

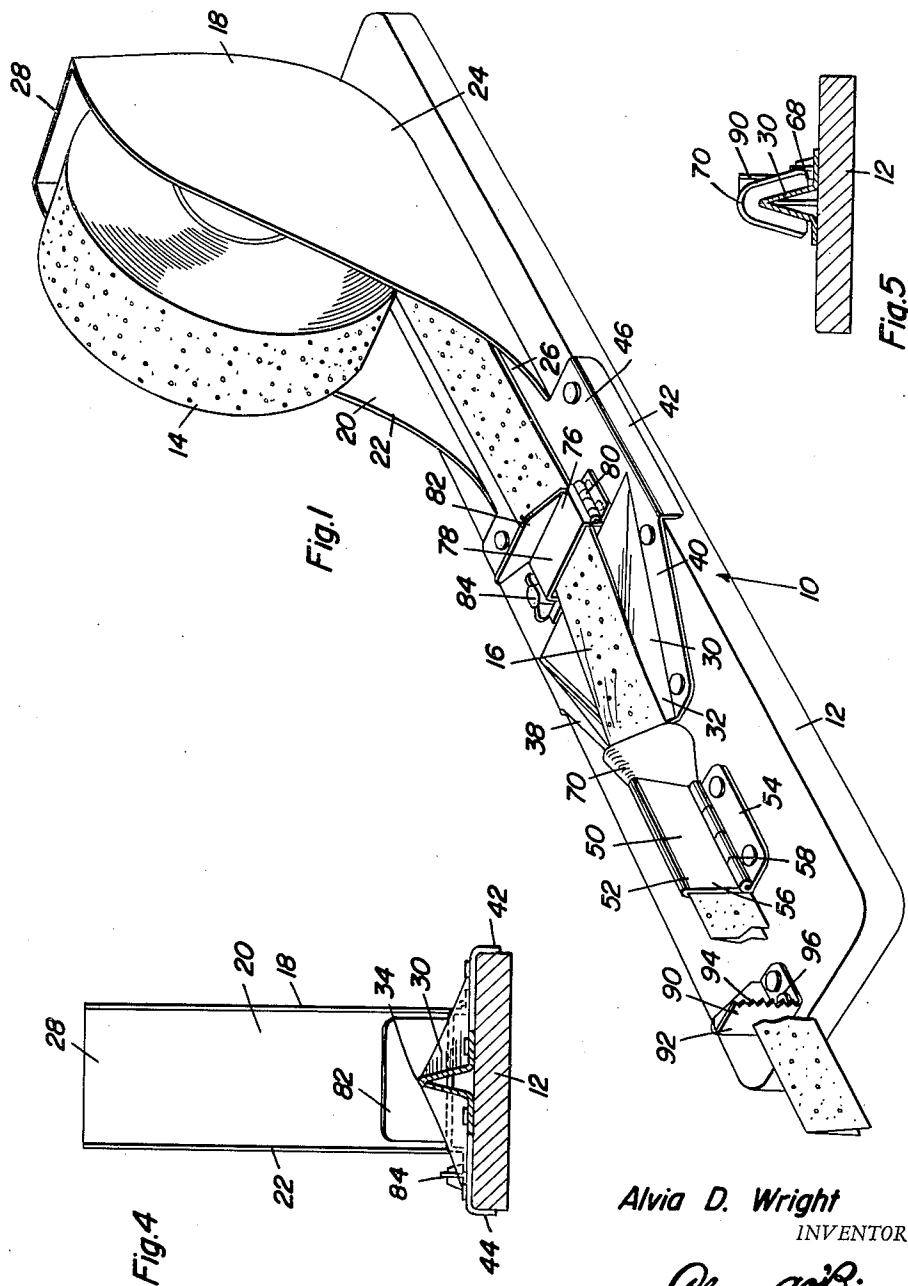
April 10, 1962

A. D. WRIGHT
TAPE FOLDER

3,029,073

Filed Feb. 12, 1960

2 Sheets-Sheet 1



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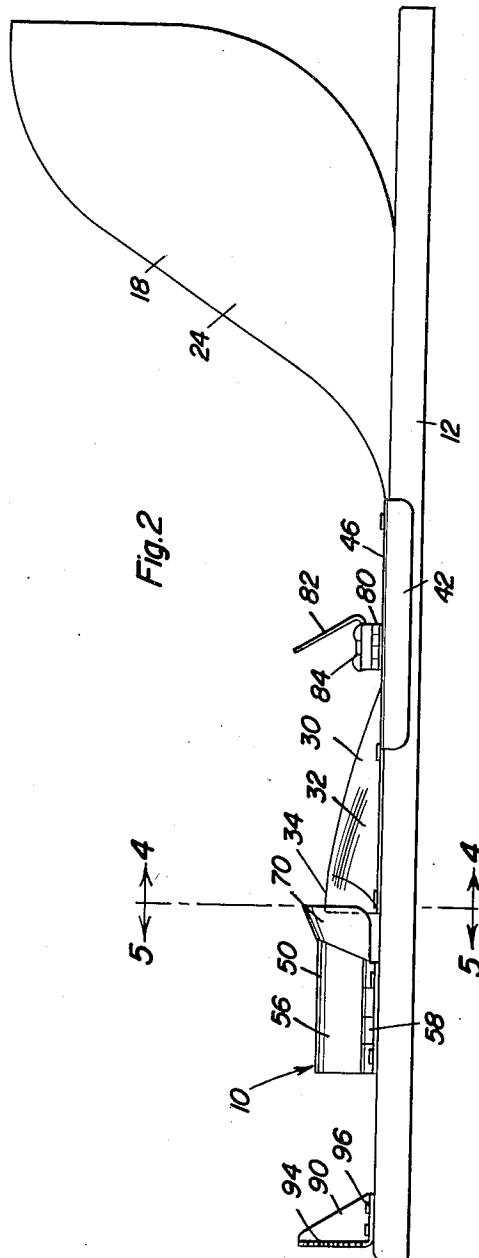
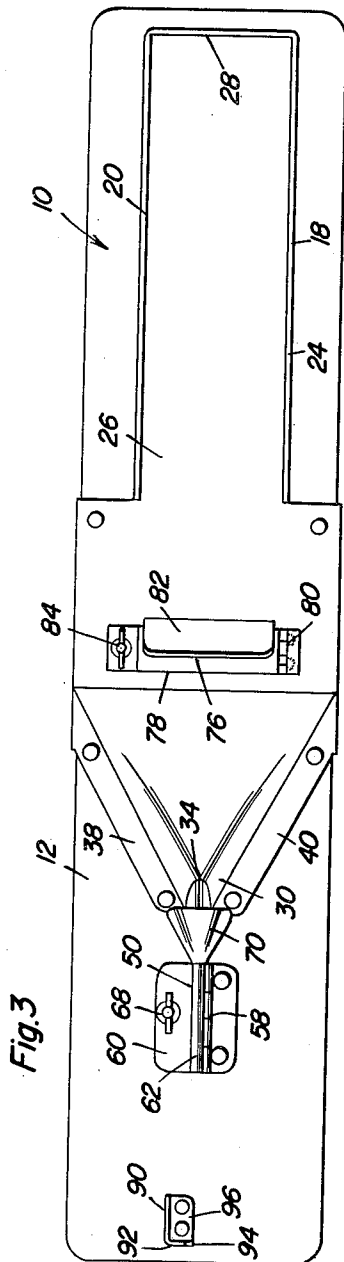
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1

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TAPE FOLDER

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Filed Feb. 12, 1960, Ser. No. 8,307

4 Claims. (Cl. 270—86)

This invention relates to dispensers and more particularly to a dispenser provided with means for folding tape or tape-like material during the dispensing thereof.

At the outset, it is to be clearly understood that the principles of the invention are applicable in connection with any and all types of tape or tape-like material capable of being dispensed from a supply thereof, preferably a roll, and folded during the dispensing procedure. There are numerous such materials used in a number of different applications and for widely divergent purposes. However, to facilitate the description, the subsequent description shall be restricted to one type of tape to be used in a single environment.

In applying tape for the purpose of finishing dry wall, it is often necessary to fold the tape, that is, make a longitudinal crease therein before applying the tape onto the plastered surface, usually a corner. The taper ordinarily withdraws a length of tape from the roll thereof which is usually hung at its side on hanger connected to its belt, and then the taper grasps the two ends thereof in three fingers of each hand and endeavors to make a crease so that the tape will fit more neatly in a freshly plastered corner. Sometimes, the tape is creased along an approximate center line, and sometimes it is not. More often than not, it is a tedious job to crease or fold the tape, and unless the taper is experienced, a neat job is almost an accidental occurrence.

Accordingly, an object of the invention is to provide a tape dispenser and creasing device which forms a longitudinal crease at the center line of the tape automatically as it is pulled from the device.

Another object of the invention is to provide a knife edge tearing device, preferably serrated, to sever the tape at the desired length.

In those instances wherein a length of tape greater than the reach of the taper is required, the device provides a solution to the problem of creasing the tape without having to crease about 6 feet; stop; reposition the tape in the fingers; and then again form another expanse of crease in the tape. This problem is overcome since the device to crease and dispense the tape does so at any length by simply pulling as much tape as required from the dispenser.

An important feature of the invention is found in the saving of time and materials used for taping. Instead of wasting tape by using too much and turn short pieces from the ends or at least one end, after it is temporarily applied to the fresh plaster, the correct length of tape may be withdrawn from the dispensing device and torn from the supply.

The above disadvantages in current taping techniques apply to taping of dry wall, for example, "sheet rock" brand of laminate plaster board which is extensively used in the building trade. Analogous problems exist in many fields and pursuits, and they can be similarly overcome by a device constructed in accordance with the principles of the invention. As indicated previously the dry wall taping is given by way of example only to illustrate only one preferred use of the invention. Other preferred uses can be achieved by a dispenser made very much like the dispenser which is especially designed for dry wall tape.

These together with other objects and advantages which will become subsequently apparent reside in the

2

details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of a dispenser constructed in accordance with the invention.

FIGURE 2 is a side view of the dispenser in FIGURE 1.

FIGURE 3 is a top view of the dispenser in FIGURE 1.

FIGURE 4 is a sectional view taken on the line 4—4 of FIGURE 2.

FIGURE 5 is a sectional view taken on the line 5—5 of FIGURE 2.

In the accompanying drawings there is an illustration of a dispenser 10 which exemplifies the invention. The dispenser is made of a flat base 12, preferably rectangular in form. The various structural components of the dispenser 10 are mounted on top of the base so that the bottom surface of the base may be used as a supporting surface.

Roll 14 of tape 16 is the source of supply. The supply holder is considered unique in that it is made of an open top and front housing 18 which merely frictionally retains the roll of tape. No spindles are necessary nor desired since it is much quicker to simply slip a roll of tape into the pocket 20 defined by sides 22 and 24 and bottom 26 as well as backwall 28 of housing 18. The two sides are approximately triangular in shape, while the back wall 28 smoothly curves at the bottom thereof to merge into bottom wall 26.

Tape former or shaper 30 is located in front of the open part of pocket 20. The former is made of metal and has a section 32 formed by upwardly and inwardly extending walls which taper gently to an apex 34 (FIGURE 3). Lateral flanges 38 and 40 at the edges of the side walls of former 30 fit flush against the top surface of base 12 and may be screwed, bolted, riveted, etc. on to the base. The former is made as a forward extension of bottom wall 26. There are a pair of side flanges 42 and 44 which fit flush against the side edges of base 12 and which help to center and hold the housing 18 and former 30 fastened in place on the base 12. Flanges 42 and 44 are located on the edges of a wide portion 46 of bottom wall 26 which projects forwardly in advance of the lower edges of side walls 22 and 24.

Since the former 32 rises vertically upward from the surface of base 12, as tape 16 is drawn thereover, it will be shaped initially prior to entering the creaser 50 which is secured to base 12 in advance of former 30. Former 30 forms a gentle, initial V-shape in tape 16, while the creaser makes a pronounced fold in the tape as it is drawn therethrough.

Creaser 50 is composed of an inverted V-shaped member 52. Mounting plate 54 is at the lower edge of one side 56 of the V-shaped member, and it is connected thereto for articulation, for instance, by a hinge 58. The mounting plate 54 is fixed to base 12. Mounting plate 60 at the lower edge of side 62 of the V-shaped member 52, is separably secured to base 12 by any suitable means, for instance, a bolt and wing nut assembly 68 attached to the base 12 and extending through a hole or slot in mounting plate 60.

A preliminary guide 70 is connected to the V-shaped member 52 and is interposed between the creaser and the former. The preliminary guide performs an intermediate creasing function on tape 16 by virtue of its shape. The mouth of the guide, i.e., that portion of the guide closer to former 30, is wide in comparison to the opposite end of the guide which may be integrally joined

or otherwise fastened to the sides 56 and 62 of creaser 50 at the inlet end thereof.

Tape guide 76 is attached to the portion 46 of bottom 26 in advance of the former 30. This would locate guide 76 between the housing 18 and the former 30. Guide 76 is made an essentially U-shaped cover 78 connected to portion 46 by hinge 80. Deflector plate 82 rises upwardly and forwardly from the edge of the U-shaped member 78 nearest to the housing 18. It is suggested that the guide 76 has the U-shaped member 10 hinged and held in place by a quick-release connector, for instance, screw and wing nut 84 so that it may be opened for cleaning, threading the tape therethrough and for any other purpose. It serves the function of feeding the tape to the ramp-like former 30 and keeping 15 the tape in proper alignment with respect to the apex part 34 of former 30.

Knife 90 is attached to base 12 at the end thereof opposite to the end having housing 18. The knife is made of a vertical plate 92 having a knife edge 94 thereon and held fastened to base 12 by means of mounting bracket 96. The knife edge 94 is preferably serrated since it has been found that a serrated edge performs the cutting operation more satisfactorily than a straight edge.

In use the housing 18 is loaded with tape by simply inserting a roll 14 therein. The tape is threaded through guide 76, over former 30 and through preliminary guide 70. The tape is further threaded through creaser 50 and thereby loading the dispenser. When it is desired to obtain a piece of creased tape, the end of the tape is simply pulled automatically creasing it along the longitudinal center line and with accuracy and precision. When the desired length of tape is withdrawn, it is cut by pulling it across knife edge 94.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A tape dispensing and creasing device comprising a base, a housing carried by said base and having an open front, said housing adapted to support a roll of tape, a former attached to said base and in advance of the open front of said housing, the tape adapted to pass

over said former, said former having an apex portion to form an initial crease in the tape along a longitudinal center line thereof, an inverted V-shaped creaser carried by said base and located in advance of said former, said creaser having sides closer together than the sides of said former to form a pronounced crease in the tape as the tape is drawn through said creaser, a preliminary creaser located between the first-mentioned creaser and said former and having sides which taper toward each other as they approach said creaser whereby the mouth end of said preliminary creaser is wider and located closer to said former, a guide carried by said base between said housing and said former including means adapted to guidingly engage opposite side edges of said tape to feed the tape centrally over the apex portion of said former, the sides of said inverted V-shaped creaser extending away from the apex of the latter a distance adapted to span substantially one-half the width of said tape and terminating in horizontal mounting plates disposed in surface to surface contacting relation with said base whereby said inverted V-shaped creaser will, together with said guide, maintain said tape properly centered relative to the apex portion of said former.

2. The subject matter of claim 1 wherein there are means connected with one of said inverted V-shaped creaser sides for movably connecting said creaser with said base so that said creaser may be opened.

3. The subject matter of claim 1 wherein said housing has a pair of sides spaced from each other a distance approximately the same as the width of the tape in the roll of tape so that said sides frictionally grip the roll of tape and hold the roll of tape in said housing.

4. The subject matter of claim 1 including an up-standing cutter connected with said base in advance of said creaser and over which the creased tape is adapted to be moved to sever selected lengths of the creased tape.

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