July 26, 1949. A. J. STANLEY ET AL 2,477,014

TAPE DISPENSER AND SUPPORTING BRACKET ASSEMBLY

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Fig. 1.

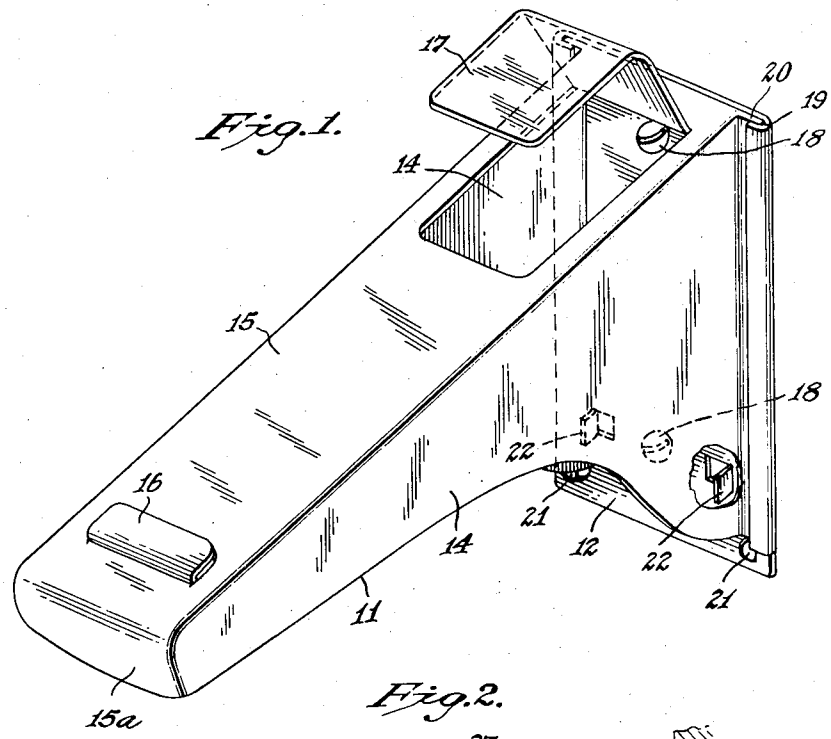


Fig. 2.

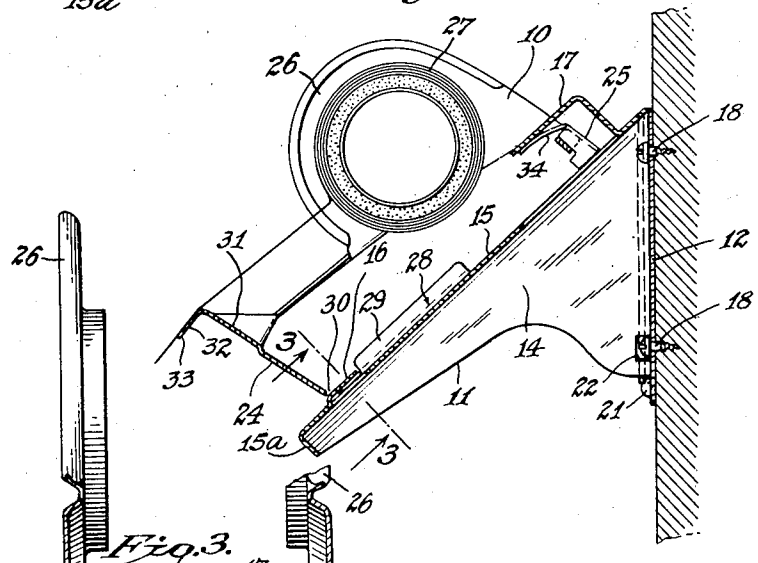


Fig. 3.

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TAPE DISPENSER AND SUPPORTING BRACKET ASSEMBLY

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6 Claims. (Cl. 248—224)

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This invention relates to a tape dispenser and supporting bracket assembly in which a dispensing device containing a roll of tape, such as a pressure-sensitive adhesive tape, is attached to a vertical support for convenience in unwinding and severing a desired length of tape from the roll.

The tape dispenser and supporting bracket assembly comprises an improved dispenser supporting bracket which enables a dispenser containing a spent roll of tape readily to be replaced with a dispenser containing a new roll of tape and a special attachment for connecting the supporting bracket to any type of vertical support, thus lending utility to the tape dispenser and supporting bracket assembly in many different environments. The assembly is compact and may be economically constructed with standard machinery from cheap and readily available materials.

Referring to the drawings,

Fig. 1 is a perspective view of a supporting bracket and attachment made in accordance with the invention and which forms part of the improved ensemble;

Fig. 2 is a fore-and-aft vertical section through a tape dispenser and supporting bracket assembly, a dispensing unit being shown in operative position on a bracket of the type illustrated in Fig. 1;

Fig. 3 is an enlarged transverse sectional view at line 3—3 of Fig. 2.

As shown in the drawings, the improved tape dispenser and supporting bracket assembly includes a dispenser 10 designed to hold a roll of tape, a supporting bracket 11, and an attachment 12 for securing the supporting bracket to a vertical support. All such elements may, with facility, be blanked out of sheet metal and bent to form.

The supporting bracket 11 includes in part, two vertical parallel side members 14, a downwardly and forwardly inclined flat top member 15, and a front member 15a, the top and front members being connected to the side members along their edges. The bracket is stamped out at the top to present a pair of opposed ears 16 and 17, located one adjacent the front and the other adjacent the rear of the bracket. The front ear is formed by cutting out a substantially rectangular portion along three sides only. The fourth side of the rectangle, which is parallel with and nearest the front edge of the bracket, is uncut so that the ear remains as an integral part of the bracket. The ear 16 is bent upwardly and then rearwardly

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so that its major portion is parallel with the top member 15 of the bracket and spaced therefrom a distance sufficient to permit the insertion therebelow of a part of the dispenser 10 in a manner hereinafter described.

The ear 17 at the rear of the bracket is cut or stamped out from the top of the bracket in the same way as the ear 16 at the front, except that it is substantially larger than the front ear and is connected with the bracket at its rear. The ear 17 likewise is bent upwardly but then forwardly to prevent a portion which is parallel with the top surface of the bracket but this portion is spaced a substantially greater distance from the top surface 15 than is the corresponding portion of the front ear 16. The ear 17 likewise is arranged to permit the insertion thereunder of a part of the dispenser 10 and the reason for its greater spacing from the top surface of the bracket will presently appear.

The bracket 11 may be secured on any vertical support by the attachment 12. This attachment is in the form of a rectangular plate made from sheet stock and is flat over substantially its entire body portion. Preferably, it is provided with a plurality of holes to accommodate screws or nails 18 by which it may be secured to a support.

The plate attachment 12 is reversely bent along its vertical edges to present opposed grooves 19 adapted to accommodate tongues or flanges 20 presented at the lateral rear edges of the bracket 11 and which may be formed by bending the stock of the side walls of the bracket outwardly at right angles thereto. The bracket is secured to the attachment by inserting the lower ends of the flanges 20 into the upper ends of the grooves 19 presented by the attachment and then sliding the flanges endwise downwardly until their movement is arrested by banking against a pair of stops 21 located near the bottom of the attaching plate. There is a stop at each side of the plate in line with the path of travel of the flanges on the bracket. The stops may be of any suitable character, preferably protrusions which are struck up from the face of the attachment plate.

To lend rigidity to the bracket structure and prevent the side walls thereof, which otherwise are unsupported, from being distorted inwardly, there is provided a pair of lugs 22 partially cut out from the plate and bent forwardly into a position to engage the inner faces of the bracket side walls 14, near the lower edges thereof when the bracket is in its lowermost position as determined by the banking stops 21.

The dispenser 10 is of a well known standard

type. The specific one selected for purposes of illustration is formed with spaced parallel vertical side members 23, connected together at the front and at the rear by members 24 and 25. The side members 23 extend upwardly at the rear to form relatively large ears 26 between which there is rotatably disposed a roll of pressure-sensitive adhesive tape 27.

The dispenser also includes a bottom member 28 formed by bending extensions of the side wall members inwardly at right angles thereto. These bent in portions of the bottom member terminate in a pair of upwardly extending fore-and-aft flanges 29, whose opposed faces are in contact and serve to prevent the side members from being distorted inwardly and thus binding the roll of tape 27 against rotation.

The bottom member 28 extends forwardly somewhat beyond the front ends of flanges 29 but terminates short of the front wall member 24 so that between said front wall member and the bottom member, there is presented a slot 30 which extends along the front lower edge of the dispenser for substantially its entire width.

There is a standard 31 at the front of the dispenser which extends upwardly from the front wall member 24. This standard is formed at the top with a forwardly extending platform 32 which terminates in a knife or serrated edge 33. When the dispenser is in readiness for use, the tape extends forwardly from the roll and, by virtue of its pressure-sensitivity, adheres to the platform 32. In order to sever a length of tape the operator engages a finger beneath the tape in the region between the standard 31 and the ears 26 which support the roll of tape, lifts the tape off the platform 32, draws off the desired length, and then severs the tape by drawing it across the knife 33. In the act of severing, the end portion of the tape remaining on the roll adheres to the platform and serves to anchor the tape during the severing operation and also to support said end portion ready for the next severing operation.

In effecting the assembly, the bottom of the dispenser 10 is placed on the bracket 11 with its bottom surface adjacent the top member 15 of the bracket and in substantial fore-and-aft alignment therewith. The dispenser is then moved rearwardly so that the rear ear 17 on the bracket assumes a position between the parallel side walls of the dispenser and in overlying engagement with a deck member 34 formed by bending the top portion of the rear member 25 forwardly. In this connection, mention should be made of the fact that the spacing of the forwardly extending portion of the ear 17 above the top surface of the bracket should be such as to engage the portion of the dispenser underlying it with a fairly tight fit. Consequently, this spacing will be determined by the height above the base of the particular part of the dispenser that the ear is adapted to engage. In this instance, of course, it is the height of the deck member 34 at the rear of the dispenser although the spacing would have to be varied for dispensers having a somewhat different configuration at the corresponding location.

The dispenser is moved rearwardly along the top surface of the bracket until the front edge of the dispenser bottom member 28 clears the front ear 16 on the bracket. Then the dispenser is moved forwardly, causing the ear 16 to enter the slot 30 at the front of the dispenser and engage in overlying relation with said bottom member 28. The forward movement of the dispenser is continued until it is arrested, in this case by the engagement of the front end of its bottom flanges 29 with the rear edge of the ear 16. This constitutes the operative position of the dispenser on the bracket. In its operative position it is held firmly against displacement away from the bracket when the tape is unwound from the roll by pulling on the leading end thereof. It will be noticed that the top surface 15 of the bracket slopes downwardly toward the front so that the dispenser, when assembled thereon, is presented at an angle which is most convenient for grasping and severing a length of tape.

It is to be understood, of course, that when the roll of tape in the dispenser has been spent, the dispenser may be replaced by one containing a fresh roll. To remove the dispenser with the spent roll, it is necessary only to reverse the operations that are used in assembling the dispenser on the supporting bracket, i. e., the dispenser is moved rearwardly along the bracket until the bottom clears the front ear 16. The dispenser then is raised sufficiently to permit its bottom to pass over the ear 16, whereupon the dispenser is moved forwardly out of underlying engagement with the ear 17 at the rear of the bracket.

From what has been said, it is clear that the invention provides a compact, handy arrangement for securing a dispenser to a vertical support at an angle which is most convenient for unwinding the tape from the roll and severing a desired length thereof, and one which, while permitting substitution of a new dispenser when the roll in an old one has been spent, nevertheless adequately supports the dispenser in a stable condition, requiring the use by the operator of one hand only in dispensing tape.

The invention has been described in its preferred form only and many modifications thereof are included within its spirit. It is to be limited, therefore, only by the prior art and the scope of the appended claims.

What is claimed is:

1. A tape dispenser and supporting bracket assembly comprising an adhesive tape dispenser and a wall type bracket unit for supporting the dispenser in a position to facilitate the removal of tape from the contained roll by pulling on the leading end of the tape, said wall bracket unit comprising a platform member for supporting the dispenser, anchoring means associated with the platform constructed and arranged to hold the dispenser in operative position against movement in the direction of pull on the tape as it is removed from the dispenser and to permit movement of the dispenser to inoperative position to facilitate its removal from the supporting platform, and means for securing said supporting platform to a vertical support.

2. A tape dispenser and supporting bracket assembly comprising an adhesive tape dispenser and a wall type bracket unit for supporting the dispenser in a position to facilitate the removal of tape from the contained roll by pulling on the leading end of the tape, said wall bracket unit comprising a platform member for supporting the dispenser, a pair of opposed ears struck up one at each end of the platform and arranged, when the dispenser is located in its operative position on the platform, to engage underlying parts at the front and at the rear of the dispenser, to hold the dispenser against displacement in

the direction of pull of the tape as it is removed from the dispenser, and to permit said dispenser to be moved along the platform to an inoperative position clear of one of said ears to permit its displacement away from said platform and out of underlying engagement with the other of said ears, and means for securing the platform to a vertical support.

3. A tape dispenser and supporting bracket assembly comprising an adhesive tape dispenser and a wall type bracket unit for supporting the dispenser in a position to facilitate removal of tape from the contained roll by pulling on the leading end of the tape, said wall bracket unit comprising a platform member for supporting the dispenser, anchoring means associated with the platform, constructed and arranged to hold the dispenser in operative position against movement in the direction of pull on the tape as it is removed from the dispenser and to permit movement of the dispenser to an inoperative position clear of said anchoring means to facilitate its removal from the platform, and a device for securing the bracket unit to a vertical support including a pair of opposed grooves to accommodate tongues presented by the bracket unit, and means on said device cooperating with the tongues to locate the tongues in a given position in said grooves.

4. A tape dispenser and supporting bracket assembly comprising an adhesive tape dispenser and a wall type bracket unit for supporting the dispenser in a position to facilitate the removal of tape from the contained roll by pulling on the leading end of the tape, said wall bracket unit comprising a pair of parallel side walls connected by a platform member for supporting the dispenser, anchoring means associated with the platform, constructed and arranged to hold the dispenser in operative position against movement in the direction of pull on the tape as it is removed from the dispenser and to permit movement of the dispenser to an inoperative position clear of said anchoring means to facilitate its removal from the platform, and a device for securing the bracket unit to a vertical support including a pair of opposed grooves to accommodate a pair of tongues presented by the side wall members of the bracket unit, and means on said device arranged to engage the side walls of the bracket unit when the latter is in its normal position in said device for holding said wall members against movement toward each other.

5. A wall type bracket for supporting an adhesive tape dispenser in a position to facilitate removal of the tape from a roll contained in the dispenser by pulling on the leading end of the tape, and which is adapted to be mounted

on a vertical support presenting opposed grooves, said wall bracket comprising a sloping platform member for supporting the dispenser, a pair of opposed ears struck up, one at the higher end of the platform for engaging the dispenser at its rear end and one at the lower end of the platform for engaging the dispenser at its front end, to hold the dispenser against displacement in the direction of pull of the tape as it is removed from the dispenser when the dispenser is located in its operative position on the platform, lateral wall members for supporting the sloping platform and flanges presented by the wall members at the ends thereof corresponding to the higher end of the platform for engaging the opposed grooves in the vertical support to hold the bracket in its operative position.

6. A wall type bracket for supporting an adhesive dispenser in a position to facilitate removal of the tape from a roll contained in the dispenser by pulling on the leading end of the tape, and which is adapted to be mounted on a vertical support presenting opposed grooves, said wall bracket comprising a sloping platform member for supporting the dispenser, a pair of opposed ears struck up, one at the higher end of the platform for engaging the dispenser at its rear end, and one at the lower end of the platform for engaging the dispenser at its front end, to hold the dispenser against displacement in the direction of pull on the tape as it is removed from the dispenser when the dispenser is located in its operative position on the platform, lateral wall members for supporting the sloping platform, flanges presented by the wall members at the ends thereof corresponding to the higher end of the platform for engaging the opposed grooves in the vertical support to hold the bracket in its operative position and abutments presented by the vertical support in a position to engage the inner opposed faces of the lateral wall members to assist in retaining the flanges thereon in engagement in the opposed grooves of the vertical support.

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Certificate of Correction

Patent No. 2,477,014 July 26, 1949

ALEXANDER J. STANLEY ET AL.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows:

Column 2, line 12, for the word "prevent" read *present*;

and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 13th day of December, A. D. 1949.

[SEAL]

THOMAS F. MURPHY,
Assistant Commissioner of Patents.