

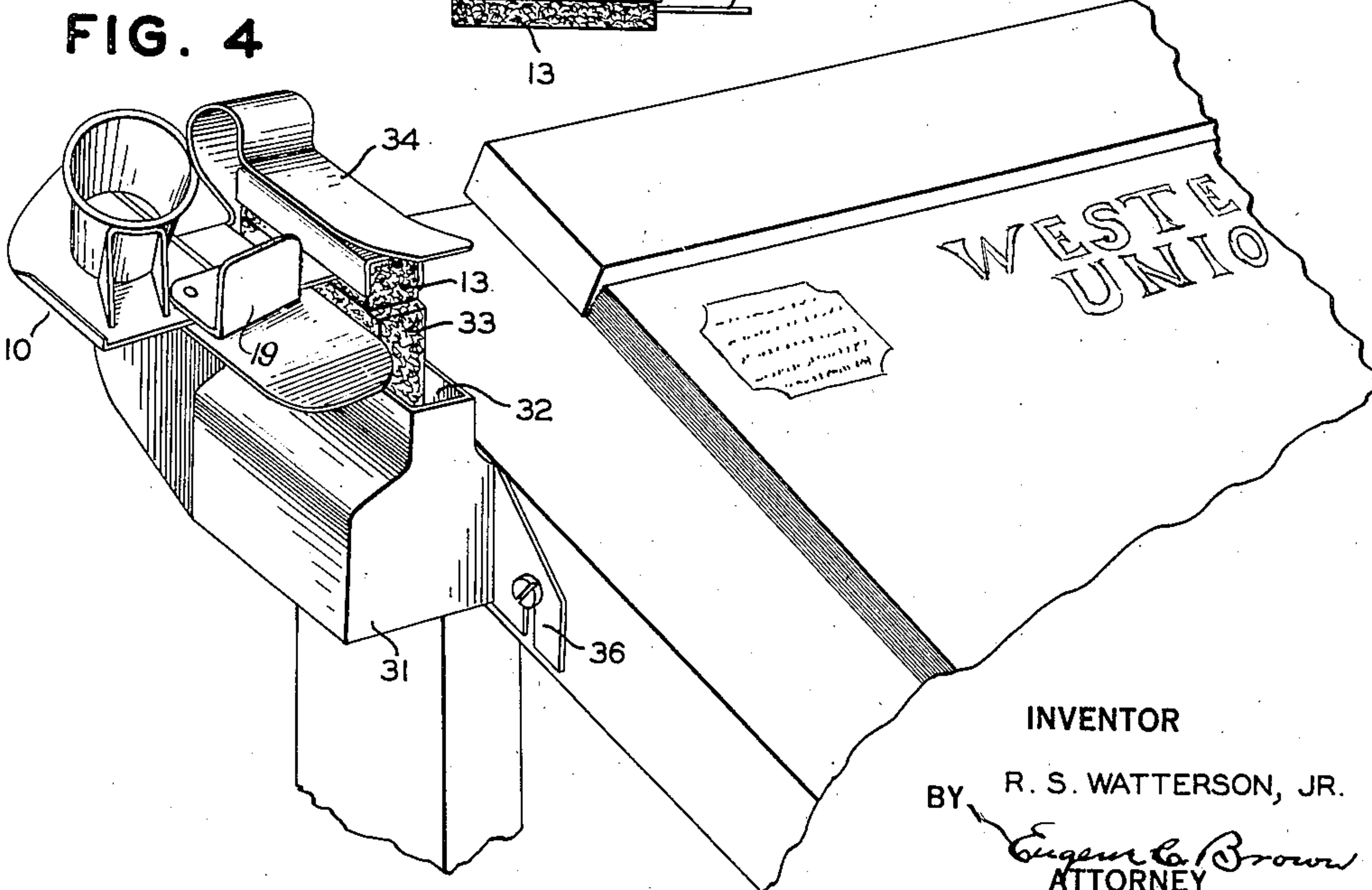
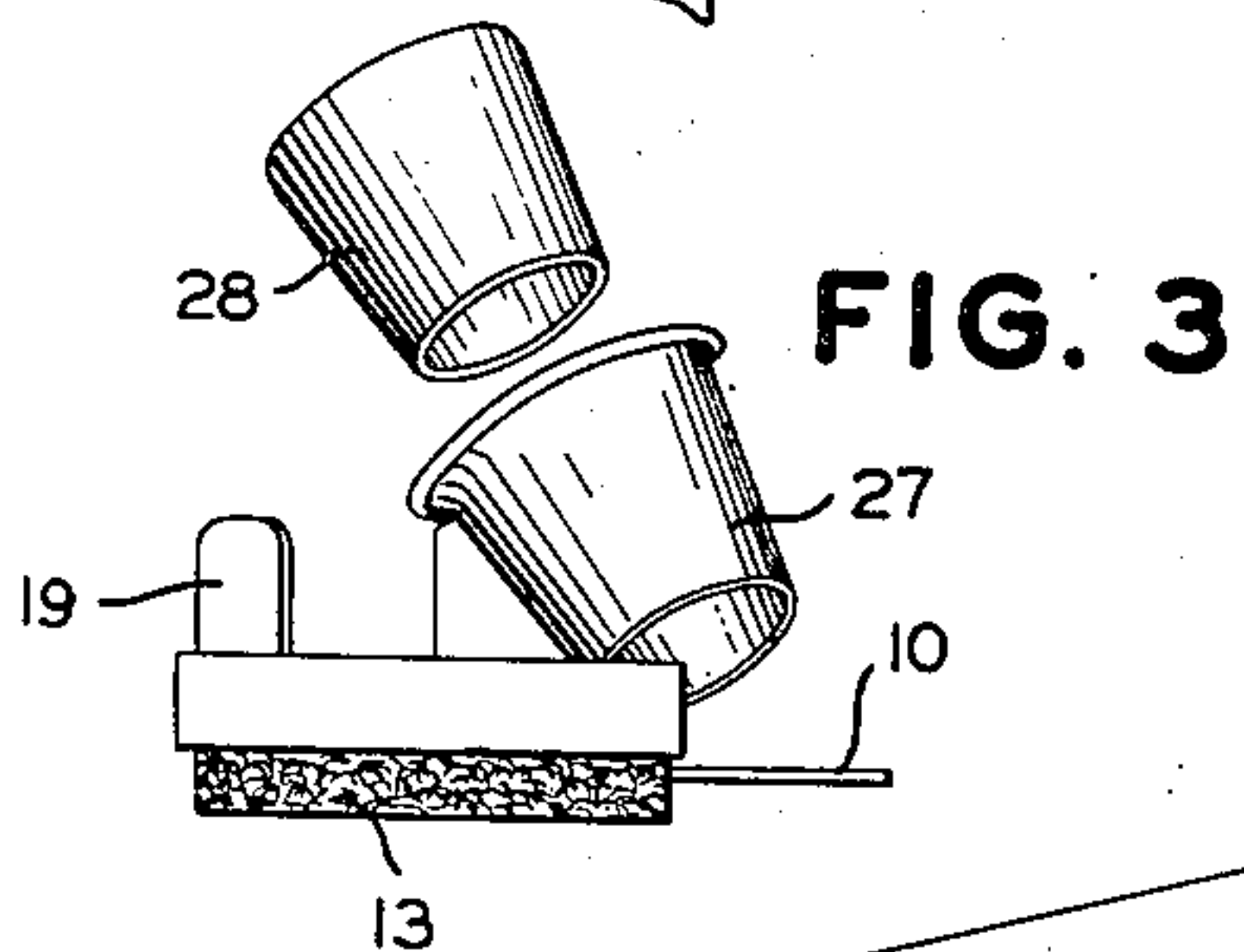
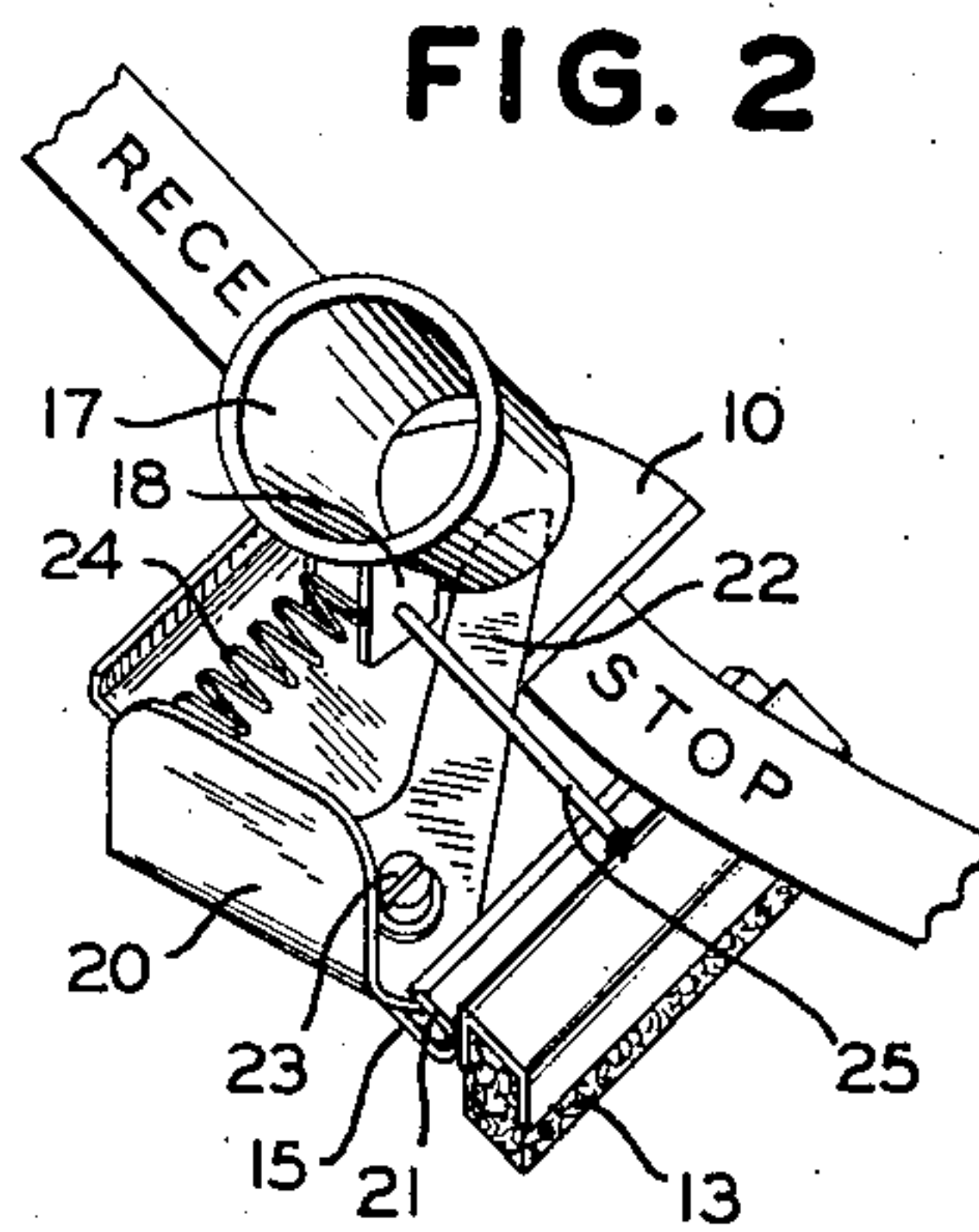
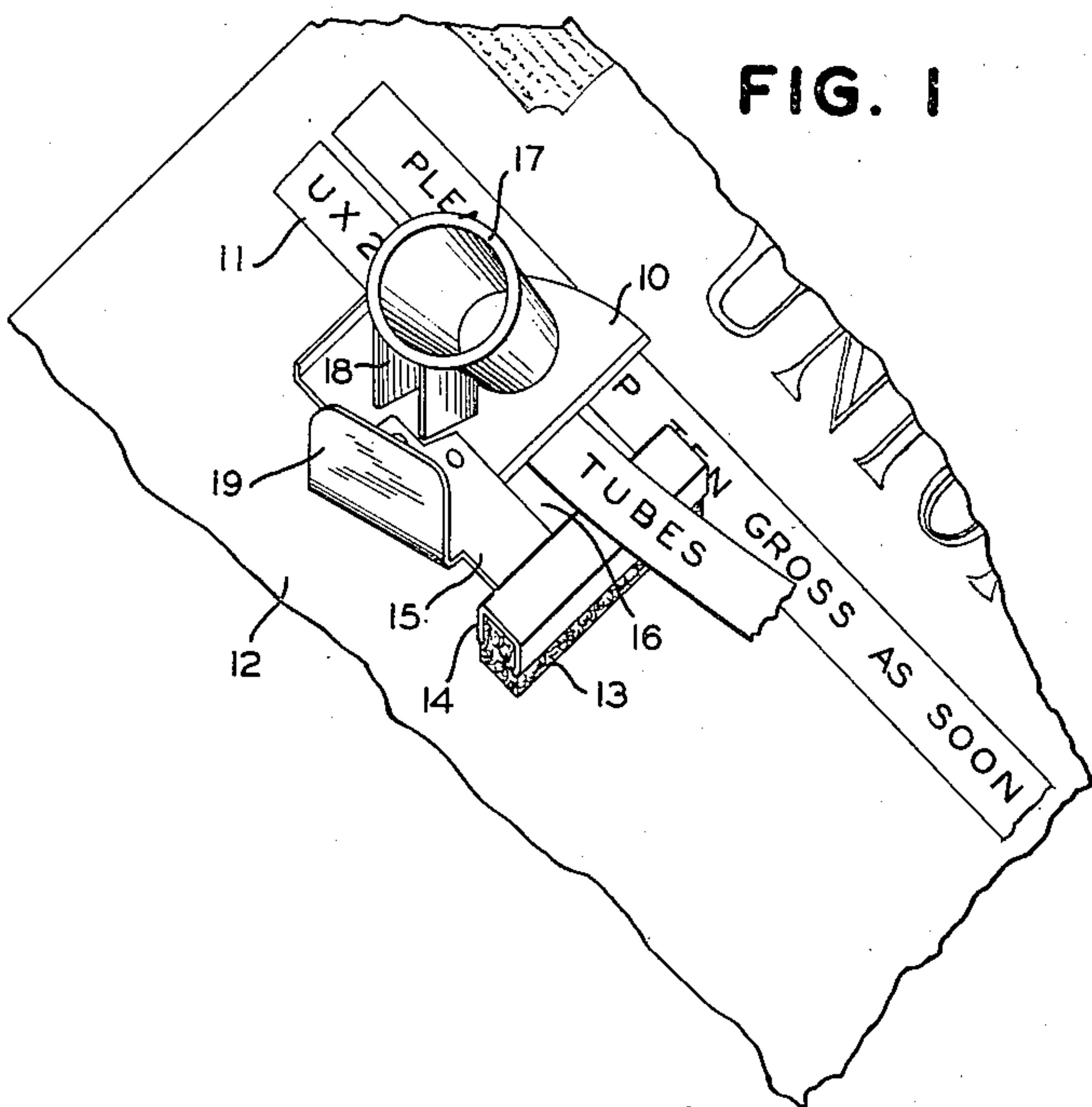
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TAPE AFFIXING DEVICE

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TAPE AFFIXING DEVICE

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This invention relates to tape affixing devices, more particularly, to a device for affixing gummed tape to a blank sheet or supporting surface by applying moisture to the surface to which the tape is to be affixed and pressing the gummed surface of the tape down upon the moistened surface.

It is well known that the type of modern printing telegraph apparatus ordinarily employed for receiving the commercial type of telegraph message prints the message lengthwise on a narrow tape, the undersurface of which has glue or other suitable adhesive material applied thereto, which will cause the tape to stick to a surface when a solvent liquid, such as water, is applied thereto. There are two methods of applying the moisture or solvent liquid to affix adhesive tapes of this type to the desired surface. One is to apply the moisture directly to the coated surface of the tape; the other is to apply moisture to the surface to which the tape is to be affixed and later pressing the tape down upon the moistened surface. This invention relates particularly to means for applying the tape by the latter method.

There are certain types of printing telegraph service, such as private subscriber service had by brokers and the like, in which only a few messages are received at a time for the larger portion of the day. In such a service a device for affixing the message tape to the telegraph blank which requires that the tape be threaded through an extended passageway or guide in the device is objectionable. More time may be lost in assembling the tape in an affixing device of this type than is saved by the use of the device.

It is an object of this invention, therefore, to provide a simple tape affixing device which may be operated with the minimum amount of manipulation.

Another object of this invention is to provide a tape affixing device which may be carried by the fingers of one hand and brought into position to apply the tape to the paper while the tape is carried in the other hand.

A still further object of this invention is to provide a device embodying a presser or affixing plate and a moisture carrying pad arranged with their faces in substantially the same plane, so that the pad and plate may be passed over the face of a telegram blank or other surface with a single motion.

Still another object is to provide a presser plate with moisture pad means secured thereto in position to pass over the surface to which the tape is to be affixed ahead of the presser plate so that the

tape, allowed to pass under the plate, will be pressed down upon a moistened surface.

A further object is to provide means for severing the tape in a space or opening between the moistening pad and the presser plate.

Another object is to provide a thimble grip for said device arranged to hold removable thimble sleeves so that various sizes of standard internal diameters may be used interchangeably.

A still further object is to provide a support, which may be secured to the desk or table at which the affixer is to be employed, having means for renewing the moisture in the moistening pad while the device is not in use.

These and other objects will be apparent from the following description and claims, together with the drawing forming a part of this description, in which:

Fig. 1 is a perspective view showing the simplest form of the device in position to apply tape to a message blank;

Fig. 2 is a perspective view showing another form of the device provided with shearing members for severing the tape;

Fig. 3 is a side view of the device showing the removable thimble sleeve; and

Fig. 4 shows the support and moisture renewing means secured to a desk or table.

According to this invention a tape affixing device is provided in an extremely simple form in which only the essential elements are included. No moisture or solvent liquid reservoir is required for my affixing device. Neither is any type of guide or passageway required for the tape. When all of these elements are omitted the device assumes an extremely simple form, which is inexpensive to manufacture and which may be readily used by an inexperienced person.

For a further description of the invention reference is had to the drawing. Fig. 1 shows the simplest form of the device and comprises a presser plate 10, which is passed over a tape 11 to press it down upon the surface of a telegram blank. The front side of the plate 10 is preferably provided with a beveled edge so that the tape may be severed by tearing it therealong. In order to apply moisture to the blank a pad 13, preferably of absorbent felt or the like, is carried in a recess of a bracket 14. The bracket is secured to the plate 10 by an arm 15 extending from one edge of the plate. An opening in the form of an open end slot 16 is left between the pad carrying bracket and the front edge of the plate 10.

The device is arranged to be carried preferably

by the left hand by means of a thimble 17 secured to the back of the plate 10 by means of a bracket 18. The thimble is carried in a position inclined toward the butt of the plate 10. At the butt of the plate 10 an upstanding member 19 is provided for a thumb rest. The face of the thumb rest plate 19 is preferably inclined outwardly from front to rear of the plate, so as to give a surface which conforms more nearly to the natural position of the end of the thumb when the device is held by inserting the forefinger in the thimble 17 and bringing the thumb against the face of the thumb rest plate.

In use a message tape is affixed to a blank by first passing the moisture pad over the area at the left margin of the blank to which the end of the tape is to be applied. The tape may then be positioned with the fingers of the right hand and pressed upon the wetted surface by the tip of the plate 10. The tape is then held upwardly inclined by the right hand so that the pad carrying bracket 14 may pass around underneath the tape. The device is then carried forward from left to right with the tape passing over the bracket 14 and underneath the front edge of the presser plate 10, and the moisture pad in engagement with the surface of the blank so that moisture is applied ahead of the point where the tape passes under the plate 10. As the plate passes over the tape it is pressed down firmly upon the moistened surface of the blank where the adhesive coat on the undersurface of the gummed tape is partially dissolved, causing it to adhere thereto. When a user of the device becomes experienced the movements may be made very rapidly so that a tape may be affixed to a message blank as rapidly as by any other device.

When the device reaches the right margin of the blank the tape is severed between words, as is the common practice, by pulling the tape upwardly against the front edge of the plate 10 with a twisting movement. This type of severing is well known. If desired, the front edge of the plate 10 may be brought to a knife edge to assist in cutting the tape.

Referring to Fig. 2, another embodiment of the device is illustrated which employs means for shearing the tape. It comprises a presser plate 10 with a thimble 17 secured thereto by means of bracket 18 and with a moisture pad 13 carried in a recess in bracket 14 and positioned in spaced relation to the front edge of the plate. In its preferred form the plate 10 extends across the space to the moisture pad in the form of an arm 15, carrying a section 21 turned over to present its under surface substantially parallel to the plate 10. The plate section 21 forms the upper element of the shears while the lower element is formed by member 22 pivoted at 23. As the member 22 swings around its pivot point, its forward edge engages the edge of plate 21 with a shearing action. The shears are operated by providing a thumb rest plate 20 as an integral part of the lower shearing member. A spring member 24 is disposed in compression between the back of the plate 20 and the thimble bracket 18. The spring 24 pushing against the plate 20 pivots the thimble member 22 in a counter-clockwise direction holding the shears open. When it is desired to close the shears, pressure is applied to the thumb rest plate 20, overcoming the pressure of the spring and swinging the member 22 in a clockwise direction. To prevent the tape from binding in the front of the shears, a guide

bar 25 is located across the front a slight distance outwardly from the bottom.

In operation the device, in engagement with a tape being affixed to a blank, is moved so that the tape passes over the pad 13 and the upper shearing member 21 and underneath the plate 10 and lower shearing member 22. When it is desired to sever the tape, the device is stopped at the proper position and pressure applied to the thumb plate 20 to swing the member 22 over, cutting the tape between the shearing edges of the upper members 21 and 22.

It is well known that finger thimbles are ordinarily provided in a series of standard sizes for fitting the fingers of different persons. When supplying the type of device illustrated in Figs. 1 and 2, it would ordinarily be necessary to provide an assortment of devices having thimbles of various sizes. In order to avoid the necessity of having an assortment in order to supply the proper size thimble to persons intending to use the device, an arrangement according to Fig. 3 may be employed with an external sleeve member 27 of uniform size secured to the back of the presser plate 10 in the position of the ordinary thimble. The internal diameter of this sleeve is of sufficient size to admit a thimble sleeve 28 of the largest size ordinarily required. For supplying the user with a thimble of the required size this inner thimble sleeve 28 will be removed and another sleeve substituted therefor. The removable sleeves all have the same outside diameter. The inside diameters conform to the various standard thimble sizes. These inner sleeves may be of bakelite material or other suitable composition and may be held in place by forcing them tightly into position in the external sleeve. A special securing member may be provided to hold the inner sleeves in place if desired. The other features of the device with the removable inner sleeves may be substantially the same as already described.

I have found that the moisture pad of a size of somewhat the same proportions as illustrated will furnish sufficient moisture for affixing or sticking down the tape of two or three ordinary messages. Of course the amount of moisture carried by the device may, by increasing the dimensions of the felt member comprising the pad, be made greater. However, this moisture must be renewed from time to time. It may be renewed in any suitable manner such as dipping the pad in water or pressing it upon a saturated sponge. However, I have provided a rest or support member which may be secured in any convenient place at the desk or table where the device is ordinarily used, which provides not only a receptacle for the device when not in use but means also to renew the moisture in the pad. In its preferred form the support comprises a member 31 in the form of a reservoir with a slot opening 32 along its upper side. A wick member 33 preferably of slightly less width than the length of said opening, is inserted therein to rest on the bottom of the reservoir. The upper end of the wick is preferably of a size equivalent to or slightly larger than the surface of the pad 13. The device is arranged to hold the pad 13 firmly down upon the surface of the wick by means of a spring member 34. For supporting the presser plate and the remaining portion of the device a shelf member 35 is disposed at substantially the same level as the top of the wick 33. Suitable brackets 36 at the ends of the reservoir may be provided for securing the support in place.

During periods when the device is not in use, it is placed upon the support. The reservoir 31 will be kept partially filled with water or other solvent liquid. Capillary attraction in the wick 5 33 will draw the water up to the upper surface. The affixing device will be inserted in position by lifting a spring 34 and inserting the pad 13 in position across the upper surface of the wick 33, with the presser plate 10 resting on the shelf 10 35. In this position the pad 13 being held firmly against the wick will absorb moisture from the wick and thus replace what has been used up during the gumming operations. It has been found that with this arrangement the pad will 15 be renewed with moisture within a relatively short space of time. It has been found that when the device is placed upon support, as described, at the end of each short period of use, sufficient moisture will be absorbed to paste down 20 many messages per hour.

It will be readily seen from the above described arrangement or combination that it has many advantages over other methods of supplying moisture to a pad or other means for moistening 25 a surface to which tape is to be affixed. It does not require that a reservoir be provided on the affixing device, making it very light and easily manipulated. On the other hand by supplying the moisture to the pad during the intervals be- 30 tween the periods of use by means of a saturated wick in which the moisture is transferred from the wick to the pad by capillary action the pad may be easily provided with a sufficient amount of moisture without the same becoming satu- 35 rated to such a degree that the moisture may drip from the pad as would be the case if it were necessary to immerse the pad in the moisture liquid. The pad is at all times ready for use after resting upon the wick for a time sufficient 40 to replenish the moisture. As is well understood by those skilled in the art, capillary action will raise a liquid from a reservoir and wet the medium along which the capillary action takes place to a degree of saturation always less than the 45 dripping point. Such an arrangement provides an ideal combination for use in devices such as described herein.

From the above description it will be seen that an extremely simple and rugged device has been 50 provided for affixing or pasting gummed tape, such as telegraph tape, to message blanks in a very efficient manner and with the minimum amount of manipulation. A device has been provided which may be furnished at small cost 55 where a moderate amount of use will be required and which may be readily manipulated by inexperienced persons. It further will be seen that a tape affixing device has been devised which embodies all of the essential features, including 60 means for applying moisture, means for pressing down the tape and means for severing the tape at the end of the lines. Moreover these elements have been incorporated in a device of small size without employing special guides for the tape or 65 a reservoir for the moisture in which free liquid must be kept and which is entirely devoid of mechanism which may readily get out of order.

Although this invention has been described in connection with affixing tape to telegraph blanks, 70 it may be employed for affixing any type of tape or strip material such as stamps and labels to any suitable surface.

While this invention has been shown in but three forms, it will be apparent to those skilled 75 in the art that it may be embodied in other

forms and modifications without departing from the spirit thereof and it is desired therefore that only such limitations be placed thereon as are imposed by the prior art or as set forth in the appended claims.

What I claim is:

1. A tape affixing device consisting of a presser plate carrying a thimble to receive the finger of an operator and a moistening pad secured to the plate in position to pass in a single motion 10 over the surface to which the tape is to be affixed ahead of the plate.

2. A device for affixing gummed tape to a suitable blank consisting of a unit having a presser plate carrying a thimble to receive the 15 finger of an operator and a moistening pad secured to the plate with their active faces arranged in substantially the same plane.

3. A device for affixing gummed tape to a blank by applying moisture to the blank ahead of 20 the tape comprising a presser plate, a moistening pad, an arm extending from said plate to hold said pad spaced from the front edge of the plate so that the tape may pass over the pad and underneath the plate as the device is moved 25 across the blank, and means in said space for severing the tape.

4. A device for affixing gummed tape to a blank by applying moisture to the blank ahead of 30 the tape comprising a presser plate, a moistening pad, an arm extending from said plate to hold said pad spaced from the front edge of the plate so that a slot is formed through which the tape passes underneath the plate as the device 35 is moved across the blank and means embodying one edge of said slot for severing said tape.

5. A device for affixing gummed tape to a blank by applying moisture to the blank ahead of 40 the tape comprising a presser plate, a moistening pad, an arm extending from said plate to hold said pad spaced from the front edge of the plate so that a slot is formed through which the tape passes underneath the plate as the device is moved across the blank and means embodying 45 a shearing member cooperating with one edge of said slot for severing said tape.

6. A device for affixing gummed tape to a blank by applying moisture to the blank ahead 50 of the tape comprising a presser plate, a moistening pad, an arm extending from said plate to hold said pad spaced from the front edge of the plate so that a slot is formed through which the tape passes underneath the plate as the device is moved across the blank and means embodying a 55 shearing member cooperating with one edge of said slot for severing said tape, said shearing member being pivotally supported and having joined thereto a thumb rest plate arranged to operate said shearing member when pressure is applied to said thumb plate. 60

7. A device for affixing gummed tape to a blank by applying moisture to the blank ahead 65 of the tape comprising a presser plate, a moistening pad, an arm extending from said plate to hold said pad spaced from the front edge of the plate so that a slot is formed through which the tape passes underneath the plate as the device is moved across the blank and means embodying a cutting member cooperating with one edge of 70 said slot to form shears for severing said tape, and a guide bar secured across the throat of said shears for preventing the tape from entering the shears to the full depth of the throat.

8. In a tape affixing device a presser plate em- 75 bodying a butt end, a finger thimble secured to

- the back of said plate and inclined toward the butt end, and a thumb rest plate secured to said presser plate and disposed in spaced relation to said thimble and at substantially right angles to the face of the presser plate.
- 5 9. In a tape affixing device a presser plate embodying a butt end, a finger thimble secured to the back of said plate and inclined toward the butt end, and a thumb rest plate pivotally mounted upon said presser plate and disposed in spaced relation to said thimble, a pair of shearing members secured to said plate and spaced horizontally from one edge thereof, one of said shearing members being secured to said pivotally mounted thumb rest plate and arranged to be actuated thereby.
- 10 10. In a tape affixing device a presser plate, and a thimble sleeve secured to the back of said plate, said sleeve being arranged to receive removable thimbles.
- 20 11. In a tape affixing device a presser plate,

means on the back of said plate for removably securing thimbles thereto, whereby said plate may be interchangeably provided with thimbles of various sizes.

12. In a tape affixing device a presser plate, 5 a thimble secured in an inclined position to the back of said plate and a thumb rest member at one end of said plate having its face disposed substantially in a vertical plane and at a substantial angle to the horizontal projection of the 10 axis of said thimble.

13. In a tape affixing device, a combination of a presser plate having a forward edge under which a tape passes for being pressed down, a thimble secured to the back of said plate in an 15 inclined position, a thumb rest plate having its face disposed substantially in a vertical plane extending at a substantial angle to said forward edge.

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