

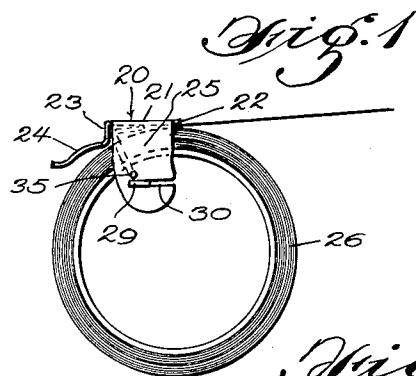
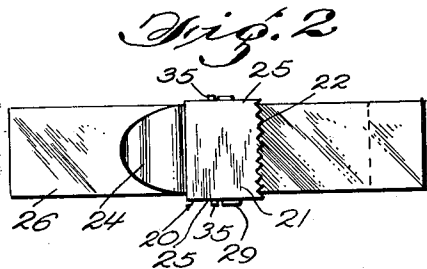
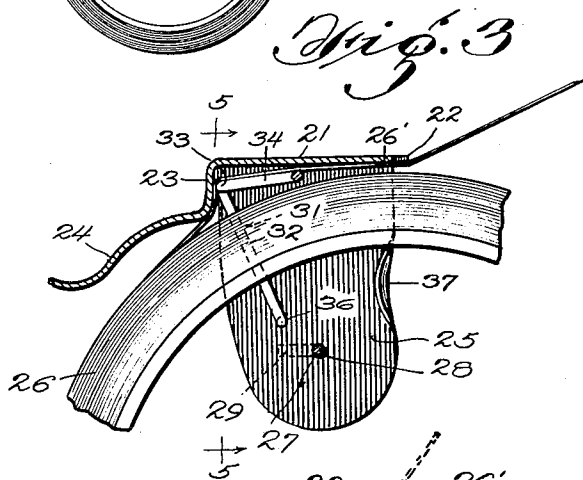
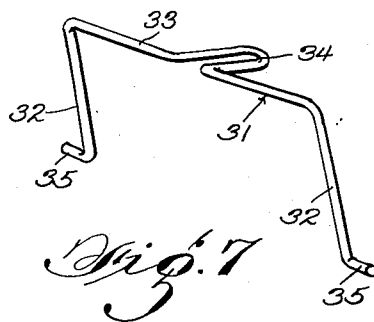
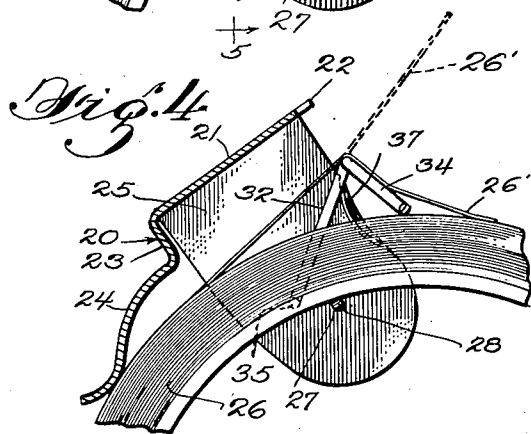
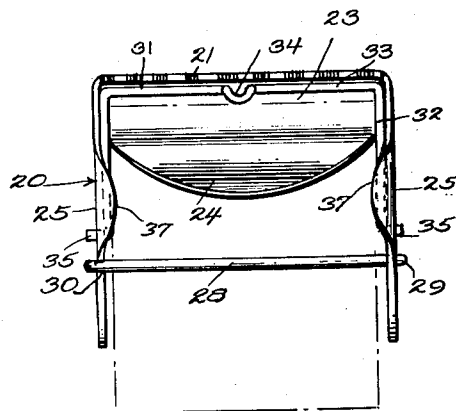
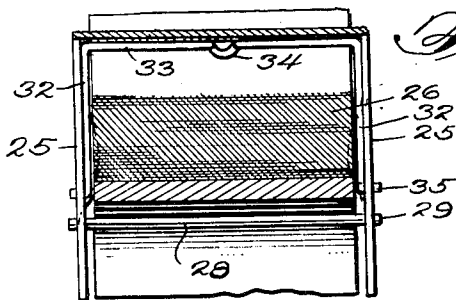
Feb. 23, 1954

S. ISLER

2,670,042

GUMMED TAPE DISPENSER

Filed Aug. 14, 1951



INVENTOR
Samuel Isler

BY

W. J. Eukerton
ATTORNEY

UNITED STATES PATENT OFFICE

2,670,042

GUMMED TAPE DISPENSER

Samuel Isler, Asbury Park, N. J.

Application August 14, 1951, Serial No. 241,873

2 Claims. (Cl. 164—84.5)

(Granted under Title 35, U. S. Code (1952),
sec. 266)

1

The invention described herein, if patented, may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

My invention relates to a dispenser for gummed tape.

In connection with adhesive tapes, especially gummed cellulose tapes, which are sold in rolls, difficulty is frequently experienced in loosening the end of the tape when it is desired to unwind a length of tape from the roll. This is especially true of very thin gummed tapes. Accordingly, it is a primary object of this invention to provide highly simplified and inexpensive means for preventing the free end of the gummed tape from adhering to the periphery of the roll of tape, such means being operable to position the free end of the tape in a convenient location to be grasped for dispensing the next length of tape.

A further object of the invention is to provide a simplified and inexpensive gummed tape dispenser which is adaptable to various size rolls of tape, and readily removable from the rolls, so that it may be used repeatedly.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is a side elevation of a gummed tape dispenser embodying the invention, and showing the same mounted upon a roll of gummed tape,

Figure 2 is a plan view of the same,

Figure 3 is a central vertical longitudinal section through the tape dispenser with the same adjusted for severing an unwound length of tape,

Figure 4 is a similar section through the tape dispenser while it is adjusted for unwinding a length of tape,

Figure 5 is a transverse vertical section taken on line 5—5 of Figure 3,

Figure 6 is a front elevation of the dispenser, and,

Figure 7 is a perspective view of a pivoted bail or stripper removed.

In the drawings, where for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 20 designates generally a body or shell for the dispenser, preferably formed from a unitary section of relatively thin sheet metal, or the like. If desired, the shell 20 may be molded from a suitable plastics material or the like.

2

The shell 20 comprises a flat top plate or wall 21 having a forward, transverse serrated edge 22, against which the unwound lengths of tape are drawn for severing the same during use of the dispenser. The serrated edge 22 extends for the entire width of the shell 20, as shown. The top plate 21 is bent downwardly at its rear end to form a relatively short integral depending flange or shoulder 23, arranged substantially at right angles to the top plate 21. An inclined, longitudinally curved extension or tab 24 is integrally secured to the lower end of the flange 23, and extends rearwardly of and below the flange for a substantial distance. The marginal edge of the tab 24 is preferably rounded, as shown.

The shell 20 further comprises opposed parallel depending side plates 25, integrally secured at their upper ends to the opposite sides of the top plate 21. The side plates 25 extend a substantial distance below the top plate 21, and are adapted to straddle the opposite ends of a roll 26 of cellulose adhesive tape, or the like. The side plates 25 have aligned openings 27 near their lower extremities for receiving a transverse keeper pin 28, having its opposite end portions 29 bent laterally for holding the keeper pin against longitudinal movement. A slot 30, slightly narrower than the diameter of the openings 27 is formed in one side plate 25, and leads from the opening 27 through the marginal edge of that side plate. The slot 30 permits removal of the keeper pin 28, so that the dispenser may be readily removed from the tape roll 26.

A generally U-shaped bail or stripper 31 is arranged inwardly of the side plate 25 and below the top plate 21. The bail 31 includes straight parallel arms 32, connected at their upper ends by a transverse bar 33, arranged at right angles thereto. The bar 33 is preferably formed at its longitudinal center to provide a forwardly projecting loop or tongue 34, integral therewith, and arranged substantially at right angles to the arms 32; although the angle between the tongue 34 and arms 32 may be varied slightly as preferred. The lower ends of the arms 32 are bent outwardly to provide short lateral trunnions 35, integral therewith and pivotally engaging within aligned openings 36, formed in the side plates 25, above and rearwardly of the openings 27. The bail 31 is freely pivotally mounted within the shell 20, and the bar 33 and loop 34 and freely swingable beneath the top plate 21. The rearward swinging movement of the bail 31 is limited by engagement of the bar 33 with the shoulder 23, Figure 3.

When the dispenser is installed upon the tape

roll 26, the forward swinging movement of the bail 31 is limited by contact of the loop 34 with the periphery of the roll 26, as shown in Figure 4. The forward edges of the side plates 25 are crimped inwardly near the longitudinal centers of the sides to form laterally inwardly projecting stops 37. These stops serve to positively limit the forward swinging movement of the pivoted bail 31 at all times.

In use, the shell 20 is applied to the tape roll 26 by removing the keeper pin 28 and replacing the same after the side plates 25 are passed over the ends of the roll 26. The shell 20 is loosely mounted upon the tape roll, and freely movable radially and circumferentially of the same. Outward radial movement of the shell 20 is limited by contact of the keeper pin 28 with the bore of the tape roll.

The free end of the tape is initially passed forwardly under the tab 24, and between the top plate 21 and bar 33 of the pivoted bail. The free end of the tape may now be pulled forwardly for unwinding a desired length of tape. Prior to severing this unwound length of tape, the shell 20 is shifted radially downwardly, Figure 3, and also forwardly or clockwise of the tape roll 26. The pivoted bail 31 will adhere to the section of gummed tape above it, and swing rearwardly or counterclockwise, Figure 3, until the bar 33 engages the shoulder 23. The top plate 21 is now preferably pressed against the periphery of the tape roll 26, to increase the adhesive bond between the unwound length of tape and loop 34. The unwound length of tape is now severed by tearing it against the serrated edge 22.

After a length of tape is thus severed, the section of tape between the top plate 21 and loop 34 adheres to the loop and also to the bar 33. This section of tape is held out of contact with the periphery of the roll 26 by the pivoted bail 31. The shell 20 is now elevated radially of the roll 26, until the keeper pin 28 contacts the surface of the bore of the roll, Figure 4. The shell is also shifted rearwardly or counterclockwise upon the roll 20. The pivoted bail 31 is at this time swung forwardly or clockwise, relative to the shell 20, since the bail is adhering to the section of tape above it, and the free extremity 26' of the tape is now stuck to the periphery of the roll 26, the same having been forced thereagainst when the top plate 21 was pressed downwardly prior to severing the tape. The radial arms 32 are now contacting the stops 37, Figure 4, and the bail 31 cannot swing further clockwise, with respect to the shell 20. Accordingly, further counterclockwise movement of the shell 20 upon the roll 26 causes the bail 31 to pull or strip the free extremity 26' of the tape away from the periphery of the roll, so that the same is directed upwardly in position to be conveniently grasped by the fingers, as shown in dotted lines in Figure 4. A further length of tape may now be unwound from the roll 26, and the shell 20 is again shifted radially downwardly, and forwardly upon the roll 26, Figure 1, and the pivoted bail 31 again assumes its rearmost position against the shoulder 23, holding the free section of tape beneath the top plate 21 elevated from the periphery of the roll 26. The top plate 21 is now pressed downwardly against the periphery of the roll 26, and the unwound length of tape is severed by the serrated edge 22. The section of tape below the top plate 21 adheres to the bar 33 and loop 34, as previously explained, and is held out of contact with the periphery of the roll 26.

It is to be understood that the form of the invention, herewith shown and described is to be taken as preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of the invention or the scope of the subjoined claims.

I claim:

1. A dispenser for a roll of gummed tape comprising a body portion bodily mounted upon the roll and having spaced side walls extending over the opposite ends of the roll, an outer wall connecting the side walls of the body portion and disposed outwardly of the periphery of the roll and having a leading transverse tape severing edge, a wall extension secured to the trailing end of said outer wall and arranged substantially at right angles thereto and extending inwardly thereof generally radially of the roll, an element carried by one of said side walls near the leading edge thereof and projecting laterally inwardly of the side wall in spaced opposed relation to said wall extension, a stripper device arranged between said side walls and between said wall extension and element, said stripper device comprising a pair of generally radial arms arranged between the ends of the roll and side walls and having their inner ends pivotally secured to the side walls and extending radially beyond the periphery of the roll, a transverse bar connecting said arms outwardly of the periphery of the roll and arranged forwardly of said wall extension and between the periphery of the roll and said outer wall and adapted to contact the wall extension for limiting the rearward swing of the stripper device, and a tongue secured to said transverse bar near the longitudinal center thereof and disposed generally at right angles to said transverse bar and arms and extending forwardly of the transverse bar between the periphery of the roll and said outer wall, whereby the free end of the gummed tape may pass over the transverse bar and tongue and adhere thereto, said element engaging one of said generally radial arms to limit the forward swing of the stripper device.
2. A dispenser for a roll of gummed tape comprising a body portion bodily mounted upon the roll and having spaced side walls extending over the opposite ends of the roll, an outer wall connecting the side walls of the body portion and disposed outwardly of the periphery of the roll and having a leading transverse tape severing edge, a wall extension secured to the trailing end of said outer wall and arranged substantially at right angles thereto and extending inwardly thereof generally radially of said roll, an operating extension carried by the inner end of said wall extension and extending rearwardly of the wall extension near the periphery of the roll and substantially circumferentially thereof, stop elements secured to said side walls adjacent to their leading edges and projecting laterally inwardly thereof in spaced opposed relation to said wall extension, a stripper device including a pair of generally radial arms arranged between the ends of the roll and side walls and having their inner ends pivotally secured to said side walls, the arms extending radially beyond the periphery of the roll, a transverse bar connecting said arms outwardly of the periphery of the roll and arranged forwardly of said wall extension between the periphery of the roll and outer wall and adapted to engage the wall extension for limiting the rearward swing of the stripper device, a tongue secured to said transverse bar near the longitudinal

center thereof and arranged generally at right angles to the bar and arms of the stripper device and extending forwardly of the transverse bar between the periphery of the roll and said outer wall, said elements engaging the generally radial arms to limit the forward swing of the stripper device, and a pin connected with said side walls a substantial distance radially inwardly of the periphery of the roll and extending axially through the bore of the roll and permitting the body portion to shift radially and circumferentially of the roll substantial distances.

SAMUEL ISLER.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
2,272,628	Anderson	Feb. 10, 1942
2,284,807	Donahoo et al.	June 2, 1942
2,423,004	Butler	June 24, 1947
2,463,445	Van Cleef	Mar. 1, 1949
2,611,432	Tallman	Sept. 23, 1952