

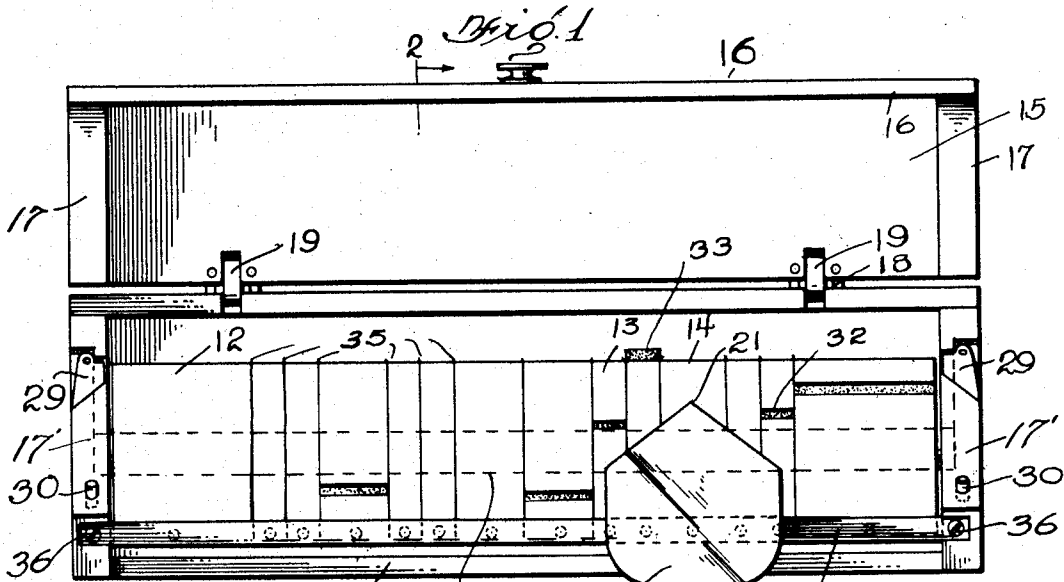
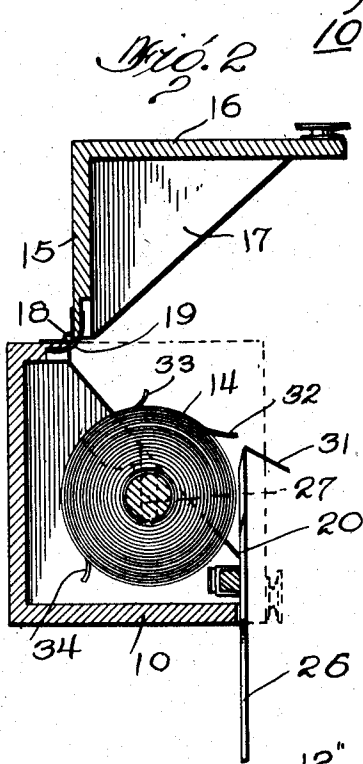
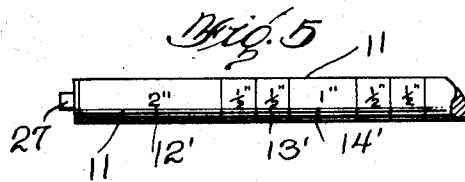
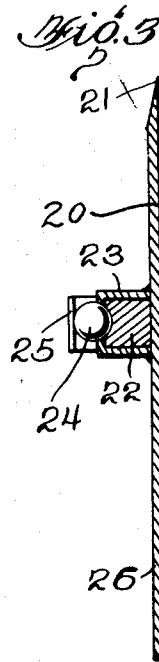
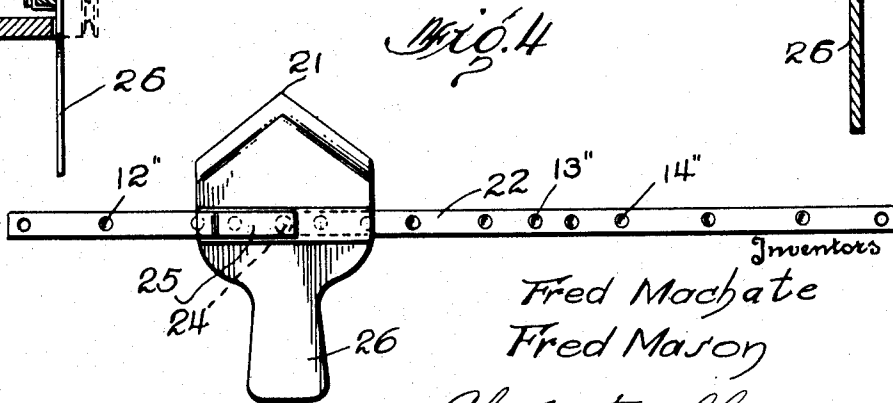
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F. MACHATE ET AL

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TAPE DISPENSER

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Inventors
Fred Machate
Fred Mason

By *Chas. M. Funkhouser*
Attorney

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TAPE DISPENSER

Fred Machate and Fred Mason, Lansdale, Pa.

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9 Claims. (Cl. 164—36)

This invention relates to a roll strip dispensing apparatus and more particularly to a container for accommodating a plurality of strip rolls and a cutter for severing desired lengths of material from individual rolls.

An object of the invention is to provide a container for a plurality of axially aligned rolls of strip material and a movable cutter blade mounted in the container and adapted to be centered relative to the surface of any individual roll surface.

Another object of the invention is to provide apparatus of the character designated having an improved cutter mechanism and mounting therefor.

Another object of the invention is to provide apparatus of the character designated having a removable unitary supporting axle for a plurality of rolls of adhesive tape and spacer members of non-adhesive material between adjacent rolls.

Another object of the invention is to provide an adhesive tape dispensing device which shall provide apparatus for severing strips from the individual rolls in a convenient and sanitary manner.

Another object of the invention is to provide apparatus of the character designated in which the individual rolls are positioned on a supporting axle in spaced relation to cutter positioning mechanism on the cutter support.

A further object of the invention is to provide a dispensing cabinet for adhesive tape which is simple and rugged in construction and more efficient and serviceable in operation than similar apparatus heretofore proposed for dispensing severed strips from a plurality of rolls.

These and other objects of the invention will be more manifest from the following specification and drawing and more particularly set forth in the claims.

In the drawing:

Figure 1 is a front view in elevation of a roll strip dispensing device embodying our invention, Figure 2 is a sectional view in elevation on line 2—2 of Figure 1.

Figure 3 is an enlarged sectional view of the cutter blade and retainer therefor shown in Figure 1.

Figure 4 is a rear view in elevation of the cutter blade and mounting shown in Figure 1; and Figure 5 is a fragmentary view of the roll shaft support and individual roll markings thereon.

Referring to Figures 1 and 2 of the drawing,

there is shown a roll strip dispensing device constructed and arranged in accordance with the present invention. The device contemplates a cabinet container 10 including a shaft 11 adapted to support a plurality of individual rolls of adhesive tape of different widths as indicated by the numerals 12, 13 and 14, for example. Each roll is placed on the axle support 11 in accordance with space designations 12', 13' and 14' shown in Figure 5, wherein 12' indicates space for a roll of two inch tape, 13' for one-half inch tape and 14' for one inch tape, respectively. The cabinet 10 is diagonally divided so that ample access may be had to the rolls in the container and the division is effected by a hinged lid member having top and side members 15 and 16 respectively, and diagonal end members 17—17. The lid is hinged by members 18—18 each including a spring 19 having snap action so as to hold the lid in elevated position, or in the closed position as shown in dotted lines, Fig. 2.

An important feature of the present invention is the provision of a movable cutter blade 20 mounted in the front portion of the cabinet and extending vertically adjacent the periphery of the rolls. The blade is provided with a V shaped cutting edge, a point 21 of which is adapted to engage the median or middle portion of a strip and sever outwardly as the material is pulled downwardly across the blade. The blade 20 is mounted on a square shaft 22 by a rectangular guide member 23 which is adapted to rigidly hold the blade in upright position during any severing operation, Fig. 3.

Another feature of the V shaped knife is that the blade edge is beveled on the inside as indicated by the numeral 21'. This bevel is adjacent to the roll surface in order that a straight cross cut or severance of the strip shall be effected when the strip is pulled into engagement with the blade.

In order to properly position the blade with its point 21 at the median portion of each roll, the support shaft 22 is provided with notches or depressions 12'', 13'' and 14'' spaced to correspond with the respective markings 12', 13', and 14' on the roll supporting axle, as shown in Figures 1 and 4, for example. These depressions are engaged by a slide latch ball member 24 and a leaf spring retainer member 25 as shown in Fig. 3. The cutter blade 20 is provided with a suitable handle portion 26 which projects outside the cabinet and is readily accessible.

The axle support 11 is removably supported in the cabinet end portions by a bearing portion 27

which engages a suitable notch in the stationary diagonal side members 17'-17' of the cabinet. The axle 11 is retained in the end notches by keeper members 29-29. The diagonal end members are also provided with rubber stops 30-30 which prevent excessive noise when the lid is closed.

An important feature of the present invention is the rigid vertical mounting of the blade 20 relative to the surface of a roll and the simple manner in which the severing operation may be carried out as illustrated in Figure 2. It will be observed that as a strip 31 is severed from the roll 14 for example, there remains a top or loose portion 32 remaining between the cutter blade and the roll body. This remaining tab 32 is of particular importance in that it provides a ready means to pull more tape from the roll in a rapid and convenient manner. Tabs 33 and 34 indicate end portions of adjacent rolls and the accessible manner in which the tabs remain after severing.

The provision of markings on the roll support 11 to designate the order of assembling the strip rolls thereon, and the corresponding notch means for positioning the cutter relative to a designated roll, insures that the point 21 of the cutter blade will always be positioned at the center or median portion of the particular tape strip. The present arrangement also enables a person to grasp a tab and draw tape from the roll and sever it with the use of one hand and with a single movement, leaving the other hand free for any other use. A dispenser of this type is particularly desirable in hospitals or dispensaries where tapes of different sizes or widths must be kept available in a convenient and sanitary condition.

Another feature of the present invention is the provision of separator sheets 35-35 positioned between adjacent rolls to prevent the same from sticking together. The sheets are preferably of non-adherent wax material.

While we have shown the blade support as a square rod 22, it is obvious that this may be of any configuration to properly guide the blade 20 and hold it with the desired rigidity during a severing operation. Whichever form is employed, it is commensurate in length with the roll axle 11 and is securely attached to the stationary cabinet diagonal end members 17'-17' by any convenient means such as screws 36-36.

Having thus fully described our said invention, what we claim as new and desire to secure by Letters Patent is:

1. Apparatus for dispensing roll strip material comprising in combination, an axle support for receiving a plurality of rolls of different widths, means on the axle support for indicating the position at which each roll shall be assembled thereon, a cutter member movable relative to said rolls, and means for locating and holding the cutter at the median portion of each individual roll on the support whereby a strip may be severed therefrom.

2. Apparatus of the character described in claim 1 in which the cutter comprises an inverted V shaped vertical blade, and means for positively holding the point of the blade adjacent to the median point of a roll strip.

3. Apparatus of the character described in claim 1 in which the cutter is slidably mounted on an angular shaped rod positioned in front of the rolls and coextensive in length with the roll axle support, and indentations on the rod for

positively positioning the cutter adjacent the roll strip to be severed.

4. Apparatus of the character described in claim 1 including, a support for the movable cutter, means on the support for indicating the position of each roll thereon, said indicating means corresponding in location to means on the cutter support for centering and positioning the cutter blade adjacent a roll.

5. In an adhesive roll strip dispensing cabinet, the combination of an axle support for a plurality of rolls of adhesive tape, a slidably mounted cutting device having a vertically disposed inverted V shaped cutter blade mounted in front of the cabinet, an angular shaped rod for supporting the blade in rigid cutting relation to the rolls, and latch means carried by the cutter and cooperating with indentations in the rod support for positioning the point of the blade adjacent the center of each roll strip to be severed.

6. Apparatus of the character described in claim 5 in which the cutting device is provided with a handle extending outside the cabinet walls.

7. In a cabinet for housing and dispensing roll strip material, the combination of a removable axle support for a plurality of rolls, spacer sheets for separating adjacent rolls and preventing the edge portions from adhering together, spaced designations on said axle for positioning the rolls in a predetermined order, a movable cutter blade located in the front of the cabinet for severing strips from a roll, a cutter support coextensive with said axle, spaced designations on said cutter support corresponding to those on said axle, whereby the cutter blade shall be positioned and held adjacent to the median portion of a roll strip, and a lid closure member for enclosing the rolls and the cutter blade member.

8. In an adhesive tape dispensing cabinet, a removable axle support for receiving a plurality of rolls of different widths, means on the axle support for indicating the position at which each roll shall be assembled thereon, a vertically disposed inverted V-shaped knife slidably mounted for movement adjacent to the peripheral surface of each roll, said knife having a bevelled edge adjacent to the roll surface, whereby the roll strip shall be severed with a straight cut when pulled into contact with said blade, and means for locating and holding the cutter blade at the median portion of each individual roll on the support.

9. In an adhesive roll strip dispensing device the combination of a rectangular shaped cabinet having the bottom, side and end wall portions adapted to partially enclose a plurality of rolls of adhesive tape in side by side relation, an axle support removably mounted in the end portions of said cabinet for receiving the rolls of tape, means on the axle support for indicating the position at which each roll shall be assembled thereon, a vertically disposed inverted V-shaped knife slidably mounted for movement adjacent to the front portion of each roll, said knife having a bevelled edge adjacent to the tape roll surface, whereby the roll strip shall be severed with a straight cut when pulled into contact with said blade, and means for locating and holding the cutter blade at the median portion of each individual roll on the support, and a lid including top and front wall portions for enclosing the rolls and the knife when the cabinet is not in use.

FRED MACHATE.
FRED MASON.