BEST AVAILABLE COPY

Jan. 24, 1939. O. KIND 2,144,883

DEVICE FOR HOLDING IN READINESS A SUPPLY OF ADHESIVE PAPER BANDS PROVIDED WITH CARRYING HANDLE LOOPS

Filed Sept. 1, 1934

Fig. 1

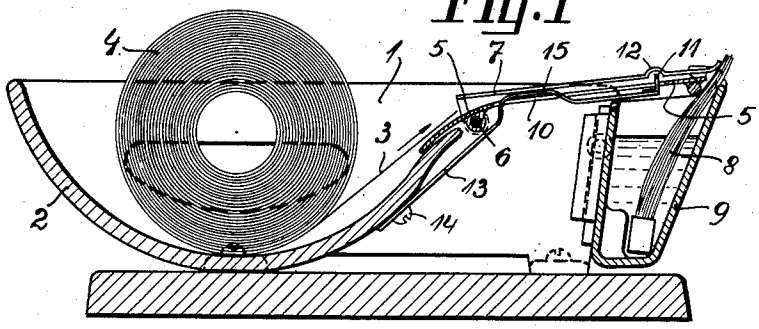


Fig. 2

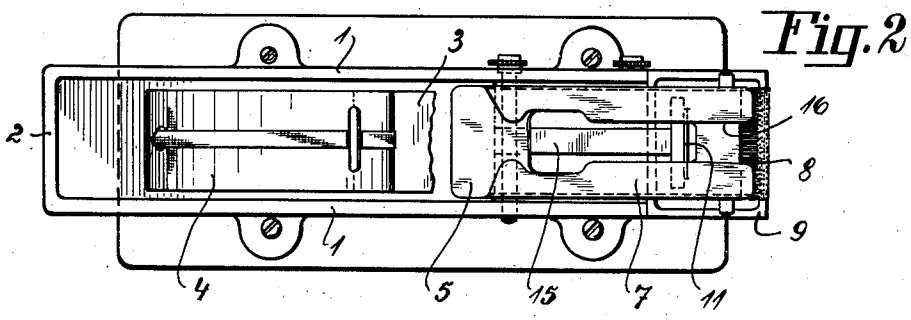


Fig. 3

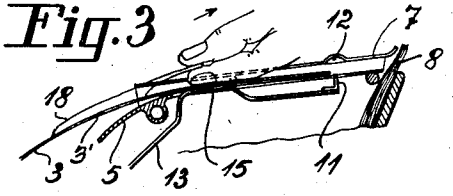


Fig. 4

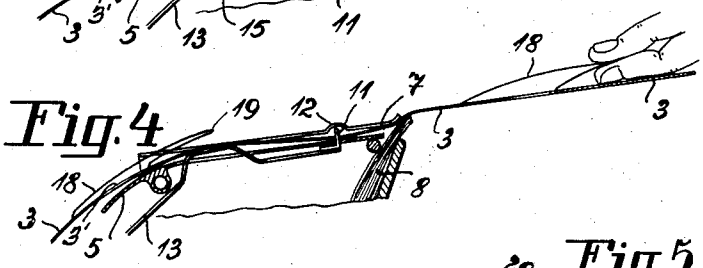
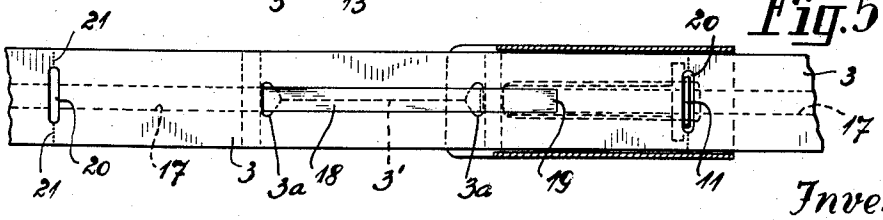


Fig. 5



Inventor:
Oscar Kind
by
Fraser & Bleman Atty

Patented Jan. 24, 1939 2,144,883

UNITED STATES PATENT OFFICE

2,144,883

DEVICE FOR HOLDING IN READINESS A SUPPLY OF ADHESIVE PAPER BANDS PROVIDED WITH CARRYING HANDLE LOOPS

Oscar Kind, Rodenkirchen, near Cologne-on-the-Rhine, Germany

Application September 1, 1934, Serial No. 742,506
In Germany September 6, 1933

1 Claim. (Cl. 242—55.5)

This invention relates to gummed tape and a dispensing machine for such tape.

An object of the invention is to provide a novel dispensing means for a gummed tape or adhesive band having loops on the ungummed side, wherein the loops will be successively disposed for gripping by the fingers of an operator.

A second important object of the invention is to provide a novel combination of gummed tape and dispensing machine wherein the tape and dispensing machine are provided with cooperating means engageable to limit the length of tape drawn off by one movement of the operator's hand.

A third important object of the invention is to provide the tape or band with a transversely extending weakened portion for engagement by the delivery limiting means of the machine so that the delivery portion can be easily torn from the remainder of the tape at such weakened line.

A fourth important object of the invention is to so arrange the delivery limiting means of such a machine that it may be readily engaged by the operator's fingers to release the tape in drawing off the same.

With the above and other objects in view, the invention consists in general of certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawing and specifically set forth in the appended claim.

In the drawing is shown the device constructed according to the invention.

Fig. 1 is a vertical longitudinal section of a dispensing machine constructed in accordance with the invention and showing the special arrangement of tape therein.

Fig. 2 is a plan view thereof with a portion of the tape shown in Figure 1 omitted.

Fig. 3 is a longitudinal section drawn to a larger scale and showing the method of operation of the device when removing an adhesive band section.

Fig. 4 is a partial longitudinal section corresponding to Fig. 1 and showing the position of the parts when tearing off the moistened end section ready for use.

Fig. 5 is a horizontal section of the guide track for the adhesive band together with a plan of a piece of the latter.

The sides 1 of the body of the device together with the shell shaped bent bottom wall 2 which connects them together forms a container open at the top, which serves for the reception of the coil 4 formed of the adhesive band or gummed tape 3. The guide for the adhesive band end runs from this coil to the moistening device, has the cross section of a flat sleeve and is supported by two transverse pins 6 connected to the lower wall 5 of the sleeve and extending between the two side walls 1. The upper wall of this guide track is formed by two longitudinal bars 7 connected at their outer longitudinal edges to the lower wall 5. Between the longitudinal inner edges of the bars 7 there is provided a slot of suitable width. The inner end of the lower wall 5 projecting somewhat over the inlet opening of the guide track bears on the forward edge of the bottom wall 2. At the outer end of the guide track the upwardly bent ends of the two bars 7 extend to the upper end of the moistening brush 8 which is arranged with upwardly directed bristles and is held in a liquid container 9 preferably detachably secured to the side walls 1.

At a short distance from the end of the guide track the lower wall 5 thereof is provided with a transverse opening 10 in which is located a pawl 11, preferably of the shape of a bar extending transversely of the device and which in its upper operative position projects upwardly with its upper edge extending into two upwardly directed arched portions 12 of the upper wall bars 7. The pawl 11 is carried by a blade spring 13 which is secured to the outer side of the bottom wall 2 by means of a screw 14 and which has an upwardly arched bent portion 15 extending through a longitudinal slot 16 into the hollow of the guide track up to about the height of the upper wall bars.

The adhesive band 3 consists of a paper band coated on the underside with adhesive and a strong supporting sectional band 17, preferably having its section glued by its two ends at the middle of this paper band to the adhesive surface thereof. Between these two ends each section of the band 17 passes through a longitudinal slit 3' formed in the paper band to the outer side thereof, which is free from adhesive, and here forms a loop 18, the band exceeding in length the length of the slit 3' in the band 3. This slit has a slot 3^a at each end to facilitate the passing of the band 18 from one side of the band 3 to the other. As long as the paper band remains rolled up in a supply coil this band is folded and is so located between the convolutions of the coil 4 that its fold point 19 is directed forwardly as shown in Figs. 3 and 4. It is therefore possible, as shown in Fig. 3 to grip the gripping loop with two fingers for the pur-

pose of withdrawing a band section ready for use and at the same time by means of the finger underneath the loop to depress the portion of the band 3 lying over an arched portion 15 formed in the spring 13 of the pawl 11 and thus to depress this pawl spring and the pawl 11 itself. This then opens the path for the forward movement of the adhesive band which the pawl has so far obstructed and the band can now be moved forwardly in the guide by pulling forwardly on the gripping loop 18.

The space between the inner edges of the upper wall bars 7 is made somewhat wider than the width of the supporting band 17 so that the upper guide wall does not form an obstruction to the forward movement of the foremost band section. At the point at which two successive sections of the adhesive band are connected, there is provided a transverse slot 20 of which the length is somewhat longer than the width of the pawl 11.

When after suitably pulling out the foremost adhesive band section this transverse slot 20 comes over the pawl 11 the pawl rises into the hole and prevents further forward movement of the part of the band which is still dry. By means of this transverse hole and if desired perforations 21, between this and the outer edges, the paper band is weakened to such an extent that it can be torn off easily. The supporting band, which otherwise extends throughout the length of the adhesive band, is also interrupted by the transverse slot. On the passage of the adhesive band over the upper end of the moistening brush 8 the lower surface of the adhesive paper coated with adhesive coming into contact therewith is moistened and then rendered adhesive. After tearing off the withdrawn band section this can therefore be used for holding the paper wrapper of a package in the same manner as an ordinary adhesive paper strip, whilst however, the manipulation of the adhesive strip is facilitated by the presence of the gripping loop 18 as this can be used as a handle in this case. In this manner there is avoided any necessity of touching the adhesive surface of the adhesive band coated with moist adhesive.

Instead of the tearing points prepared by the transverse holes and if desired by the perforations 21 there may also be used for severing the adhesive band section withdrawn from the device and provided with the carrying loop, shears secured to the apparatus or adapted to be actuated by hand. In this case the provision and action of the stop pawl 11 is under the circumstances unnecessary.

What I claim is:—

In a dispensing machine for gummed tape including means for holding a supply of said tape, and wherein said tape has regularly spaced transverse slots formed therethrough and has gripping means formed on the ungummed back thereof intermediate said slots; a pawl adapted to successively engage said slots as said tape is drawn from said supply holding means, a leaf spring supporting said pawl and extending rearwardly under said supply holding means, said spring normally urging said pawl in a slot engaging direction, said pawl and spring being positioned to be depressed out of a slot engaging position by the fingers of a user as said tape gripping means is gripped, said pawl being automatically released to return to a slot engaging position to engage in the succeeding slot after said tape is drawn forward a predetermined distance, and a flat tubular guide extending from said tape supply holding means, the upper surface of said guide being formed to provide a slot extending from end to end thereof.

OSCAR KIND.