

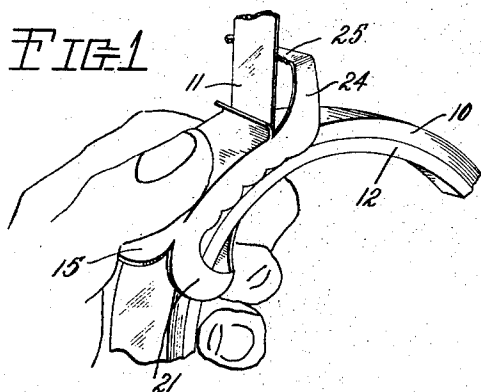
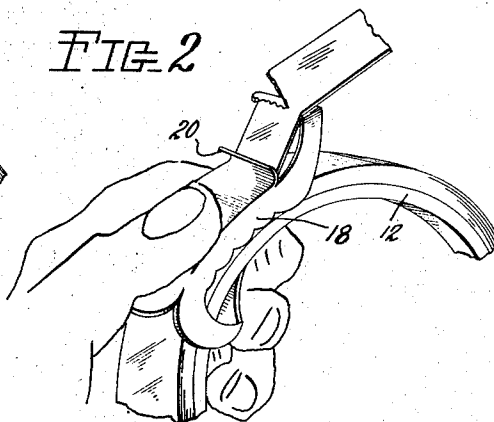
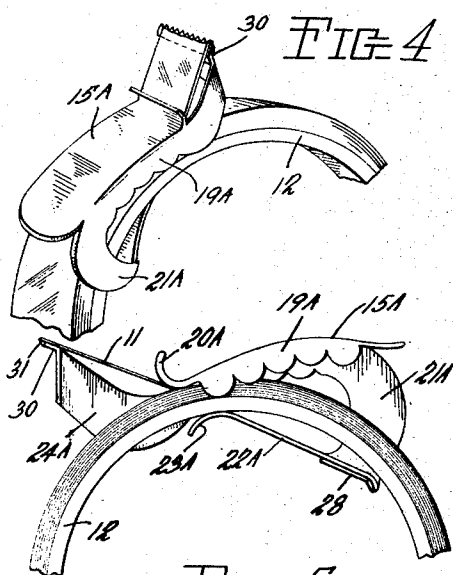
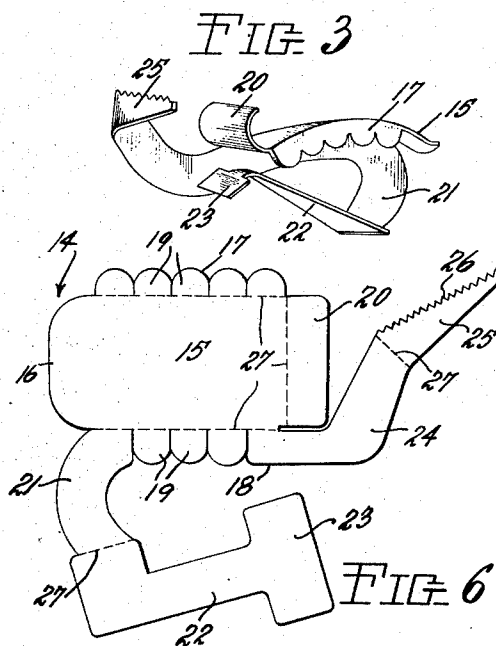
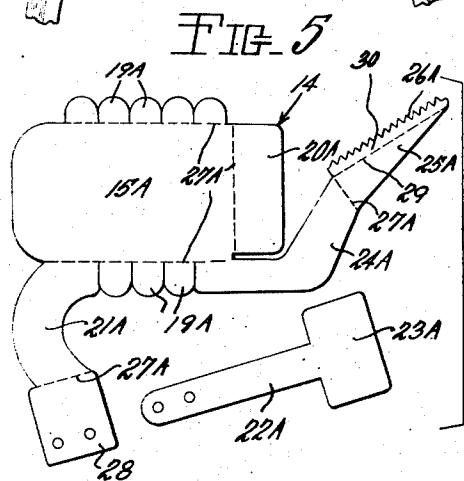
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C. A. HANINGTON

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TAPE DISPENSER

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INVENTOR.
CHARLES A. HANINGTON

BY

John F. Lynch

ATTORNEY

UNITED STATES PATENT OFFICE

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TAPE DISPENSER

Charles A. Hanington, Freeport, N. Y.

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1

This invention relates to tape dispensers and in particular to a portable hand type for application to a roll of pressure sensitive tape.

The well known transparent or cellophane type of pressure sensitive tape is universally used and with frequency particularly by draughtsmen, artists and craftsmen of all kinds to facilitate their work. If they use the 4½" roll with 3" core, which is economical and handy, they have difficulty finding the starting end after each use, due to the tacky nature of the tape, and have to resort to digging at the end thereof, with their finger nails to free it after use after said end is located, usually with difficulty due to the transparent nature of the tape. After cutting off what they wish, the free end securely fastens itself to the roll and again must be dug free in a time and patience consuming operation.

There are dispensers of one kind or another available for the large 4½" economy roll which maintains the loose end of the tape accessible, but they are clumsy or heavy, the weight being necessary to keep the dispenser from sliding toward the puller when the tape is being drawn from the roll. While these dispensers operate satisfactorily if the user's work allows him to keep within easy reach of the dispenser, it is not at all handy for the user who must move around a draughting table or work bench or counter or has occasion to use the tape many times and at varying distances from the dispenser because the dispenser is too heavy and cumbersome and requires a firm base for support and hence does not lend itself to odd jobs. Also in the metal holders used, the sides grip the roll when the holders are held between the fingers and the tape cannot be withdrawn because the roll is prevented from rotating.

It is among the objects of my invention to provide a handy portable dispenser that can be applied to and carried by the roll of tape and becomes an integral part thereof until the contents are all used, after which it can be removed and applied to a fresh roll; to provide a dispenser that is small, light in weight, simple of construction, can be made from one or two pieces of material, either light metal or plastic; to one that, with the roll, can be laid any place, hung up, or carried in the pocket of a workman's apron with the loose end of the tape held in position for instant use; to provide a tape holding edge that is far enough away from the roll to provide easy access to the free end of the tape by the fingers; to provide a dispenser that maintains itself on the periphery of the roll, yet allows free

2

pulling rotary motion of the roll to unwind the tape to be torn off for use and to provide a dispenser that can be made at small cost, can be used with rolls of various width and diameter and one which can be readily attached to a full roll and detached from an exhausted roll of tape without complicated manipulation.

With these and other objects in view, the invention comprises certain construction hereinafter described and then particularly pointed out in the claims and a preferred embodiment of my invention is illustrated in the accompanying drawing in which:

Figure 1 is a view in perspective showing my improved dispenser in use with tape being drawn therefrom,

Figure 2 is a view similar to Figure 1 with the tape being severed,

Figure 3 is a view in perspective showing the construction of the dispenser,

Figure 4 is a view similar to Figure 1 but showing a modified form of tearing shelf formed in the dispenser,

Figure 5 is a side view of the dispenser and a part of the roll and showing the relationship therebetween,

Figure 6 is a plan view of the blank from which the dispenser shown in Figures 1, 2 and 3 is formed,

Figure 7 is a view similar to Figure 6 showing the modified form of tear shelf and also a gripping spring made separately, and

Figure 8 is a view in perspective of the gripping or pressure spring shown in Figure 5.

Referring to the drawing in detail 10 indicates a roll of pressure sensitive tape from which an end portion 11 is drawn and severed from the roll for use. The tape is wound on a cardboard ring 12 and when the strip of tape is pulled on to release it from the roll the latter is rotated a distance equal to the length of the piece to be drawn and severed.

My improved dispenser consists primarily of a piece or blank of suitable material such as metal or plastic generally indicated as at 14 and preferably stamped out or molded to delineate an outer body of thumb rest section 15, suitably rounded at its rear edge as at 16, and shaped to provide flanking scalloped or plain flanges 17 and 18, the scallops 19 of which permit the body 15 to be bent into arcuate shape to coincide with the curvature of the average roll of tape. At its forward edge the blank is provided with a tongue 20, and the side flange 18 presents at one end an arcuate elbow portion 21 terminating in a

3

pressure arm 22 having a tab end 23, the opposite or forward end of the flange being shaped to provide a side guard 24 terminating in a laterally extending blade 25 having a serrated edge 26. The parts are arranged to be shaped by bending or folding on the fold indicating lines 27.

The blank of Figure 5 has all of the counterparts of Figure 6 designated as at 15A, 19A, 20A, 21A, 22A, 23A, 24A, 25A, 26A and 27A; with the exception that the pressure arm 22A is made as a perforated separate unit, tempered to shape for exerting spring pressure as shown in Figure 8 and adapted to be riveted or otherwise secured to the perforated tab portion 23, along with a fold 29 delineating a shelf 30 bounding the serrated edge 26A of the blade 25A.

In forming, the tongue 20 is rolled or curled to provide a rounded front dash surface against which the tape being drawn off the roll has easy sliding movement; the flanges 17 and 18 are bent downwardly at right angles to the body 15; the blade 25 is bent obliquely to the guard 24 so that it lies laterally of the roll and spaced thereabove; the arm 22 bent on its obliquely disposed fold will assume an inclined position beneath the body 15 so that the spring end 23 can yieldably engage the inner peripheral wall of the cardboard strip or ring on which the tape is mounted, the spring being positioned substantially mid-width of the roll by its supporting tab 23 (Fig. 5) or its counterpart of Figure 6 which is formed integrally with the arm 22; and the shelf 30 being formed by bending the serrated edge of the blade along the line 29.

The guard 24 is an extension piece which holds the tape cutter far enough away from the body of the roll so that, as seen in Figure 3, the free end of the tape can be easily gripped by the fingers for subsequent withdrawal.

In using, the dispenser is held in the fingers, with the roll of tape free to revolve within the dispenser. The tape is pulled outwardly from under the curled lip, and drawn out between the cutting edge and the curled lip but kept clear of the cutting edge. When the desired amount is pulled out, the tape is drawn down and sideways against the serrated cutting edge. This action cuts off the desired amount and causes the remaining free end to adhere to the edge of the extended cutter, so that it is in position to be readily grasped again when another length is needed. The main body of the dispenser is curved to conform with the outside diameter of a full roll of tape. The purpose of the underneath spring member, is to hold the roll up between the side flanges of the main body and to compensate for the reduction in thickness of the roll, as the tape is used. The spring member is formed in a T shape so that the spring tension will not be too great, yet it will exert pressure across the full width of the dispenser, permitting rolls of various widths to be used.

It will be noted that the shelf 30 of the serrated cutter or blade is sharpened on its under edge as at 31 to facilitate clean and easy severance of the tape 11, and that the shelf 30 is in the same plane as the tape when the latter is pressed thereon in cutting. Hence the shelf forms a flat surfaced ledge to which the remaining end of the tape adheres and by which it is securely held from accidental release. When the dispenser is held in the fingers during withdrawal of the tape the rotation of the roll can be closely controlled and the tape drawn off straight and undistorted.

4

It will be understood that this dispenser is intended for the big $4\frac{1}{2}$ " rolls particularly because there are handy dispensers for the small rolls of tape with a 1" core for tape varying in length from 100 to about 360 inches to the roll and in different widths. The dispensers come in a couple of widths for use with refills but a wider tape cannot be used in the narrow dispenser nor can a narrow tape be used in a wide dispenser. These small 1" core handy dispensers are satisfactory for the small rolls but if they are increased in size to handle the 3" core $4\frac{1}{2}$ " rolls they would be quite cumbersome and unhandy. It is evident that the plain cutting edge or the shouldered cutting edge can be used with the single piece dispenser or with the one using the separate spring strip. The one piece type can be made entirely of spring metal and tempered after forming. It is evident also that the cut end of the tape will adhere to the plain cutting edge.

My invention is not to be restricted to the precise details of construction shown since various changes and modifications may be made therein without departing from the scope of the invention or sacrificing the advantages to be derived from its use.

What I claim is:

1. A dispensing implement for use with pressure sensitive tape wound about a ring to form a roll and through which the roll rotates by a pull on the free end of the tape, which consists of a blank shaped to provide a body section, depending portions on said body, an elongated spring arm carried by one of said depending portions for yieldable engagement with the inner periphery of said ring for detachably positioning the implement on the roll so that said portions lie along the sides of the roll, a carrier extending forwardly from said body section, an upwardly and outwardly directed blade at the end of the carrier over which the tape passes for severing the tape in sections as it is drawn from the roll, and said body and said spring arm coacting under variable finger squeezing pressure to control the speed of rotation of the roll when tape is being withdrawn therefrom.

2. A dispensing implement of the character set forth in claim 1 including a curled tape pull-off guide on the forward edge of said body section.

3. A dispensing implement of the character set forth in claim 1 including a shelf integral with said blade and serrated to provide a tape severing ledge to which the severed end of the tape adheres.

4. A dispensing implement of the character set forth in claim 1 in which the blade is positioned forwardly of and in spaced relation with the end of said body section and a shelf having a serrated edge on said blade disposed substantially at the angle assumed by the tape when the latter is drawn off the roll for severance along said edge.

5. A dispensing implement for use with pressure sensitive tape wound about a ring to form a roll and through which the roll rotates by a pull on the free end of the tape, which consists of a blank shaped to provide a body portion, flanges flanking the sides of said body portion, for confining the roll therebetween, the front and rear ends of said body portion being curled, one of said flanges being extended at opposite ends thereof to provide an elbow portion and a side guard, a spring arm carried by the elbow portion adapted to engage the inner periphery

5

of the roll and detachably mount the implement thereon, a blade at the end of the guard disposed laterally of the roll and in spaced relation from the forward end of said body, a shelf on said blade disposed substantially at the angle assumed by the tape when the latter is drawn off the roll and thereover, a serrated tape severing edge on said shelf, and said body being arcuately shaped to conform substantially to the external contour of the roll, and said body and spring arm coacting under variable finger squeezing pressure to control the speed of rotation of the roll when tape is being withdrawn therefrom.

6. A dispensing implement of the character set forth in claim 5 in which said elbow portion is shaped to provide a tab means to which said spring is attached.

CHARLES A. HANINGTON.

6

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,811,945	Lange -----	June 30, 1931
2,229,961	Deane -----	Jan. 28, 1941
2,262,260	Smith -----	Nov. 11, 1941
2,267,335	Kiessling -----	Dec. 23, 1941
2,284,807	Donahoo et al. -----	June 2, 1942
2,401,286	Wright -----	May 28, 1946
2,472,761	Reed -----	June 7, 1949
2,528,958	Johnson -----	Nov. 7, 1950