

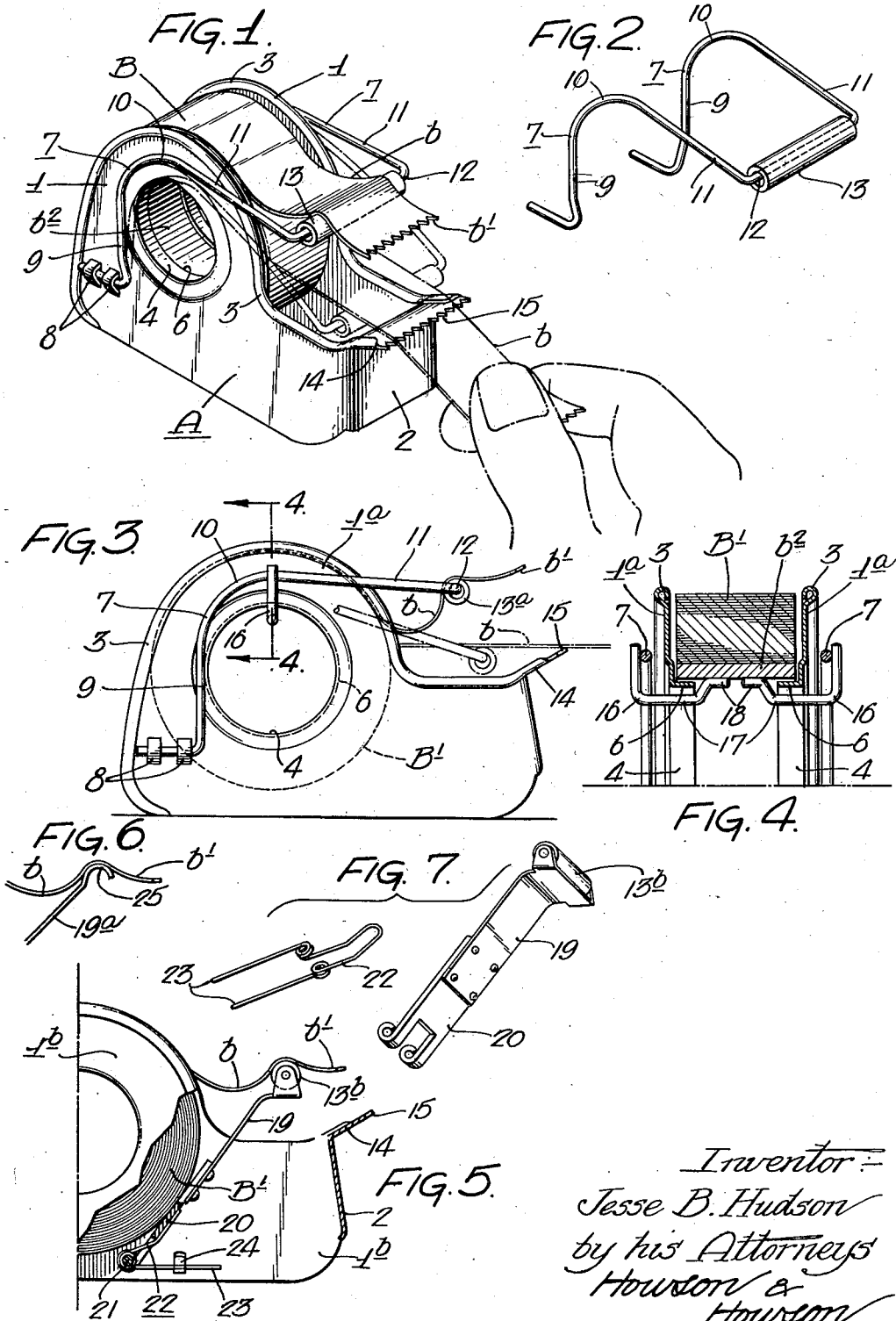
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GUMMED TAPE DISPENSER

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GUMMED TAPE DISPENSER

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1 Claim. (Cl. 242—55.5)

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This invention relates to improvements in gummed tape dispensers for use in the home and office, etc. The device of the present invention is designed to overcome deficiencies found in the ordinary tape dispenser available at the present time; and at the same time present a readily operable structure having symmetrical esthetic lines.

One object of the present invention is to construct the device in such a manner that when the gummed tape is drawn out over the cutting blade of the device and is pulled down over and severed by the saw-toothed edge thereof, the free end of the tape, which extends from the outside of the roll of tape, within the dispenser, will be prevented from adhering to the cutting blade in any manner, and, by force of a spring-actuated retriever or releasing means, will be lifted clear of the cutting blade and maintained in a convenient, accessible position ready for again drawing tape from the roll.

Another object of the present invention is to position the cutting blade of the device on such an angle with respect to that position of the tape which extends from the tape roll to the saw-toothed edge of the cutting blade as will prevent the adhesive face of the tape from coming in contact with the flat face of the blade, thus facilitating the lifting of the cut end of the tape from the saw-toothed edge of the cutting blade by the spring-actuated releasing means.

Another object of the present invention is to provide spring-actuated means adapted to cooperate with the severed end of the tape to act as a guide therefor and, when severance is completed, to carry the cut edge of the tape into a convenient, readily accessible position for future use, without necessitating manipulation of the tape by the user of the device.

Further objects of the device made in accordance with the principles of the present invention, its construction and mode of operation, will be more clearly understood from the following detailed description and illustrations of the accompanying drawings, of which:

Fig. 1 is a perspective view of a device constructed in accordance with the principles of the invention ready for use, as shown in full lines, and in cutting position, as shown in broken lines;

Fig. 2 is a detached perspective view showing one form of a tape releasing element employed in a device of the present invention;

Fig. 3 is a side elevation of a modification of the invention;

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 3;

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Fig. 5 is a fragmentary side elevation, partially broken away to illustrate another modification of the present invention;

Fig. 6 is a fragmentary side elevation showing a modified form of release element; and

Fig. 7 is a detached perspective view showing details of the modification of the present invention, shown in Fig. 5.

Describing the invention in detail, the tape dispenser comprises a main frame member A, made preferably of suitable resilient metal, and comprising a pair of substantially parallel side walls 1, 1 integrally connected by a transverse front wall 2. The upwardly extending side walls 1, 1 are of an irregular contour and are formed with their upper edges beaded or rolled throughout the length thereof, as shown at 3.

Formed on the side walls 1, 1 of the frame A are a pair of axially aligned circular holes or orifices 4, 4 adapted to present an open area running transversely through the frame A, from side wall to side wall thereof. The circular edges of said orifices 4, 4 are pressed inwardly to form annular bosses 6, 6 adapted to be inserted into the opposite ends respectively of a core tube 6² of a roll B of adhesive tape b, for rotatably supporting the roll B in the frame A.

At each side of the frame A, one end of a spring wire lever member 7 is attached to the outer side of each side wall 1, as by staples or straps 8, 8, pressed out of the metal of said side walls. Each spring lever 7 curves upwardly from its anchorage 8 at right angles to the longitudinal base line of the side wall 1, as shown at 9. The wire lever members 7 then curve around the outer periphery of the orifices 4, 4 as shown at 10, and extend outwardly beyond the beaded edges 3, 3 of the side walls 1, 1 in substantially parallel relation to said base line, as shown at 11, 11. The outer ends of the spring wires 7, 7 are bent at right angles to the arm portions 11, 11, substantially parallel to the front wall 2 of the frame A and form a cross bar 12 integral with said arms 11, 11. A roller member 13 is adapted to be rotatably mounted on the cross bar 12, intermediate the forwardly extending arms 11, 11 of the spring lever 7, 7.

The upper portion of the front wall 2 of the frame A is bent upwardly and outwardly at an oblique angle to the longitudinal base line of the frame A in the form of a flange 14, which constitutes the cutting blade of the device. The cutting blade 14, at its transversely extending outer edge, is of a saw-toothed construction, as shown at 15.

In operation, the resilient side walls 1, 1 of the frame A are spread apart and a roll of tape

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B is placed therebetween to be rotatably mounted on the opposite inwardly extending annular bosses 6, 6.

With the tape roll B in its rotatable position, the free end b^1 of the tape b is extended outwardly from the roll B, over the spring supported roller 13, in its operative position, with the free end b^1 of the tape projecting beyond the roller 13 to be grasped by the operator.

The operator, when desirous of using the device, merely grasps hold of the loose end b^1 of the tape b and draws it outwardly across the roller 13, and then downwardly into a position over the saw-toothed edge 15 of the cutting blade 14. The downward motion of the tape b carries with it the roller 13, and the arms 11, 11 of the spring levers 7, 7, respectively. The tape b is then pressed against the sharp saw-toothed edge 15 of the cutting blade 14, causing a complete cutting or severance of a measured length of the severed tape b . At the moment of severance the arms 11, 11 of the resilient levers 7, 7 will, due to the resilient nature of said levers, spring back into their normal positions carrying with them the roller 13 and thereby releasing the severed edge b^1 of the tape from the saw-toothed edge 15 of the cutting blade 14. In this position, the tape dispenser is ready for further repeated use in the same manner, with the free end b^1 of the tape lying over and projecting beyond the roller 13 to be readily accessible for prompt action in the further use thereof.

Obviously, the device is susceptible to modification and, as shown in Fig. 3, the levers 7, 7 may be provided with brake members 15, 15 for engagement with the tape roll B¹ to prevent the said roll from rotation sufficient to dislodge the free end b^1 of the tape b from the roller 13^a and thereby avoiding the possibility of entanglement with other objects close at hand.

This brake member 15 comprises two rod-like arm members 17, 17 respectively attached to the outer sides of the wire lever elements 7, 7, as by welding, and turned inwardly at right angles to said levers to project through orifices 4, 4. The tips or ends 18, 18 of the brake arms 16, 16 are bent upwardly and inwardly, with a gap therebetween, to afford opening of the frame A for insertion of the roll of tape B¹. These tips 18, 18 function as brakes.

When the wire levers 7, 7 are drawn downwardly by action of the operator of the dispenser, the brake 15 no longer engages the core tube b^2 of the tape roll B¹, but the moment the tape is severed the wire levers 7, 7 spring back into normal position in contact with the core tube b^2 and hold the roll B¹ stationary ready for further use.

A further modification of this invention is found in Figs. 5 and 7. This construction involves the location of the braking element at a point outside the periphery of the tape roll B¹.

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This arrangement comprises a support 19 for the roller 13^b attached by any suitable means to a metal braking element 20, said braking element in turn being pivotally mounted on a cross rod 21, carried by and between the side walls 1^b, 1^b and which also supports spring member 22, having ends 23, 23 attached to the respective side walls 1^b, 1^b of the frame as by staples 24, 24. In operation the piece 19, carrying the roller 13^b, will move downwardly on a pulling motion of the free end of the tape by the operator of the dispenser and, at the point of complete severance of the tape will, due to the action of the spring 22 on the braking element 20 attached thereto, return the roller 13^b and the free end of the tape to the position ready for further use. By this means a very simple yet effective operation is attained.

A further modification of the invention is found in the construction shown in Fig. 6. In place of using the roller 13^b as described above, the supporting element 19^a for the roller may comprise an integral rolled end as indicated at 25, thereby affording a guiding means without the necessity for employing the rotatable roller element. This guiding means will be actuated in the same manner as described in regard to the roller 13, i. e., by pulling down the tape, and, since it is integral with the element 19^a itself, as shown at Fig. 6, it will be motivated by the operation of the spring member 22 to return the tape into position for further use.

I claim:

A gummed tape dispenser comprising a frame including a pair of substantially parallel laterally spaced side walls and a transverse front wall, said side walls having orifices formed therein with the edges of said orifices indented inwardly to form bosses for rotatably supporting a roll of said tape thereon, a cutting blade carried by said front wall, spring levers respectively carried by said side walls, means carried by said spring arms and adapted to engage said tape intermediate said roll and said blade to permit severance of said tape and to effect subsequent release of said tape from said cutting blade, and means comprising a brake member carried by said spring arms and adapted to project through said orifices and engage a portion of said roll after said release.

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