This invention relates to gummed tape serving machines and has special reference to improvement in such machines relating to means for preventing sticking of the gummed tape to the surface over which it travels and for preventing accidental retraction of the tape.

In machines of this character it is common to have the tape fed from a tape roll to the delivery end of the machine over a platen or top plate and the gummed side is downward so that it may be drawn over the top of a brush or other moistener. In damp weather and in those climates in which the air contains a large amount of moisture it is found that if the machine is allowed to rest for sometime the tape adheres to the surface over which it passes and this prevents the operation of the machine until the adhesive tape has been removed and the machine rethreaded for serving fresh tape. Of course, this is an inconvenience and it is detrimental to the proper operation of the machine.

One important object of the present invention is to provide an improved arrangement of surface over which the tape may travel, this surface being of such character that the tape will not adhere thereto even under rainy or other moist conditions.

It is also found that machines of this kind, especially when placed on a counter within reach of customers, are apt to be tampered with and the tape drawn back from the delivery end so that it becomes unthreaded.

This makes it necessary for the clerk or other attendant to stop to rethread the machine.

A second important object of the present invention is to provide an improved form of retraction preventing means in such a machine.

With the above and other objects in view as will be hereinafter apparent, the invention consists in general of certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings and specifically claimed.

In the accompanying drawings like characters of reference indicate like parts in the several views, and:

Figure 1 is a plan view of a gummed tape dispensing machine embodying the improved features.

Figure 2 is a detail section through the upper part of the machine on the line 2—2 of Figure 1.

Figure 3 is a plan view of the top plate with the other parts removed.

Figure 4 is a detail section on the line 4—4 of Figure 1.

Figure 5 is a perspective view of a certain stop member used herewith.

In the construction of the present invention there is provided a gummed tape machine having a casing or body 10 which is closed at the top by a top plate or platen 11. At the rear end of the machine are standards 12 for supporting a roll R of gummed tape. At the forward end of the machine there is a cutting and tab forming device 13 operated by a lever 14 in the manner shown and described in my prior Patent Number 1,592,481, dated July 13, 1926, Reissue Number 16,774, dated October 18, 1927, or in any other preferred manner. Just forward of the normal position of the cutting blades is a cover plate 15 which is spaced slightly above the top plate 11 and acts as a guide through which the gummed tape passes so that it is directed over a moistener here shown as a brush 16 dipping into a tank 17. It will be noted that the cutting mechanism includes a knife blade 18 which in cutting position passes through a transverse slot 19 formed in the plate 11. The gummed tape T travels over the plate 11 from the roll R to the front end, being of course severed at the slot 19 which may be termed the cutting slot. In order to prevent the sticking of the gummed tape in its passage there is provided on the plate 11 a surface 20 which is roughened to prevent adhesion of the tape and this surface 20 is preferably formed by applying to the plate 11 sand or granulated corundum or other sand like material, the material being mixed with a suitable adhesive to cause the same to stick to the plate 11 and thus present a multiplicity of fine points on which the tape T rests in its travel. Experience has shown that with this multiplicity of fine points even if the gummed side of the tape becomes damp it will not adhere to the roughened surface and consequently can be at all times drawn forward past the cutting device even though the machine be left idle for a long time.

It is to be understood that the material used will be referred to hereinafter as "sand like", this term embracing such materials as sand,
granulated carborundum or other material of the same general character and that applicant is not confined by his use of this term solely to sand in the form of particles of silica but the term is to be understood as broad enough to cover not only sand but its equivalents.

Customers, especially children, in a machine of this character are apt to attempt to roll up the tape on the roll R by rotating the same. In order to prevent the tampering in this way with this machine and the consequent drawing back of the gummed tape so that the machine requires to be retreaded certain stop mechanism cooperating with the roughened surface 20 is provided. To this end there is mounted on the plate 11 just behind the cutting mechanism a frame 21 having upstanding legs 22 which straddle the surface 20. Through these legs 22 extends a pivot rod 23 which supports a swinging plate or dog 24 which is inclined forwardly at its lower edge and has this lower edge engaged on the tape T just behind the cutting mechanism. With this arrangement any attempt to draw the tape back toward the roll will be resisted since the dog 24 will grip the tape and force it tightly against the roughened surface 20.

It will be noted that the plate 11 in front of the slot 19 is slightly lower than the portion of the plate behind said slot. Further, the portion in front of the slot is curved upwardly. This construction is shown in Figure 2 where the dropping of the front part of the plate is exaggerated; it being in practice only about five one-thousandths of an inch lower than the rear part.

It will also be noted that the member 24 prevents the tape from being pushed back by the operator when grasping the tab.

There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

It is obvious that minor changes may be made in the form and construction of the invention without departing from the material spirit thereof. It is not, therefore, desired to confine the invention to the exact form here-in shown and described, but it is desired to include all such as properly come within the scope claimed.

Having thus described the invention, what is claimed as new, is:

1. In a gummed tape dispensing machine, a body, a tape roll holder at one end of the body, a delivery mechanism at the other end of the body, the tape from the roll extending over the body between the roll and the point of delivery, and a coating of sand like material adhesively secured to the body in the path of said tape.

2. In a gummed tape dispensing machine, a body having an upper plate, a tape roll holder at one end of the machine, a severing blade and means for operating the same at the other end of the machine, said plate having a transverse slot into which said knife moves in severing the tape, and a sand like material on said plate extending from a point adjacent the roll holder to the slot.

3. In a gummed tape dispensing machine, a body, a tape roll holder at one end of the body, a delivery mechanism at the other end of the body, the tape from the roll extending over the body between the roll and the point of delivery, a sand like surface on said body over which said tape travels, a frame straddling the path of the tape from the roll to the delivery mechanism, and a dog pivoted mounted in said frame and inclined forwardly and downwardly to engage the tape and grip it against the sand like surface.

4. In a gummed tape dispensing machine, a body, a tape roll holder at one end of the body, a delivery mechanism at the other end of the body, the tape from the roll extending over the body between the roll and the point of delivery, a roughened surface of sand like material adhesively secured to the body in the path of said tape, a frame straddling the path of the tape from the roll to the delivery mechanism, and a dog pivoted mounted in said frame and inclined forwardly and downwardly to engage the tape and grip it against the roughened surface.

In testimony whereof I affix my signature.

WILLIAM A. UTTZ, Sn.