

April 3, 1951

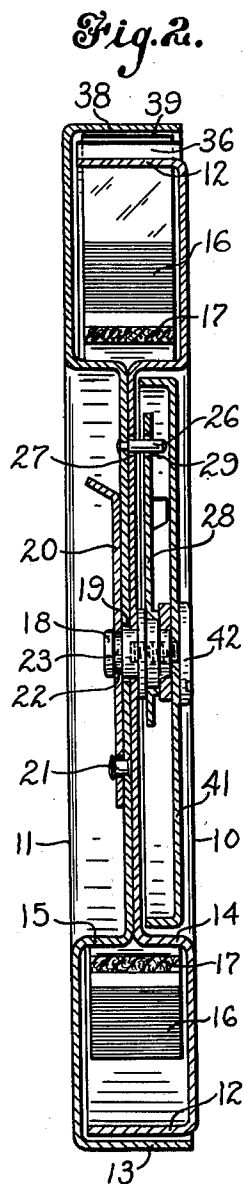
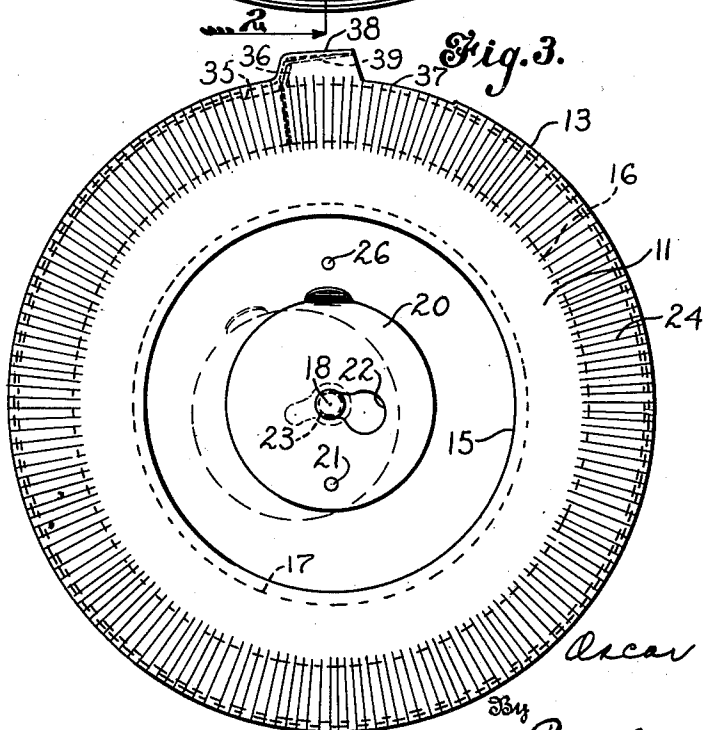
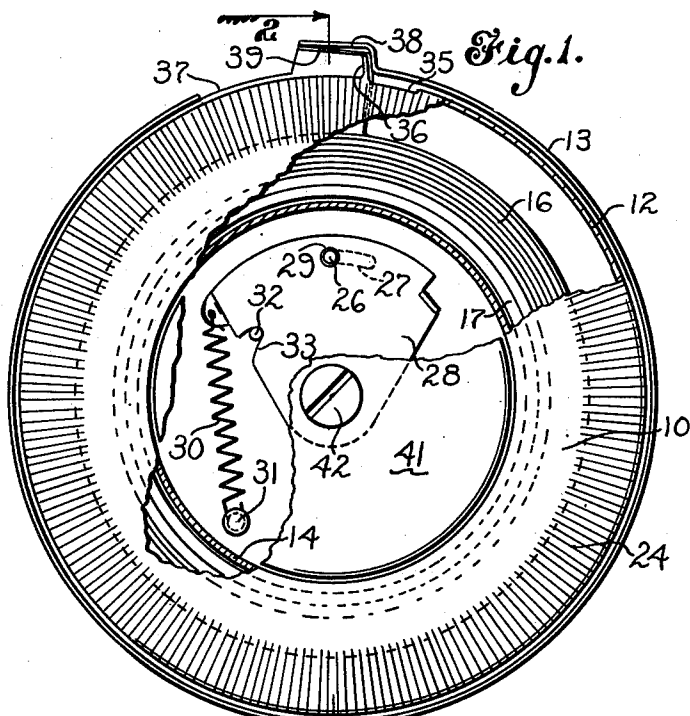
O. P. ERHARDT

2,547,569

TAPE DISPENSER

Filed Sept. 4, 1948

2 Sheets-Sheet 1



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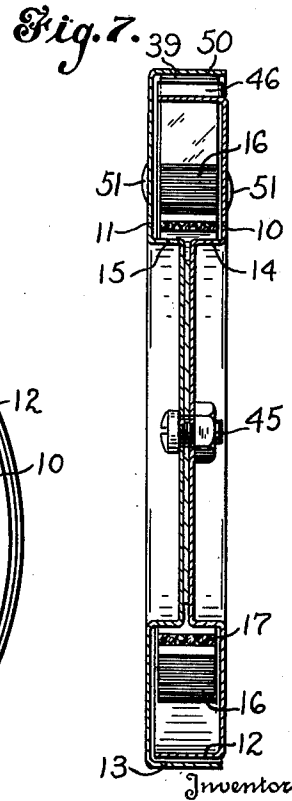
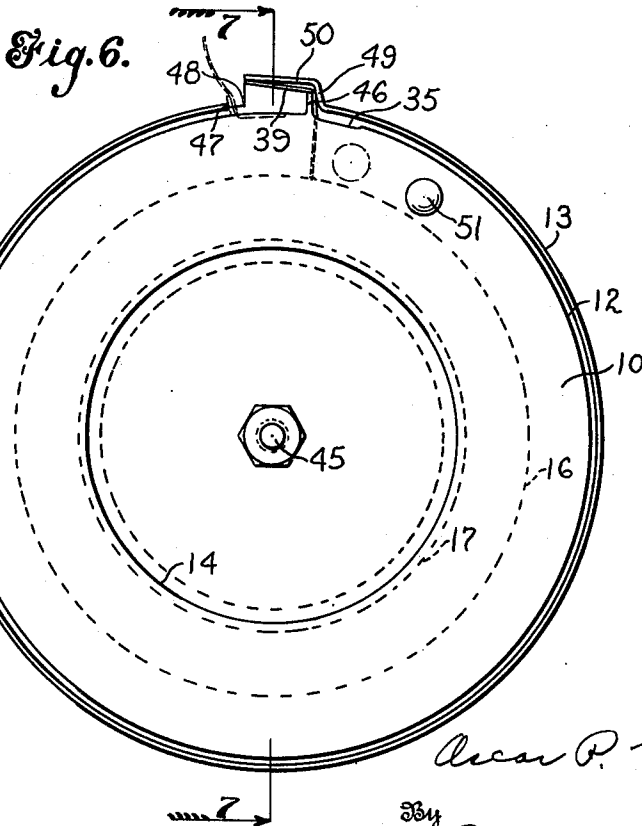
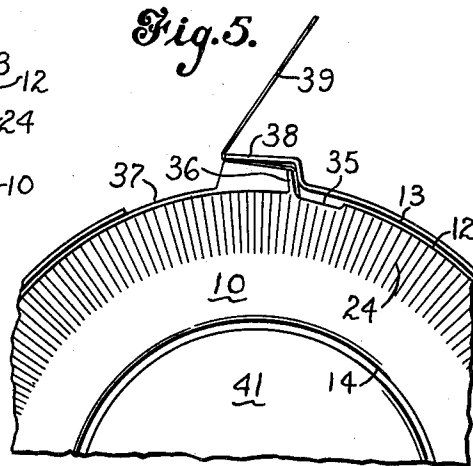
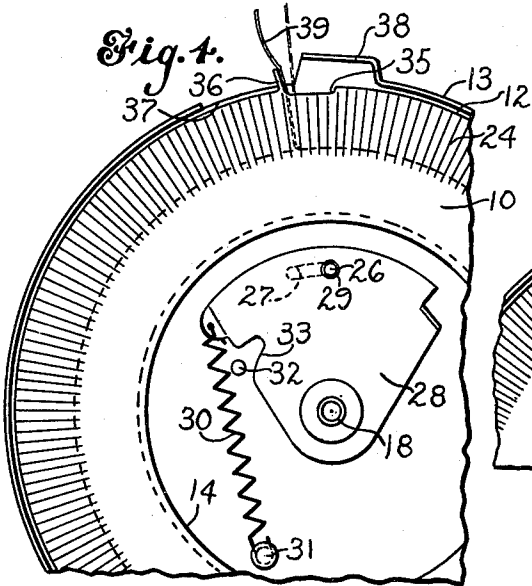
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TAPE DISPENSER

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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TAPE DISPENSER

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9 Claims. (Cl. 206—52)

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This invention relates to a tape dispenser and, more particularly, to a dispenser for use with so-called Scotch tape which is tacky or clingable upon one side.

Such tape ordinarily is sold in rolls, the roll being of relatively large diameter as compared to the width of the tape so that it is in the shape of a relatively flat cylinder. Such rolls are ordinarily sold in a metal package or container and they are usually removed from the container and placed in a dispensing device of some character, so that the tape may be conveniently unwound from the roll and severed or torn off in the desired lengths in which it is to be used. The most common dispensers of this type are those which are intended to be mounted or rest upon a table, desk, or other flat surface.

There are, however, certain advantages in a dispenser which may be of relatively small size and which will be very little larger than the size of the roll of tape itself, so that it may be conveniently held in the hand and the tape dispensed therefrom.

Also, it is desirable to provide a combined tape package and dispenser, or to provide a package or container in which a roll of tape may be placed and sold, the container being provided with a slot or opening through which the tape may be drawn to unwind it from the roll, and also provided with a severing device by which it may be severed when a sufficient length has been unwound.

One object of the present invention is to provide a tape dispenser of relatively small size and of light weight so that it may be readily held in the hand.

A further object of the invention is to provide a tape dispenser of substantially the size and shape of the supply roll of tape so that it will add very little to the size of the latter when the two are assembled.

A still further object of the invention is to provide a tape dispenser of the character above described which shall have an opening through which the tape may be drawn and a tape-end support adjacent this opening so that a free end of the tape may cling to this support and project from the case of the dispenser in a position to be grasped by the fingers of the operator.

A still further object of the invention is to provide a tape dispenser of the character just described which shall be provided with a severing member movably mounted with respect to the tape-end support so that the severing member may be moved to a position in which it covers

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the support and the opening through which the tape emerges, or may be moved to a position in which the opening and the tape-end support are covered.

Still another object of the invention is to provide a dispensing case which may be readily held in the hand and within which a roll of tape may be supported, the case being formed of two parts movable relatively to each other about an axis at substantially the center of the case, one part of the case being provided with an opening through which the tape may emerge, and a tape-end support adjacent said opening, and the other part of the case being provided with a severing edge which may be moved to a position to cover or expose the opening and support as desired.

To these and other ends the invention consists in the novel features and combinations of parts to be hereinafter described and claimed.

In the accompanying drawings:

Fig. 1 is a bottom plan view of a dispenser embodying my invention, with some parts broken away;

Fig. 2 is a sectional view on line 2—2 of Fig. 1;

Fig. 3 is a top plan view of the dispenser shown in Fig. 1;

Fig. 4 is a plan view similar to Fig. 1 with some parts removed and the mechanism being shown in the open position assumed when the tape is being dispensed;

Fig. 5 is a fragmentary elevational view similar to Fig. 1 showing the tape being torn off against the edge of the severing member;

Fig. 6 is a view similar to Fig. 1, but showing a modified form of the dispenser; and

Fig. 7 is a sectional view on line 7—7 of Fig. 6.

To illustrate a preferred embodiment of my invention, I have shown in Figs. 1 to 5 of the drawings a dispenser which comprises a case of substantially the shape and size of a roll of tape. This case consists of two parts, one part 10 may be considered the bottom of the case, while the part 11 may be considered as the top or cover, and, as will be seen from Fig. 2, the part 10 of the case is designed to telescope into the part 11. The bottom portion is provided with a peripheral flange 12, while the upper part is likewise provided with a flange 13 the flange 12 lying within the flange 13 when the two parts of the case are assembled.

Each part of the case is depressed at its central portion so as to provide an annular internal shoulder 14 on the bottom portion 10 and an annular internal shoulder 15 on the cover 11, these two shoulders forming a circular supporting hub

for the supply roll 16 of tape. It will be seen from Figs. 1 and 2 of the drawings that there is sufficient space provided between these annular shoulders and the flanges or peripheral edge portions 12 and 13 to accommodate the supply roll of tape 16 which is wound upon the spool 17.

A pin 18 is secured to the lower portion 10 of the case, which pin projects through an opening 19 in the upper portion or cover and, in order to secure the two parts of the case together, a disk-shaped member 20 is pivoted to the cover at 21 and provided with a keyhole slot 22, the edges of which may be received in an annular recess 23 in the pin 18.

It will be apparent from Fig. 3, that when the disk 20 is in the full-line position, the edges of the smaller end of the slot 22 are received in the groove 23 and the two parts of the case are locked together. However, when this disk is moved to the dotted-line position shown in this figure the end of the pin 18 will register with the larger end of the keyhole slot 22 and will pass through this end of the slot so that the cover 11 may be readily removed from the lower or bottom portion 10, in order that a new roll of tape may be inserted.

It will be apparent that, while the two portions of the case are thus detachably secured together so that they will not accidentally become detached, they are movable or rotatable, one with respect to the other, about the pin 18 which, as shown, is at the center of the case. In order that the operator may hold the device in one hand and readily rotate one part with respect to the other, each portion of the case is provided with a roughened or knurled surface 24, so that the parts of the case may be readily grasped by the fingers and rotated when desired. The relative movement of one part of the case with respect to the other is limited, however, to a small angle, by a pin 25 secured to the upper part 11, this pin being received in an arcuate slot 27 in the bottom portion 10 of the case.

Also, means may be provided to normally hold the parts in the closed position shown in Fig. 1. In the present instance, this means takes the form of a quadrant 28 pivoted on the pin 18, this quadrant having an opening 29 to receive the pin 26. The quadrant is mounted adjacent the bottom portion 10 of the case and is connected to this portion of the case by a spring 30, one end of which is secured to the quadrant and the other end secured to a pin 31 on the bottom portion 10. This spring normally urges the quadrant in a counterclockwise direction with reference to Fig. 1 and the movement of the quadrant in this direction is limited by a stop pin 32 secured on the part 10 which is received in a recess 33 in the quadrant. It will be seen, therefore, with this arrangement, that, when the parts are moved relatively to each other from the position shown in Fig. 1, the quadrant 28 will be moved in a clockwise direction until the pin 26 is at the other end of the slot 27, as shown in Fig. 4. When the parts are released, they will be returned to the position shown in Fig. 1 by the spring 30.

The flange 12 on the cover of the case is provided with a relatively small slot or opening 35 through which the tape may be drawn, and adjacent this slot is a radially or outwardly projecting lip 36 which provides a tape-end support to which the tacky side of the tape may cling as shown more especially in Figs. 1, 4 and 5.

Adjacent this lip, the flange 13 of the cover is provided with an opening 37 through which the

lip 36 may protrude and adjacent one end of this opening the metal of the flange is displaced outwardly, as shown at 38, so that the lip or support 36 may pass under this portion of the flange, as shown in Fig. 1. The edge of the part 38 is preferably somewhat sharp and serves as a tear off or severing blade against which the tape may be severed, as shown, for example, in Fig. 5.

A cup-shaped cover 41 may be secured to the pin 18 by the screw 42, this cover lying within the depressed portion of the section 10 of the casing and covering the quadrant 28 and spring 30.

The normal position of the parts of this form of dispenser is shown in Fig. 1, where the free end 39 of the tape is shown as extending from the roll over the lip 36, with which the tacky side of the tape is engaged, and then circumferentially of the case along the lower surface of the severing member 38, the extreme edge being substantially flush with the severing edge.

When it is desired to secure a length of tape from the roll, the operator, by holding the dispenser case in one hand with the thumb on the knurled portion of one section and the forefinger on the knurled part of the other section, may rotate one section relatively to the other about the pin 18, as permitted by the slot 27 and pin 25, from the position shown in Fig. 1 to the position shown in Fig. 4. In the latter position, it will be noted that the quadrant 28 has also been rotated in a clockwise direction and the spring 30 placed under tension. Also, the tape-end support 36 has been uncovered by the severing device 38 and the free end 39 of the tape exposed so that it may be readily grasped by the fingers.

The free end of the tape is then grasped and pulled outwardly, thus unwinding the tape from the supply roll 16. When a sufficient length has been drawn from the supply roll, the parts of the case are released so that they may be returned to their original position by the spring 30, as shown, for example, in Fig. 5. In this position the tape-end support 36 is again covered by the severing member 38 and it will be noted that there is a length of tape between the tape-end support and the severing edge of the member 38 substantially equal to the length of the inner surface of the latter. It will be understood that the tacky side of the tape is engaged with the tape-end support and the nontacky side engages the severing member. The tape may now be torn off against the extreme edge of the member 38, as shown in Fig. 5.

In Figs. 6 and 7 of the drawing, I have shown a slightly modified form of my invention. The principal difference is that the quadrant 28, spring 30, and associated parts, have been omitted. In this device, the dispenser comprises a supporting container having the two sections 10 and 11 as before, arranged to carry between them the supply roll of tape 16. In this instance, the two parts or sections of the case are held together by the bolt 45 so that they may be rotated as permitted by the tape-end support 46 on one section of the case, and the edge 47 of the opening 48 on the other section, and the shoulder 49 of the severing member 50. The rotation is effected manually in both directions, and, instead of knurling the two sections of the case as illustrated in the previous modification, each section is provided with a raised boss 51 which may be engaged respectively by the thumb and forefinger of the hand in which the case is held. Otherwise, the device is substantially the same as illustrated in Figs. 1 to 5 of the drawings.

While I have shown and described some preferred embodiments of my invention, it will be understood that it is not to be limited to all of the details shown, but is capable of modification and variation within the spirit of the invention and within the scope of the claims.

What I claim is:

1. A Scotch-tape dispenser comprising a container for supporting a roll of tape having an opening through which the tape is drawn, a tape-end support carried by the container to which the free end of the tape is adapted to cling, said support projecting outwardly from the container to support the free end of the tape in a position spaced from the container, severing means, and means movably mounting said severing means on the container for movement to and away from a position in which it covers said opening and projects beyond said end support.

2. A Scotch-tape dispenser comprising a container for rotatably holding a roll of tape, said container having an opening through which the tape issues as it is drawn from the roll, a tape-end support carried by the container adjacent said opening to which the tacky side of the tape clings, said support projecting outwardly from the container to support the free end of the tape in a position spaced from the container, a severing member, and means movably mounting said member for movement to and from a position in which it projects beyond said tape-end support and covers said opening.

3. A dispenser as in claim 2 wherein the container comprises two relatively movable sections, the tape-end support being on one section and the severing member being carried on the other section.

4. A Scotch-tape dispenser comprising a container composed of two nesting sections each of said sections being of substantially circular shape and having a peripheral flange, means connecting said sections for relative rotating movements with the flange of one part lying within the flange of the other, supporting means within the container for rotatably holding a roll of tape, a tape-end support projecting outwardly from one of said sections, and a severing member on the other section lying outwardly of, and normally covering said support.

5. A Scotch-tape dispenser comprising a container composed of two nesting sections each having a flange, means connecting said sections for relative rotating movements with the flange of one part lying within the flange of the other, supporting means within the container for rotatably holding a roll of tape, the inner flange having an opening therein to permit the tape to pass therethrough, and a tape-end support adjacent said opening, and the outer flange having a part displaced upwardly to provide a severing member and being movable with its supporting section to positions to cover and uncover said opening and tape-end support.

6. A Scotch-tape dispenser comprising a container composed of two nesting sections each having a flange, means connecting said sections for relative rotating movements with the flange of one part lying within the flange of the other, supporting means within the container for rotatably holding a roll of tape, the inner flange having an opening therein to permit the tape to pass therethrough, a tape-end support adjacent said opening, the outer flange having a part dis-

placed upwardly to provide a severing member and being movable with its supporting section to positions to cover and uncover said opening and tape-end support, and a spring normally urging said sections to one of said positions.

7. A Scotch-tape dispenser comprising a container composed of two nesting sections each having a flange, means connecting said sections for relative rotating movements with the flange of one part lying within the flange of the other, supporting means within the container for rotatably holding a roll of tape, the inner flange having an opening therein to permit the tape to pass therethrough, a tape-end support adjacent said opening, the outer flange having a part displaced upwardly to provide a severing member and being movable with its supporting section to positions to cover and uncover said opening and tape-end support, and a spring secured to one of said sections and operatively connected to the other section to urge the latter to the position in which said tape-end support is covered.

8. A Scotch-tape dispenser comprising a container composed of a pair of mating sections, each having a circular body portion and a peripheral flange, said sections being adapted to be rotatably secured together with the flange of one lying within the flange of the other, means within the container to rotatably support a roll of tape, the inner of said flanges having an opening through which the tape may be drawn, a tape-end support adjacent said opening, the outer of said flanges having an opening within which said tape-end supporting member is disposed, a severing member displaced outwardly from the body of the flange, said severing member being adapted in one position to cover said opening and said tape-end supporting member, and spring means for urging said member to said position.

9. A Scotch-tape dispenser comprising a container composed of a pair of mating sections, each having a circular body portion and a peripheral flange, said sections being adapted to be rotatably secured together with the flange of one lying within the flange of the other, means within the container to rotatably support a roll of tape, the inner of said flanges having an opening through which the tape may be drawn, a tape-end support adjacent said opening, the outer of said flanges having an opening within which said tape-end supporting member is disposed, a severing member displaced outwardly from the body of the flange, said severing member being adapted in one position to cover said opening and said tape-end supporting member, and spring means for urging said member to said position, said severing member being rotatable to position to uncover said tape-end support and thereby leave exposed a free end of the tape to be grasped by the operator.

OSCAR P. ERHARDT.

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