To all whom it may concern:

Be it known that I, SHERMAN H. PAXTON, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Dispensing Devices for Gummed Tape, of which the following is a specification.

My invention relates to dispensing devices for gummed tape and consists of an improvement on the device disclosed and claimed in my prior Patent No. 1,263,597 granted April 23, 1918. The device as disclosed in said patent is very efficient in use so long as it is kept in operation without much pause between successive withdrawals of the tape. However, if there is any considerable interval of time between successive operations, it is found that the end of the gummed tape which has passed over the gumming roller and which is left in the machine, has a tendency to become glued to the end of the spring which lifts the tape from the said roller after a section of the tape has been detached for use. The result of this is that the tape is torn off at this place when an attempt is made to pull out another section for use. An object of my present invention is to provide a construction which will prevent the tape from becoming glued to the spring above referred to. Another object of my invention is to provide means which will prevent back-lash of the tape upon the guide-roller after a section of the tape has been detached.

The means for effecting the above indicated results are economically and efficiently disposed and cooperate with the tape which is to be dispensed so as to accomplish the desired functions.

The full objects and advantages of my invention will appear in connection with the detailed description thereof and the novel features embodied in my invention are particularly pointed out in the claims.

In the drawings which illustrate the application of my invention in one form,—

Figure 1 is a longitudinal section of the device showing my improvement in position. Fig. 2 is a section on the line 2—2 of Fig. 1 looking in the direction of the arrow.

Referring to the drawings, the tape or strip 10 is wound in a roll upon a supply reel 12 supported in any suitable manner relatively to the base 14. The tape passes from the reel beneath a guide roller 16 journaled upon a screw pin 18 which is threaded into an arm 20 extending upwardly from the base. From beneath the roller 16 the tape passes over a platen roller 22 journaled upon a screw pin 24 threaded into the arm 20 and from this roller the tape passes backwardly beneath a guide roller 26 journaled upon a screw pin 28 threaded into the arm 20. From the roller 26 the tape passes forwardly over a liquid applying roller 30 having commotions 32 fitting into slots 34 in the side walls 36 of the base member. A receptacle 38 for containing water or a gumming liquid is located between the side walls 36 and the roller 30 has its lower portion extending into this liquid. From this roller, the tape passes over a serrated cutting knife 40 mounted on a cross bar 42 extending between the side walls 36. By means of this knife, the tape when drawn out may be conveniently severed into sections of the desired length. A carrier 44 is pivoted upon the pin 18 and mounted upon this carrier in a manner described in my prior patent above referred to, are the inking roller 46, the ink applying roller 48 and the printing roller 50. A spring 52 tends to force the carrier into its forward position as shown. Sealed to the rear wall 54 by a screw 56 are a primary spring plate 58 and a secondary spring plate 60. The spring member 58 is curved downwardly and upwardly and its forward end is serrated to provide a plurality of teeth 62 which furnish the limited contacting surface for engagement with the tape. The spring member 60 extends forwardly and its free end serves to press the tape against the guide roller 26 to prevent back-lash of the tape after it has been pulled forward. The tape is thus prevented from dropping into contact with the curved portion of the member 58.

The operation of my improvement will be readily understood from the foregoing description. Assuming that the tape is gummed on its lower side as it appears in position on the device, the gum or adhesive material will be moistened by contact with the liquid applying roller when the tape is drawn forwardly. As soon as the desired length of tape is pulled out, this section of tape is readily severed by a downward pull thereon, and the spring member 58 will quickly lift the end of the tape remaining in the device into the dotted position shown...
in Fig. 1 out of contact with the liquid applying roller. It will be noticed that the free end of the tape is carried into an inclined position and therefore the sticky mixture formed by the moistened gum tends to run down along the tape. If the spring 58 were constructed with a straight engaging edge the tape would soon become glued to this straight edge so that when an effort was made to pull out more tape, the latter would be torn off at this place and the entire device would fail to function. The teeth 62 have only a very limited contact with the tape so that the latter will not become glued to the spring member 58 at its front edge. The sticky mixture continues to run down the plate 58 and collects at the lowest point thereof from which it may drop off into the receptacle 38. The spring member 60 prevents back-lash of the tape and hence keeps it from dropping down and becoming glued to the sticky mixture on top of the plate 58.

I claim:

1. A dispensing device for gummed tape comprising a guide roller, a liquid applying roller in front of said guide roller, a spring plate for lifting the remaining end of the tape from said liquid applying roller after a section of the tape has been severed, and means for preventing said end from becoming glued to said spring plate.

2. A dispensing device for gummed tape comprising a guide roller, a liquid applying roller in front of said guide roller, a spring plate for lifting the remaining end of the tape from said liquid applying roller after a section of the tape has been severed, and a spring member for holding the tape in engagement with said guide roller whereby back lash of the tape is prevented.

3. A dispensing device for gummed tape comprising a guide roller, a liquid applying roller in front of said guide roller, a curved spring plate for lifting the remaining end of the tape from said liquid applying roller after a section of the tape has been severed, and a plurality of teeth on the end of said plate to provide a limited contact with the tape.

4. A dispensing device for gummed tape comprising a guide roller, a liquid applying roller in front of said guide roller, a spring plate for engaging the tape between said rollers for lifting the remaining end of the tape from said liquid applying roller after a section of the tape has been severed, a plurality of teeth on the end of said plate to provide a limited contact with the tape, and a spring member for holding the tape in engagement with said guide roller whereby back lash of the tape is prevented.

In testimony whereof I hereunto affix my signature.

SHERMAN H. PAXTON.