Jan. 24, 1939. R. M. WELCH 2,144,999

ADHESIVE TAPE SPOOL HOLDER AND CUTTER

Filed June 1, 1937

Fig. 1.

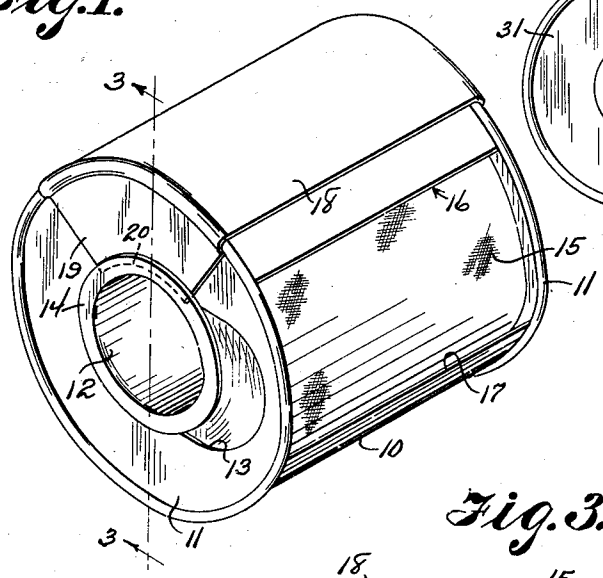


Fig. 6.

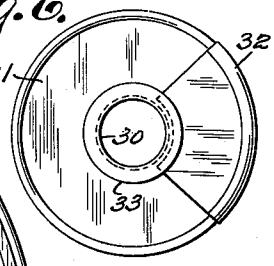


Fig. 2.

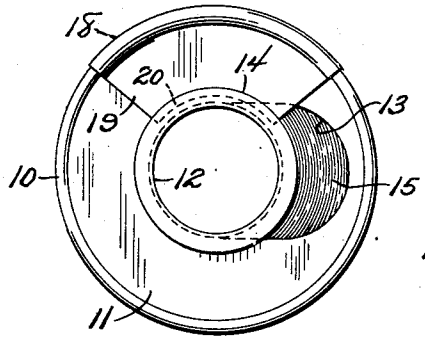


Fig. 3.

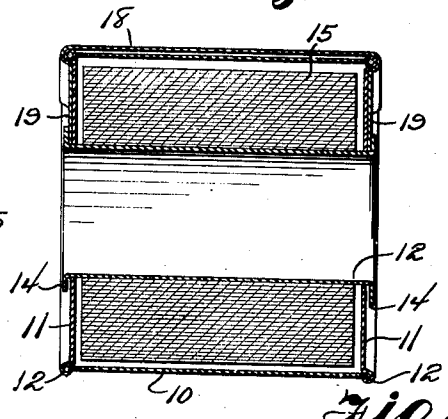


Fig. 4.

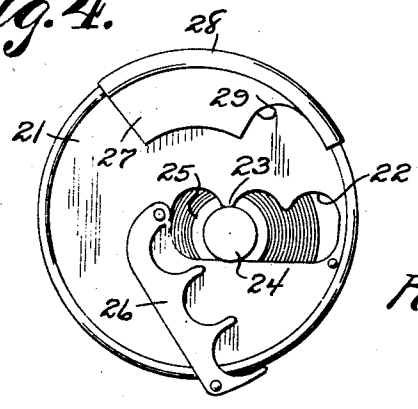
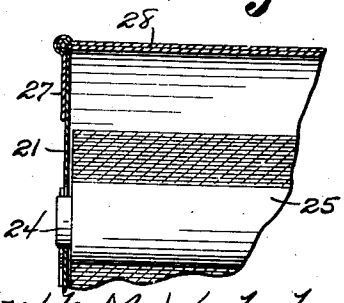


Fig. 5.



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ADHESIVE TAPE SPOOL HOLDER AND CUTTER

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Application June 1, 1937, Serial No. 145,859

3 Claims. (Cl. 206—52)

The invention relates to a tape container and cutter and more especially to an adhesive tape spool holder and cutter.

The primary object of the invention is the provision of a device of this character, wherein the tape carrying spool for adhesive tape or other similar material is rotatably supported within a container or housing so that on pulling the required length of tape therefrom the spool will rotate during the pulling and such required length of tape cut in an easy and convenient manner, the unrolling of the tape from the spool being easily effected and will run smoothly from such spool.

Another object of the invention is the provision of a device of this character, wherein the spool will be permitted to approach the outlet opening in the housing as the size of the roll decreases thereby enabling the easy and convenient cutting of the length of tape on the pulling of the same out of the container or housing.

A further object of the invention is the provision of a device of this character, wherein the uncoated side of the tape is fed by unrolling from a rotatable spool to the cutting edge of the housing so that a determined length of tape can be conveniently and easily cut, the tape when rolled on the spool is confined within the housing so as to render it sanitary and free from catching dust or dirt, particularly when the device is not in use and stored.

A still further object of the invention is the provision of a device of this character, which is simple in construction, thoroughly reliable and effective in its operation, convenient for the easy handling of the adhesive tape and the cutting thereof, strong, durable, and inexpensive to manufacture.

With these and other objects in view, the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawing, which discloses the preferred and modified forms of embodiment of the invention and pointed out in the claims hereunto appended.

In the accompanying drawing:

Figure 1 is a perspective view of a device constructed in accordance with the invention, the housing being open for the dispensing of adhesive tape from the spool within.

Figure 2 is an end elevation.

Figure 3 is a sectional view on the line 3—3 of Figure 1 looking in the direction of the arrows.

Figure 4 is an end elevation of a slight modification.

Figure 5 is a fragmentary vertical longitudinal sectional view through the same.

Figure 6 is an end view of a further modification.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail, particularly Figures 1 to 3 inclusive, the device comprises a cylindrical housing 10 preferably made from sheet metal having the end heads 11, these being overlap seamed at 12 to opposite ends of the cylindrical body portion of said housing 10 to form a unitary structure. Contained within the housing 10 is a tubular spool 12 journaled in elongated bearing openings 13 in the heads 11 and this spool at opposite ends has an out-turned annular flange 14 formed or bent therefrom so as to prevent lateral play of said spool 12 within the housing. This flange 14 holds the said spool 12 rotatably fitted with the housing and at the same time the said spool is susceptible of displacement from the normal center position in the housing close to the cylindrical body in a radial direction from the said center. Adapted to be wound on the spool is the adhesive tape 15 with the adhesive surface innermost. This tape at the outer end is pulled through an opening 16 formed in the body of the housing 10 so that the smooth uncoated or sticky side of the tape can be brought against a cutting edge 17 following one side of the opening 16 for the severance of a determined length of tape from the roll carried by the spool 12. This cutting edge 17 when contacting with the tape and a drawing action exerted against the tape causes the cutting edge 17 to shear or cut the tape.

Swingingly fitted exteriorly upon the housing 10 is a closure cover 18 for the opening 16 and this cover has at each end a segmental shaped wing or ear 19 provided with the rounded edge 20 next to the bearing opening 13 and this rounded edge 20 follows the cylindrical formation of the spool 12. The cover 18 is adapted to swing about the housing 10 exteriorly thereof when uncovering the opening 16 so that the tape 15 can be pulled through said opening and unwound from the spool 12. It is necessary to swing the cover 18 to a position diametrically opposite the opening 16 when it is desired to have the spool 12 slide in the bearing opening 13 for approach to the peripheral area of the housing 10 particularly when the roll becomes

considerably decreased on the spool and in this manner facilitating the easy cutting of the tape into a desired length when dispensed from the housing.

In Figure 4 of the drawing there is shown a slight modification wherein in each end head 21 of the housing is the bearing opening 22 having a fluted edging 23 forming a plurality of seats for the journal 24 of the spool 25 rotatably held within the housing. Pivoted to the end head 21 is a racking keeper 26 for retaining the journal 24 in a selected notch or flute of the edging 23 to avoid displacement of the spool 25 when so seated. Each wing 27 of the cover 28 is provided with a clearance notch or recess 29 for the journal 24 of the spool so that when the cover 28 is in closed position the spool will be centered in the housing and retained in this position.

In Figure 6 of the drawing there is shown a further modification wherein the spool 30 is permanently journaled centrally in the housing 31 and the swinging cover is denoted at 32 for the outlet opening for the adhesive tape wound upon the spool. The spool 30 at each end is formed with the annular flange 33 to prevent lateral displacement of such spool when rotated.

Each wing 19 of the cover 18 and also of the cover 32 is overlapped by the flanges 14 and 33 as will appear from Figures 1, 2 and 6 of the drawing.

The spool is the rotating axle for the roll of tape carried thereby and is journaled in the end heads of the said housing constituting the container for the tape.

What is claimed is:

1. The combination with a cylindrical housing having a side opening and end heads, a tape spool having its ends journaled in said end heads and provided with outturned annular end flanges overlapping the end heads, and a cover member swingingly fitted with the said body for the said side opening, the said end heads being provided with elongated slots affording slide ways for the said spool for the approach of the latter toward and away from the said body in the direction of the side opening and simultaneously closed by the said cover member when the latter closes the side opening.

2. The combination with a cylindrical housing having a side opening and end heads, a tape spool having its ends journaled in said end heads and provided with outturned annular end flanges overlapping the end heads, a cover member swingingly fitted with the said body for the said side opening, the said end heads being provided with elongated slots affording slide ways for the said spool for the approach of the latter toward and away from the said body in the direction of the side opening and simultaneously closed by the said cover member when the latter closes the side opening, and means for latching the spool in adjusted position in said slots.

3. The combination with a cylindrical housing having a side opening and end heads, a rotary tape spool normally centered in said end heads, said heads having ways for movement of the spool from normal central position in the housing radially toward the peripheral area of said housing, one edge of said opening being formed with a cutting edge, a cover member swingingly fitted with the said housing for the closing of the side opening therein, and means on the cover for engaging the spool to hold it centered in the housing and freeing said spool for radial shifting movement when the cover has been moved to a determined position on the housing.

RUTH M. WELCH.