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W. H. STEWART ET AL SEVERING TAPE DISPENSER

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F19.7 I'm O Ŋ 24 42 38 32 Fig. 5 Lig. 3 26 20 F.19.6 - <u>46</u> 20 20' 18 20' 30 INVENTORS W. H. STEWART E. MARTIN The second million 76 /6 4. BY atty. 18



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SEVERING TAPE DISPENSER

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UNITED STATES PATENT OFFICE

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12 Claims. (Cl. 164-84.5)

This invention relates in general to tape dispensers for adhesive tape, Scotch tape, etc.

The principal object of the invention resides in the provision of a cutter mounted in fixed relation on the shell of the dispenser, this shell being **n** rotatively mounted on a spool so that the latter may be held in one hand and the tape removed from the dispenser with the other hand, the shell rotating on the spool so that the tape issues from the shell through a slot therein, the slot main- 10 taining its relative position with reference to the separation point of the tape from the spool; and the provision of a tape dispenser as above described comprising a cutter for the tape formed of two overlapping ends of the shell, said ends 15 being bent to close the shell and complete the same, and one of said ends having a bent up portion provided with teeth forming the tape cutter, whereby the tape cutter is easily and economically provided by taking advantage of 20 the joint in the shell which connects the two ends thereof together.

of the dispenser. The rolled lips 26 provide a smooth exit for the tape 28 as the latter emerges from the dispenser.

The blank 22 is bent into the form of a circle and one end 30 thereof is bent up as at 32 in Fig. 4. The other end 34 of the blank is provided with end teeth 36 and is folded over the bent up end 32 as at 38. Then the bend at 38 is reversely bent at 40 to enclose the end 32 and another bend 42 is used to lap over bend 38, the bend at 42 continuing as shown in Fig. 4 to terminate in the teeth 36. After this, the entire joint as shown in Fig. 4 is bent over to the right to tightly close the shell and at the same time forming the tape cutter element which extends outwardly as indicated at 44 in Fig. 1. This construction not only forms a tight joint completing the shell but also provides for the cutter. It is to be noted that the slot 24 defined by lips 26 is spaced from the cutter 44 and the tape 28 emerges through the slot in the natural direction of progress of the tape as it is stripped from the spool. The spool at 14 is gripped in one hand and as the tape is pulled it unwinds from the spool rotating the shell therewith. The cutter 44 is in just the right position to sever the tape by a twisting motion of the fingers holding the tape and pulling it from the dispenser. This construction provides for quick and easy dispensing without the necessity of a loose roll on the hub. In the event the shell 18 is not desired to rotate, a lip 46 is bent inwardly and presses on and locks the spool 14, see Fig. 8. However, the severing cutter is the same, although the shell 35 beads 20¹ may be rolled outwardly rather than inwardly. Also, the edges of the cutter may be cut and folded for added stiffness. In Fig. 9 there is shown a slot at 50 which extends substantially vertically with the tape being dispensed in the direction of the arrow. This slot is sanitary because dirt cannot drop into it due to the upwardly bent lip 52. This lip and sanitary slot may be used in conjunction with the cutter whether the shell is rotary or fixed on the spool, and may be used with the bent down lip 46 in Fig. 7, or instead of one of the lips 26 in Fig. 6. In the case of Fig. 7, lip 46 will lock the shell but the vertical sanitary slot 50 is still capable of use therewith.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying 25 drawings, in which

Fig. 1 is a view in front elevation;

Fig. 2 is a section on line 2-2 of Fig. 1, with a tape omitted;

Fig. 3 illustrates the shell of the dispenser as 80 a flat blank;

Fig. 4 is an enlarged detail illustrating the formation of the shell closure and cutter:

Fig. 5 is a diagram illustrating the closure joint and cutter; and

Fig. 6 is a detail illustrating the slot in the shell, parts being in section;

Fig. 7 is a sectional view illustrating a modified dispensing slot; and

Fig. 8 is a section on line 8—8 of Fig. 7. 40 This invention contemplates the use of a spool on which the tape is rolled, said spool comprising a hub 10 having rolled edges 12 for securing thereto a pair of spaced circular sidewalls 14. The latter are provided with rolled edges 16 45 forming a track for the shell 18. The shell 18 is provided with inwardly rolled edges 20 which contact the rolled edges 16 of the spool for guided rotation of the shell thereon. The shell comprises an originally flat blank 50 22 having the rolled edges 20, the latter terminating inwardly of the ends of the blank. A slot 24 is punched out to provide outwardly extending curved or rolled lips 26 for the tape to pass without friction from the spool to the exterior 55

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Having thus described our invention and the advantages thereof, we do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what we claim is: 1. A dispenser of the class described compris-

#### ing a spool for mounting a roll of tape, spaced circular side walls on the spool, a closure shell rotatably mounted on the side walls, a severing cutter on the shell, the shell being provided with a tape dispensing slot spaced from the cutter.

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2. A dispenser of the class described comprising a spool, a closure shell thereon, said shell having a joint, and a severing cutter formed as a part of the joint.

3. A dispenser of the class described comprising a spool, a jointed shell on the spool, said joint comprising a pair of bent ends, said ends overlapping and bent one over the other, said shell having a slot, and a severing cutter terminating one of said ends. 4. A dispenser of the class described comprising a spool, a strip of bendable metal forming a shell to close the spool, said strip having a pair of ends overlapping and gripping each other to complete the shell, one of said ends being 20 struck up and provided with a tape severing edge, said shell having a slot spaced from the severing edge. 5. A dispenser of the class described comprising a spool, circular side flanges thereon, a cir- 25 cular shell arranged for rotation on the flanges, rolled edges on the shell between which the flanges are located, a transverse slot in the shell, and a cutting edge parallel to and spaced from the slot. 30

a spool and a shell, said shell having a slot, a lip defining the slot pressed inwardly of the shell and impinging on the spool to lock the latter to the shell,

9. The dispenser of claim 8 including a second lip defining the slot, said second lip extending outwardly of the shell and forming a nearly closed tape dispensing opening.

10. A dispenser of the class described comprising a spool, spaced circular side flanges on the 10 spool, a closing shell arranged for rotation on the flanges, said shell having a tape dispensing slot, a lip defining the slot pressed outwardly of the shell so that the slot is substantially radial of the spool. 15 11. A tape dispenser comprising a spool, a pair of spaced parallel flanges thereon, a shell closing the flanges peripherally, a tape cutter on the shell, a pair of lips in the shell defining a slot therebetween, one lip being struck outwardly to cover the slot and the other being struck inwardly and impinging on the flanges to hold the shell thereto.

6. The dispenser of claim 5 wherein the shell has a pair of overlapping joined ends, one of said ends terminating in said cutting edge.

7. A dispenser of the class described comprising a spool, a strip formed into a circle about 35 the spool, one end of the strip being bent over the other end to secure the same, said one end being reversely bent and terminating in a struck up cutting edge.

12. The tape dispenser of claim 11 wherein the cutter is located in spaced parallel relation to the slot and at the side thereof defined by the inwardly struck lip.

#### WILLIAM H. STEWART. ESIDORE MARTIN.

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