this is accomplished in the present invention by providing the cutting edge as an integral part of the flange of the spool, the flat form of the flange lending itself to the production of a straight cutting edge having sharp cutting teeth by means of which a positive and straight severing of the tape is made possible. This arrangement also enables the severing operation to be conveniently carried out by holding the spool in one hand and pulling the length of tape to be severed with the other hand, the inner surface of the flange beneath the cutting edge providing an anchoring surface against which the tape may be pressed by the thumb of the hand holding the spool, and thus enabling a positive severing of the length of tape by pulling it across the cutting edge with the hand gripping the length of tape. The relationship of the cutting edge on one flange to the opposed flange is also such that the holding of the tape during the severing operation is carried out without discomfort or the possibility of cutting the fingers, the smooth curled edge of the opposed flange providing a support upon which the thumb may be rested as the end of the thumb is pressed firmly against the tape in relation to the cutting edge.

In a modification of the invention it is proposed to provide a spool carrying a plurality of widths of tape, and according to this modification each of the flanges is provided with cutting means for the respective widths of tape. In order to provide cutting edges upon both flanges of the spool, and at the same time provide smooth supporting surfaces upon the flanges laterally opposed to the cutting edges for protection of the hand holding the spool, it is proposed to provide the cutting edge upon one flange in angularly offset relation to the cutting edge on the other flange, for instance, 180° apart.

Other objects and advantages of the invention will become apparent from a consideration of the following detailed description taken in connection with the accompanying drawing wherein a satisfactory embodiment of the invention is shown. However, it is to be understood that the invention is not limited to the details disclosed

but includes all such variations and modifications as fall within the spirit of the invention and the scope of the appended claims.

In the drawing:

Fig. 1 is a side elevation of the dispenser for adhesive tape according to the invention, the spool and cover band member being shown in assembled relation;

Fig. 2 is a vertical sectional view taken along the line 2—2 of Fig. 1;

Fig. 3 is a perspective view showing the spool removed from the cover band and showing the length of tape carried across the cutting edge preparatory to cutting it, the hands holding the spool and the length of tape to be severed being shown in dot-and-dash lines; and

Fig. 4 is a vertical sectional view similar to Fig. 2 showing a modification of the invention in which a plurality of widths of tape are provided upon a single spool.

Similar reference characters indicate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, the dispenser for adhesive tape, according to the illustrated exemplary embodiment of the invention shown in Figs. 1–3, comprises a roll or spool member, indicated generally as **10**, and a cover band member, indicated generally as **11**, into which the roll member is adapted to fit. These members are both preferably formed of sheet metal, although they may be formed of plastic or other suitable material. The roll member comprises a central cylindrical hub member **12** and side flanges **13—13** secured upon the hub by curled beads **14—14** of the latter engaged about the inner peripheral edges of the flanges which, for this purpose, are bent outwardly to a slight degree as at **15**. The outer peripheral edges of the side flanges are provided with curled beads **16—16**. A tape roll **17** is wound about a cylinder roll **18** of cardboard or the like which, in turn, is rotatably carried upon the hub **12** to thus facilitate the unwinding of the tape.

The cover band member **11** comprises a cylindrical band portion **19** provided at its edges with outwardly projecting curled beads **20—20**. The roll member is yieldably and rotatably retained within the band member by pairs of inwardly projected bosses **21** provided at suitably spaced points and which snap into engagement at the inner sides of the flanges of the roll member when the latter is pressed into engagement with the band member.

According to the invention, at least one of the flanges **13** of the spool member is provided with a straight cutting edge **22**, preferably of sharp toothed form, extended as a chord between two spaced points of the peripheral edge of the flange. The terminal ends **23—23** of the bead **16** constitute shouldered ends for the cutting edge **22** so that when the tape to be severed is positioned upon the cutting edge it will be prevented from slipping off of the cutting edge during the severing operation in the event that it is not held with sufficient firmness.

As clearly shown in Fig. 3, a length of tape is drawn from the roll **17** by holding the spool member in one hand and drawing the length of tape with the other hand, the free rotation of the cylinder **18** about the hub **12** permitting the tape to be pulled off the roll at a point in proximity to the cutting edge. When the desired length of tape has been pulled off, it is folded back across the cutting edge with the sticky side of the tape at the upper side and the non-sticky side against the cutting edge. The thumb of the hand holding the spool member is pressed against the tape at the inner side of the cutting edge so that it may be firmly held against the inner side of the flange **13**, and thereupon the length of tape gripped by the other hand may be readily severed across the cutting edge. By arranging the direction of winding of the tape in relation to the cutting edge such that the non-sticky side will engage the cutting edge, the adhesive upon the tape is prevented from packing into the cutting edge teeth and also the end of the tape at the inner side of the cutting edge is free to be readily re-engaged about the tape roll.

In Fig. 4 there is shown a modification in which the spool member is of sufficient width to accommodate a plurality of rolls of tape **17** of different widths, for in-

stance, the illustrated dispenser shows one roll of tape of 1" width and another roll of tape of ½" width. Each flange **13** is provided with a cutting edge **22**, and in order that the opposite flange will present a smooth bead surface to protect the hand holding the spool member as the thumb is pressed at the inner side of the cutting edge, the cutting edge upon one flange is angularly removed 180° from the cutting edge on the other flange.

While two widths of tape are shown, it will be understood that the single spool may also have additional rolls, in which case the intermediate roll or rolls will have the tape severed by engaging the cutting edge of either of the flanges.

What is claimed is:

1. In a dispenser for adhesive tape, a hub, a pair of parallel annular flanges fixed to the respective ends of said hub, and a tape roll comprising a wound strip of adhesive tape rotatably mounted on said hub whereby a length of said strip may be drawn radially from said roll laterally opposite one point of said flange through rotation of said roll relatively to said hub and flange as the latter are held in the hand against rotation, at least one of said flanges having at its outer periphery at a point coinciding with said one point and in the plane of the flange a radially outwardly disposed tape cutting sharpened edge extending along a straight line chord between spaced points of its periphery and of a length at least equal to the width of said tape, and the periphery of said flange extending from one end of said cutting edge about said flange to the other end of said cutting edge being a continuously circumferential edge free of cutting sharpness and adapted to be gripped by the hand to hold said hub and flange against rotation as said tape roll is rotated, said drawn length of tape adapted to be placed over said cutting edge with a straight transverse line of said tape in engagement therewith for severing along said straight transverse line.

2. In a dispenser for adhesive tape, a hub, a pair of parallel annular flanges fixed to the respective ends of said hub, a pair of tape rolls each comprising a wound strip of adhesive tape rotatably mounted on said hub, one adjacent each flange, whereby a length of said strip may be drawn radially from each of said rolls laterally opposite one point of said flange adjacent thereto through rotation of each of said rolls relatively to said hub and flange as the latter are held in the hand against rotation, each of said flanges having at its outer periphery at a point coinciding with said one point and in the plane of the flange a radially outwardly disposed tape cutting sharpened edge extending along a straight line chord between spaced points of its periphery and of a length at least equal to the width of the tape of said tape roll adjacent thereto, and the periphery of said flange extending from one end of said cutting edge about said flange to the other end of said cutting edge being a continuously circumferential edge free of cutting sharpness and adapted to be gripped by the hand to hold said hub and flange against rotation as said tape roll is rotated, said drawn length of tape adapted to be placed over said cutting edge with a straight transverse line of said tape in engagement therewith for severing along said straight transverse line of said tape, the cutting edge of one flange being angularly offset from the cutting edge of the other flange whereby the edge of one flange laterally opposite the cutting edge of the other flange is free of cutting sharpness.

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