

Aug. 6, 1968

P. L. BROWN

3,395,841

SNAP-ON TAPE DISPENSER

Filed June 6, 1966

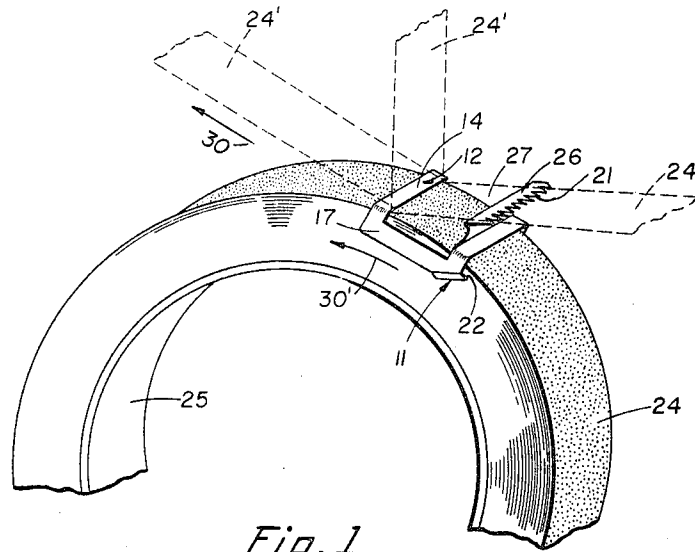


Fig. 1

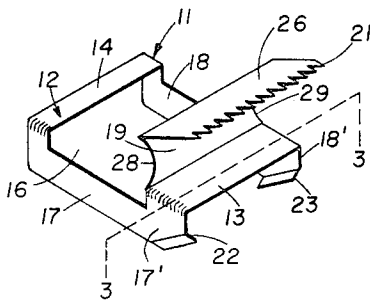


Fig. 2

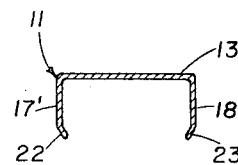


Fig. 3

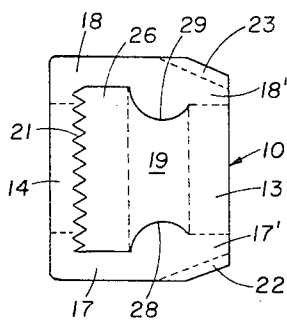


Fig. 4

INVENTOR.

PAUL L. BROWN

BY

BY  ATTORNEY

ATTORNEY

1

3,395,841

SNAP-ON TAPE DISPENSER

Paul L. Brown, 100 McAllister St., % Corps of Engineers,
Room 733, San Francisco, Calif. 94102

Filed June 6, 1966, Ser. No. 555,445

5 Claims. (Cl. 225-65)

The invention, in general, relates to devices for removing strips of tape from a roll thereof. More particularly, the invention pertains to a tape dispenser which is readily engageable upon and equally disengageable from a roll of tape, and which enables facile unwinding and severance of successive portions of tape from a roll thereof.

The following description of a preferred embodiment of the invention will make it clear and apparent that my improved snap-on tape dispenser can be utilized with equal facility in respect to the dispensing of any type of tape wound upon a central core, whether it be friction tape, pressure-sensitive adhesive tape, or surgical tape, or other type of adhesive tape and whether it be transparent or opaque.

Heretofore various types of tape dispensers have been marketed with a wide volume of users thereof and with a variety of success. Some of these prior art dispensers include a roll of tape housed in a receptacle with cutting teeth integral with the receptacle at a removal mouth thereon; while other prior art devices include a roll engageable portable unit for application to the roll. Many of these prior devices are disadvantageous especially as the size of the roll of wound tape diminishes which requires repeated bending of the devices to maintain them on the diminishing roll. Devices or tape dispensers of these general characteristics are disclosed and claimed in U.S. Letters Patents Nos. 2,128,710; 2,609,877 and 2,528,958 and patents cited therein.

A primary object of my invention is to provide a snap-on tape dispenser which firmly but movably clings to a roll of tape and ultimately to the central core of the roll during the removal of successive strips of the tape.

Another important object of the present invention is to provide a snap-on tape dispenser of the indicated nature which is additionally characterized by the facility of withdrawing and severing of the successive strips from the roll by simple and rapid manipulations.

A still further object of the invention is to provide a snap-on tape dispenser of the aforementioned character which can be used to the entire length of a roll of tape without adjustment or change in any portion of the dispenser.

Another object of my present invention is to provide a snap-on tape dispenser which is relatively inexpensive to manufacture and which may be used again and again on a multiplicity of rolls of tape of the same width.

Other objects of the invention, together with some of the advantageous features thereof, will appear from the following description of a preferred embodiment of the invention which is illustrated in the accompanying drawings. It is to be understood however, that I am not to be limited to the precise embodiment shown, nor to the precise arrangement of the various parts thereof, as my invention, as defined in the appended claims, can be embodied in a plurality and variety of forms.

Referring to the drawings:

FIG. 1 is a perspective view of a preferred embodiment of the invention mounted on a roll of tape, this view illustrating in dotted lines the withdrawal and placement of a portion of the tape for severance from the roll.

FIG. 2 is another perspective view, in enlarged showing, of the preferred embodiment of the invention disengaged from the roll.

FIG. 3 is a cross-sectional view of the embodiment of

2

FIGS. 1 and 2, this view being taken on the line 3-3 of FIG. 2.

FIG. 4 is a plan view of a blank from which the preferred embodiment of the invention can be formed or stamped and bent.

In its preferred form, the snap-on tape dispenser of my present invention preferably comprises a top having an opening therein for the passage therethrough of tape portions unwound from a roll thereof; said top being adapted to straddle the width of the tape and to be removably snapped onto the roll, a front cross-strap and a rear cross-strap on said top and bounding said opening at opposite ends thereof, together with a depending ear on each side of said top, an intumed flange inclined downwardly and rearwardly on each of said ears movably engaging opposite sides of the roll of tape on which the top is mounted, and cutting teeth supported above said top for severing successive portions of tape unwound from the roll thereof and holding the leading end of each successive portion of tape preparatory and prior to unwinding thereof.

As particularly illustrated in the enlarged view of FIG. 2, I provided by stamping and forming from a plastic or metal blank 10, see FIG. 4, a unitary snap-on tape dispenser which is designated generally by the reference numeral 11 in the annexed drawings, comprising an integral top 12 having a pair of top cross-straps 13 and 14 thereon bounding the ends of an opening 16 therein, a pair of depending ears 17 and 18 at opposite sides thereof, an upstanding member 19 provided with a serrated edge defining a row of teeth 21, and intumed yieldable flanges 22 and 23 inclined downwardly and rearwardly on the depending ears 17 and 18, respectively. The dispenser 11 can, of course, be made to any desired size with its top 12 dimensioned to accommodate different widths of tape; the tape being generally designated by the reference numeral 24 in the annexed drawings and being shown normally as being wound in a roll upon a central cardboard core 25.

In accordance with the present invention, a blank 10 is first made from any suitable bendable metal, such as spring steel, tin or a tin alloy, with the various elements above mentioned suitably delineated so that upon folding or bending the blank 10 the snap-on dispenser 11 illustrated in FIG. 2 and depicted in operative position on a roll of tape in FIG. 1 is provided with the width of the unit slightly greater than the width of the tape 24 to be dispensed from the cardboard core 25. It is of course to be understood that the blank 10 may be stamped from suitable metal stock or the same can be formed from a plastic or other moldable material and thus prepared in a suitable mold. It is to be especially observed that in bending the blank 10 to form the dispenser 11, I provide on the member 19, which extends above the top 12, a forwardly extending shelf 26 which serves to hold the next succeeding portion, designated by the reference numeral 27, of the tape 24 following that portion which has just been removed from the roll by severance using the teeth 21 on the upwardly extending projection 19. Moreover, that in stamping out the blank 10 from suitable metal stock, or in molding the same from plastic stock, I form the member 19 with inwardly extending arcuate sections 28 and 29 on opposite sides thereof to provide cut-outs or spaces for passing the finger of the hand in order to facilitate grasping of the next succeeding portion 27 of tape 24 whenever it is desired to remove additional strips of tape from the roll. In addition, the tape dispenser ears 17 and 18, which serve as guides for the placement and movement of the dispenser, are so formed that the forward ends 17' and 18' thereof, respectively, are inclined and the intumed yieldable flanges 22 and 23 extend

3

inwardly therefrom as well as rearwardly and downwardly from such inclined ends 17' and 18' of the sides 17 and 18, respectively, at the forward ends of the sides underlying the front cross-strap 13 of top 12 of the dispenser.

Whenever it is desired to remove a portion or strip of adhesive tape 24 from the roll thereof, with my snap-on dispensed in operative position of the roll, and a leading section of the tape, designated generally by the reference numeral 24', extending through the opening 16 of the top 12, all that need be done is to pull rearwardly, as indicated by the arrow 30 in FIG. 1 of the drawings, with the tape section 24' engaging and bearing against the forward edge of the rear cross-strap 14. By continuing to pull, the tape section 24' may be enlarged to the extent or length desired, and then the strip of tape or tape section 24' is carried forward to seat on the shelf 26 of the upstanding member or projection 19 with the adhesive side of the tape in engagement with the upper surface of the shelf 26. Thereafter, it is only necessary to press downwardly upon the strip or tape section 24' removed from the roll thereof to cause the strip to be severed by the teeth 21 of member 19. This downward pressure prevents dislodgment of the tape dispenser 11 from the firm seat that it has on the periphery of the roll and, of course, since this downward pressure is transmitted to the front cross-strap 13 of top 12, also prevents any tendency of the dispenser to rotate laterally, or to move or tilt in the direction of the applied pressure.

Successive strips of adhesive tape can be recurrently withdrawn from the roll thereof to the lengths desired. After an initial strip of tape has been removed and severed by the teeth 21 and with the next leading portion of a prospective succeeding strip seated on the shelf 26 of member 19, a finger of the hand can grasp such leading portion by passing the finger alongside either cut-out arcuate section 28 or 29 of the upstanding member 19 and then drawing the tape section 24' backward to engage the forward end of the rear cross-strap 14 and pull on such tape section 24' or strip so as to move the dispenser backward, as indicated by the arrow 30', with the inturned flanges 22 and 23 engaging into the tape on the roll at opposite sides thereof and impressing downwardly inclined grooves thereon to cause the dispenser to cling to the periphery of the roll. The desired length of adhesive tape is again withdrawn from the roll thereof, and then drawn forward as in the cases of the prior withdrawn strips for seating on the shelf 26 of the member 19 and for severance by the teeth 21 thereon. This operation may be repeated again and again for the severance of desired lengths of adhesive tape from the roll. As the amount of adhesive tape on the roll diminishes with but two or three convolutions thereof remaining on the cardboard core 25, the inturned flanges 22 and 23 on the ears 17 and 18, respectively of top 12 of the dispenser will bite into the stock of the core 25 to hold the dispenser in operative position so that substantially all of the adhesive tape of the roll can be dispensed therefrom or removed in severed strips. Pressure upon the forward cross-strap 13 of the top 12 upon each severance of tape withdrawn from the roll enhances the firmness of the gripping action of the dispenser upon the periphery of the roll. And, in fact, since the width of the teeth 21 on member 19 is greater than the width of the opening 16 of top 12 and the tape 24 itself, there is increased ease in the grasping of succeeding sections of the tape by reaching past the arcuate sec-

4

tions 28 and 29 of member 19 to remove the succeeding sections first from the shelf 26 to extend the strip to the length desired.

It is to be understood that the appended claims are to be accorded a range of equivalents commensurate with the advances made over the prior art.

I claim:

1. A snap-on tape dispenser comprising an integral structure consisting of a top having a tape passing opening therethrough, a front cross-strap on said top, a rear cross-strap on said top; said cross-straps bridging the periphery of a roll of tape to be dispensed in severed strips, a pair of sides depending from said top and engaging opposite sides of the roll of tape, an inwardly turned flange inclined downwardly and rearwardly on each of said sides adjacent to said front cross-strap and engaging the opposite sides of the roll to firmly but movably maintain the structure on the periphery of the roll, an upstanding member on said top projecting above the same, a forwardly inclined shelf on said member, and teeth on the outer end of said shelf against which portions of tape removed from the roll thereof may be pressed to sever the portions from the remainder of tape on the roll; said shelf serving to seat and to hold an area of each succeeding section of adhesive tape to be removed from the roll thereof.

2. A snap-on tape dispenser as defined in claim 1, wherein said inturned flange on each side is yieldable and yieldably engages the opposite sides of the roll.

3. A snap-on tape dispenser as defined in claim 1, wherein said teeth extend wider than said opening, and an arcuate cut-out section on each side of said upstanding member to facilitate removal of an area of each succeeding section of tape from said shield.

4. A snap-on tape dispenser as defined in claim 1, and an inclined section on each of said sides adjacent said front cross-strap from which said inturned flanges extend to underlie said front cross-strap.

5. A snap-on tape dispenser comprising a unitary structure for riding upon the periphery of a roll of tape to be removed therefrom in strips of desired lengths after severance; said structure comprising a top having an opening therethrough for passing tape from a roll thereof, a front cross-strap on said top bridging the periphery of a roll and against which the tape being removed from the roll is pulled to a desired length thereby moving said structure along the periphery of the roll, a pair of sides depending from said top and engaging opposite sides of the roll of tape, and an inwardly turned flange inclined downwardly and rearwardly on each of said sides of said top for impressing downwardly inclined grooves in opposite sides of the roll and for causing said structure to cling to the periphery of the roll during movement along the periphery and during the actions of severing strips of tape from the roll.

References Cited

UNITED STATES PATENTS

2,626,666	1/1953	Coldiron	225—65
2,676,658	4/1954	King	225—65 X
2,677,425	5/1954	Broyles	225—56
2,727,572	12/1955	Carlo	225—65

JAMES M. MEISTER, *Primary Examiner*.