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M. H. TARR

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LABEL, STAMP, OR STRIP APPLYING DEVICE

Filed Nov. 23, 1935

Fig. 1.

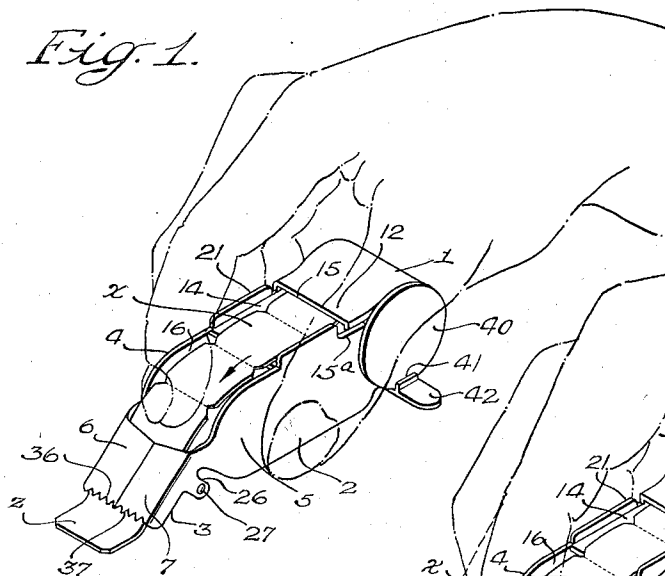


Fig. 2.

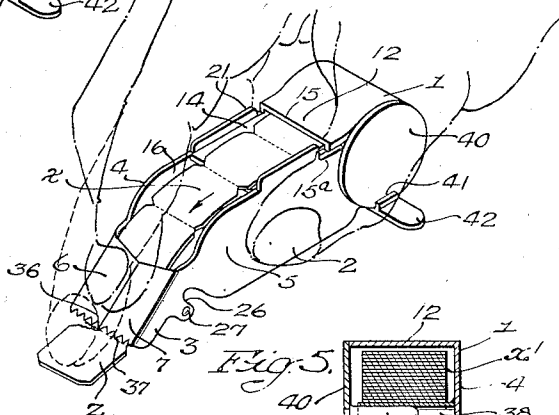


Fig. 7.

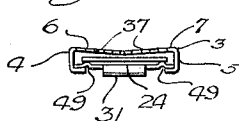


Fig. 5.

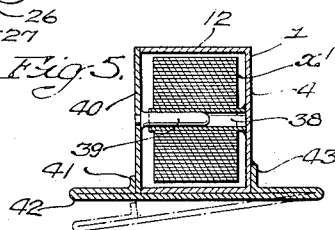


Fig. 3.

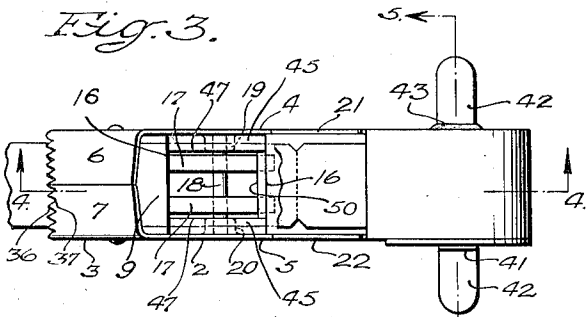


Fig. 6.

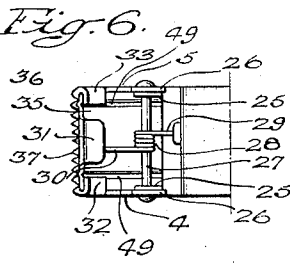
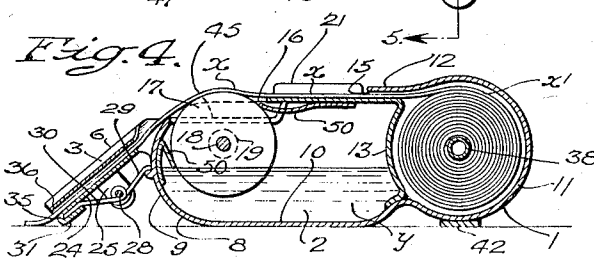


Fig. 4.



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UNITED STATES PATENT OFFICE

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LABEL, STAMP, OR STRIP APPLYING
DEVICEMargaret Hooker Tarr, Collingswood, N. J., as-
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Application November 23, 1935, Serial No. 51,304

7 Claims. (Cl. 91—14.5)

This invention relates to a device for use in applying gummed labels, tags, stamps, and particularly those in perforated strip form or imperforate strips of plain or decorated gummed paper or fabric, etc. to various articles of merchandise, letters, papers, envelopes, or parcel wrappings, etc.

The primary object of the invention is to construct a device of the kind noted in such a manner as to permit of its being supported wholly in and by one hand and operated thereby to feed, moisten, project, clamp, and release the labels, etc. or other sections of a strip and to press the projected moistened label, strip section, etc. into contact with the surface to which it is being applied while leaving the other hand free to handle the articles, etc. which are being tagged, stamped, etc.

Another object of the invention is to provide a device of the kind noted with a magazine for holding a supply of labels, etc. in a dry state and from which the same may be fed, as required, by one finger of the hand in which the device is being held.

Another object of the invention is to provide the device with a moistening means which will apply just enough moisture to the labels, etc. as will suffice to cause such units to stick properly to the surfaces to which they are applied, so that the adhesive will set substantially immediately and thereby prevent slipping or displacement of the units on said surfaces.

Another object of the invention is to provide the device with a clamping means whereby the strips or labels or stamps in strip form may be held firmly at the point of exit from the device while a projected section of the strip is being severed from that portion of the strip which is to be retained within the device.

Another object of the invention is to provide the device with a severing means adjacent the point of exit whereby, a twist of the wrist of the hand in which the device is being held, while the projected strip is being pressed by the forefinger of the same hand against the surface to which the projected portion of the strip is being applied, will sever the projected portion of the strip from that portion retained within the device.

The construction and operation of the device will be fully disclosed hereinafter, reference being had to the accompanying drawing, of which:

Fig. 1 illustrates the device in perspective as being held with one hand while a finger of said hand is being used to feed, moisten and project a portion of the strip from the device;

Fig. 2 is a view similar to Fig. 1 showing the device being held in the one hand using the forefinger thereof to effect first a clamping of the strip adjacent the delivery end of the device and subsequently with the same finger in a second position pressing a projected section of the strip against the surface to which said section is being applied while the projected section is being severed by a twist of the wrist of the hand in which the device is being held;

Fig. 3 is a plan view of the device;

Fig. 4 is a longitudinal sectional elevation taken on the line 4—4, Fig. 3;

Fig. 5 is a transverse sectional elevation taken on the line 5—5, Fig. 3;

Fig. 6 is an inverted plan view of the delivery end of the device; and

Fig. 7 is a front edge view of the delivery chute.

As shown in the drawing, the device comprises a magazine 1 for stamps or labels in strip form having one surface thereof gummed or coated with a suitable dry adhesive. Forward of the magazine 1 and immediately adjacent thereto is a reservoir 2 which in the present instance is adapted to contain water or other softening liquid for the dry adhesive on the one side of the strip α . Forward of and immediately adjacent the reservoir 2 is a delivery spout or guide 3.

Obviously, the device may be made of any suitable material in the form of a casting or molded of bakelite or tennite, etc., or it may be composed of sheet metal suitably shaped with the parts secured together to produce an integral structure forming the main portion of the device.

In the present instance, the device is shown as being composed of sheet metal, including side walls 4 and 5 which are bent transversely at 6 and 7, as shown in Fig. 3, to provide the upper portion or plate of the delivery guide 3.

Extending between the side walls 4 and 5 is a plate 8 which, as shown in Fig. 4, is bent to form the front end wall 9 and the bottom 10 of the reservoir 2 and the back circular wall 11 of the magazine 1, said plate passing upwardly and forwardly over the reservoir 2, as indicated at 12, and terminating forwardly of the magazine 1. The front curved wall 13 of the magazine 1 is formed of a second plate secured to the plate 8 immediate the reservoir 2 and magazine 1, to form a partition therebetween. The magazine 1, in the present instance, is of cylindrical form and the walls 11 and 13 thereof are bent on the same radius swung from a common center.

The plate 13 extends upwardly from the plate 8 and then forwardly below the end 12 of the

plate 3 and forms a closed top 14 on the reservoir 2. The end 12 of the plate 3 and the flat portion 14 of the plate 13 are spaced apart to provide a guide slot 15 for the strip *x* where it emerges from the magazine 1.

The flat top 14 of the reservoir 2 is provided with an opening 16 adjacent the forward end of said top plate 14 and the upper edge of the front wall 9 of the reservoir. Rotatably mounted in the reservoir 2 and projecting through the opening 16 is a pair of laterally spaced relatively narrow faced moistening wheels 17, 17.

The moistening wheels 17, 17 in the present instance are secured to a transversely extending spindle 18 which is rotatably mounted in bearings 19 and 20 carried by the side walls 4 and 5 respectively.

The upper surface of the top plate 14 of the reservoir 2 provides a support for the strip *x*, between the magazine 1 and the moistening wheels 17, 17 and, to prevent lateral displacement of the strip *x* on the support 14 as the strip *x* passes from the moistening wheels 17 under the top plate 6—7 of the delivery guide 3, the side walls 4 and 5 are provided with vertically extending guides 21 and 22 respectively.

The lower side of the guide 3 is provided by a plate 23, said plate being provided with depending side lugs 25, 25 which lie adjacent to corresponding lugs 26 formed on the side walls 4 and 5 respectively. Passing through the lugs 25 and 26 is a pivot 27, by means of which the bottom plate 24 of the guide 3 is pivotally mounted with respect to the top plate 6—7 thereof.

Coiled about the pivot 27 is a spring 28, one end 29 of which is anchored to the front wall 9 of the reservoir 2 while the second arm 30 of said spring is anchored in a lip 31 formed on the forward lower end of the plate 24.

Pivotal movement of the plate 24 with respect to the plate 6—7 is limited by lugs 32 and 33 formed on the lower ends of the side walls 4 and 5. Pivotal movement in the opposite direction is limited by the lower edge 35 of the bottom plate 24 engaging the lower edge 36 of the top plate 6—7. The lower edge 36 of the top plate 6—7 is provided with teeth or other serrations 37.

In the present instance, the strip *x* is in the form of a coil *x*¹ within the magazine 1, said coil being rotatably mounted on a tubular stud 38 secured to the side wall 4 and projecting axially through the magazine 1 to a plane adjacent that of the side wall 5. The one end of the magazine 1 is closed by the side wall 4 while the opposite end opens through the side wall 5 and is closed by a plate 40 which is provided with a stud 39 fitting within the tubular stud 38.

The cover or end plate 40 is held in place by a shoulder 41 formed on a spring 42 which extends transversely of the device and projects laterally beyond the side walls 4 and 5 thereof, one end 43 of said spring being anchored to the side wall 4 in any suitable manner as by soldering, riveting, welding, etc. The laterally projecting ends of the catch or spring 42 also serve as feet to support the device in an upright position and to prevent the device from falling laterally when not being used.

The reservoir 2 is adapted to hold a suitable quantity of liquid *y* into which the lower portions of the moistening discs or wheels 17 extend. Obviously, the reservoir 2 may contain a sponge, felt, or other moisture absorbent and retaining material which will have contact with the peripheral edges of the discs 17 which convey the

liquid *y* through the opening 16 in the top of the reservoir 2 into contact with the under dry gummed side of the strip *x*.

In order to prevent spilling of the liquid *y* if the device should be tilted laterally in use or otherwise, the opening 16 between the side walls 4 and 5 and the adjacent sides of the discs 17, 17 is substantially closed by plates 45, 45 which extend laterally inward from the side walls 4 and 5 below the plane of the top plate 14 of the reservoir 2, with the side edges 47, 47 of said plates lying immediately adjacent the outer sides of the discs 17, 17.

In operation, the device may be held in one hand (right) as illustrated in Fig. 1 and the strip *x* may be fed from the magazine 1 over the platform 14 above the reservoir 2 and over the tops of the moistening wheels 17, 17, then down into the delivery guide 3 by a movement of the forefinger in the direction of the arrow as shown in Fig. 1. In this way the gummed side of the strip is pressed into contact with the moistening wheels 17 which are relatively narrow and apply but a small quantity of moisture to the gum side of the tape.

As a section *z* of the strip *x* is projected from the delivery chute 3, said section may be pressed downwardly on the surface to which the section is to be applied by the forefinger of the right hand or by the forefinger of the other hand, left, for example, which causes the moisture applied by the wheels 17 to spread over substantially the entire surface of the projected section *z* of the strip *x*. Previous to pressing the projected section as just described, the forefinger of the right hand is placed upon the top plate 6—7 of the delivery chute 3, for pressing the forward end of the device downwardly against the label-receiving surface, whereupon the edge 35 of the pivoted bottom plate 24 swings upwardly and clamps the strip against the serrated edge 36 of the top plate 6—7. The forward end of the device is held down in this manner by being gripped firmly between the thumb and other fingers of the right hand while the forefinger is moved to the strip-pressing position above noted. Then, by a twist of the right wrist, while the projected section of the strip is being held down as noted, the section *z* is severed from the strip *x* by the serrations 37 on the lower edge 36 of the top plate 6—7.

Upon raising the device, the spring 28 moves the edge 35 of the pivotal bottom plate 24 of the guide spout 3 away from the serrated edge 36 of the top plate 6—7, leaving the exit at the lower end of the guide spout 3 open for free passage of the strip *x* when the operator again engages the strip with the forefinger and moves it along the platform 14 and across the moistening wheels 17, 17 whereby another section of the strip is projected from the delivery end of the guide 3.

A new roll *x*¹ may be readily inserted in the magazine 1 by pressing the free end of the spring 42 downwardly from the full line position in Fig. 5 to the broken line position in said figure, and wherein the top edge of the shoulder 41 is below the bottom edge of the cover plate 40. The cover plate 40 may then be removed and a new roll *x*¹ placed in the hollow stud 38 within the magazine 1, the free end of the strip *x* being slipped laterally into the slot 15 through the open end 15a thereof, see Figs. 1 and 2, after which the cover plate 40 may be replaced.

In order to prevent the moistened gummed side of the strip from adhering to the bottom plate 24 of the delivery chute 3 when said bottom plate is

moved to clamp the strip during severance of the projected end thereof, the plate 24 is or may be provided with laterally spaced longitudinally extending ribs 49, 49 which engage dry portions of the strip and keep the moistened parts thereof from contacting with said plate 24.

In order to present the required amount of moisture to the face of the wheels 17, 17 or to remove surplus moisture therefrom, a spring wiper or pair of wipers 50, 50 may be provided in the reservoir 2 and which are secured to one or more walls of the reservoir with free ends resiliently engaging the faces of the wheels 17, 17.

If desired, the wheels 17, 17 may be replaced by one broad faced wheel having circumferentially extending drain grooves, or having the face of the wheel knurled or otherwise provided with small relatively spaced strip-contacting areas which receive the moisture and transfer the moisture to the gummed surface of the strip.

I claim:

1. A device for applying strip sections to surfaces, said device being arranged to be supported, used and actuated in and by one hand of a person to apply said strip sections to said surfaces, said device comprising a magazine for the strip, means for producing an adhesive surface on the strip, a delivery guide for the strip projecting forwardly from said magazine and said adhesive surface producing means, said guide comprising a pair of substantially parallel plates for receiving the strip therebetween with one of said plates pivotally mounted with respect to the other of said plates for movement toward said other plate at the delivery end of the guide for gripping the strip therebetween, one of said plates being arranged to engage the surface on which a section of said strip is to be applied and the other of said plates being arranged to be pressed by one finger of the hand in which the device is retained for effecting said gripping.

2. A device for applying strip sections to surfaces, said device being arranged to be supported, used and actuated in and by one hand of a person to apply said strip sections to said surfaces, said device comprising a magazine for the strip at one end of the device, a delivery guide for the strip at the opposite end of the device and projecting forwardly from the magazine-containing portion of the device, means intermediate said ends for producing an adhesive surface on the strip in passing from the magazine to the delivery guide and comprising a reservoir for liquid provided with an opening over which the strip passes, a platform between said opening and said magazine and arranged to slidably support the strip to provide for feeding of the strip from the magazine to said delivery guide and said adhesive-producing means by pressure and movement of one finger of the hand in which the device is retained, means in the opening and receiving liquid from the reservoir for applying said liquid to said strip, means at the delivery end of the delivery guide for severing the strip, and means adjacent said severing means for holding the strip during severance of a section therefrom.

3. A device for applying strip sections to surfaces, comprising a magazine for the strip at one end of the device, a delivery guide for the strip at the opposite end of the device, means intermediate said ends for producing an adhesive surface on the strip in passing from the magazine to the delivery guide and comprising a reservoir for liquid provided with an opening over which the strip passes, a pair of laterally spaced and

relatively narrow faced wheels rotatably mounted in the reservoir and projecting into the opening and receiving liquid from the reservoir for applying said liquid to said strip as relatively narrow bands respectively, means at the delivery end of the delivery guide for severing the strip, and means adjacent said severing means for holding the strip during severance of a section therefrom.

4. A device for applying strip sections to surfaces, said device being arranged to be supported, used and actuated in and by one hand of a person to apply said strip sections to said surfaces, said device comprising a magazine for the strip at one end of the device, a delivery guide for the strip at the opposite end of the device and projecting forwardly from the magazine-containing portion of the device, means intermediate said ends for producing an adhesive surface on the strip in passing from the magazine to the delivery guide and comprising a reservoir for liquid provided with an opening over which the strip passes, a platform between said opening and said magazine and arranged to slidably support the strip to provide for feeding of the strip from the magazine to said delivery guide and said adhesive-producing means by pressure and movement of one finger of the hand in which the device is retained, means in the opening and receiving liquid from the reservoir for applying said liquid to said strip, guide means for the strip adjacent the side edges of said platform to prevent laterally shifting of the strip between the magazine and the liquid-applying means, means at the delivery end of the delivery guide for severing the strip, and means adjacent said severing means for holding the strip during severance of a section therefrom.

5. A device for applying strip sections to surfaces, comprising a magazine for the strip, means for producing a plurality of laterally spaced narrow adhesive surfaces on the strip, a delivery guide for the strip, said guide comprising a pair of substantially parallel plates for receiving the strip therebetween with one of said plates pivotally mounted with respect to the other of said plates for movement toward said other plate at the delivery end of the guide for gripping the strip therebetween, and a pair of laterally spaced ribs on and extending longitudinally of the strip-confining surface of one of said plates for engagement with the adhesive side of the strip parallel to and spaced laterally from said narrow adhesive surfaces.

6. A device for applying strip sections to surfaces, said device being arranged to be supported, used and actuated in and by one hand of a person to apply said strip sections to said surfaces, said device comprising a magazine for the strip, means for producing an adhesive surface on the strip, a delivery guide for the strip projecting forwardly from said magazine and said adhesive surface producing means, said guide comprising a pair of substantially parallel plates for receiving the strip therebetween with one of said plates pivotally mounted with respect to the other of said plates for movement toward said other plate at the delivery end of the guide for gripping the strip therebetween, one of said plates being arranged to engage the surface on which a section of said strip is to be applied and the other of said plates being arranged to be pressed by one finger of the hand in which the device is retained for effecting said gripping, and resilient means for separating said plates upon release of the

pressure of the finger on the plate engaged thereby.

5 7. A device for applying strip sections to surfaces, said device being arranged to be supported, used and actuated in and by one hand of a person to apply said strip sections to said surfaces, said device comprising a magazine for the strip, means for producing an adhesive surface on the strip, a delivery guide for the strip projecting
10 forwardly from said magazine and said adhesive surface producing means, said guide comprising a pair of substantially parallel plates for receiving the strip therebetween with one of said plates pivotally mounted with respect to the other of

said plates for movement toward said other plate at the delivery end of the guide for gripping the strip therebetween, one of said plates being arranged to engage the surface on which a section of said strip is to be applied and the other of said plates being arranged to be pressed by one finger of the hand in which the device is retained for effecting said gripping, and a cutting edge formed on one of said plates at the delivery end of the guide for severing the strip adjacent the place where the strip is gripped between said plates. 5 10

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