June 25, 1935. A. LA GRANGE 2,005,898

LABEL DISPENSING AND MOISTENING MACHINE

Filed Oct. 24, 1933 2 Sheets-Sheet 1

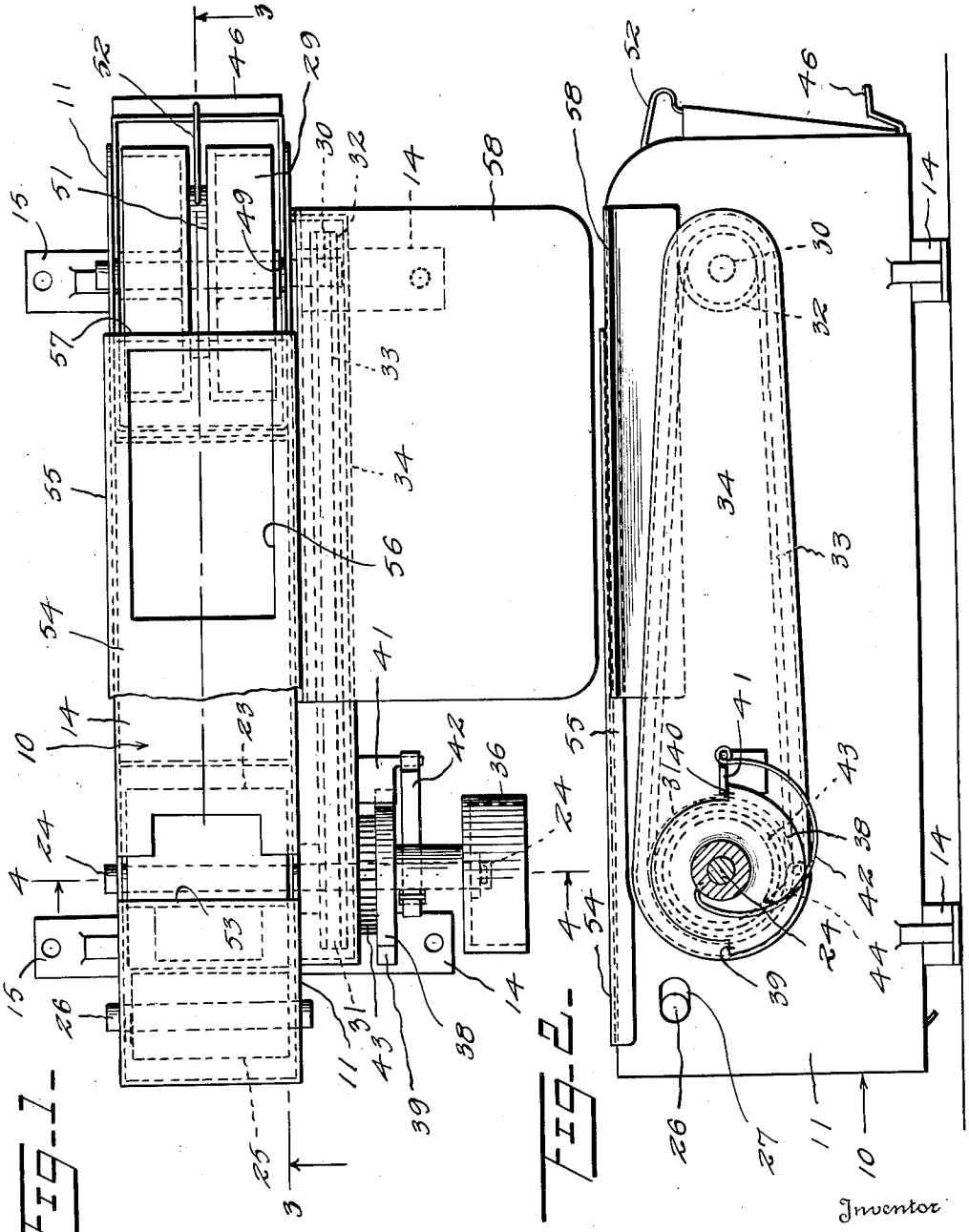


Fig. 1.

Fig. 2.

Inventor

A. LaGrange

By Watson E. Coleman

Attorney

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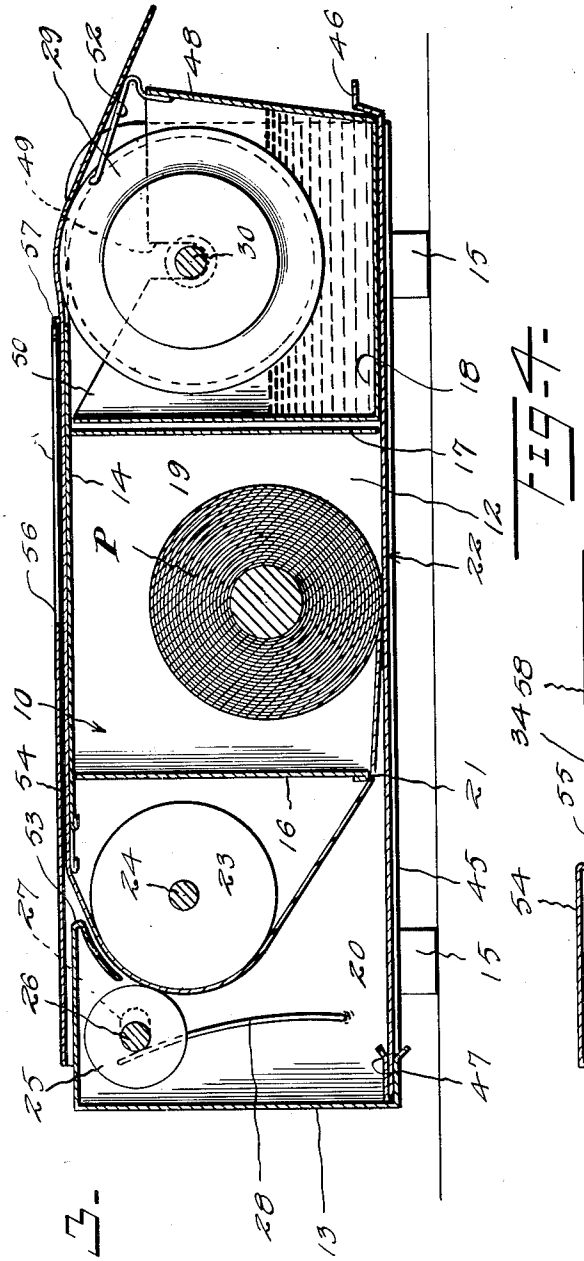


Fig. 1.

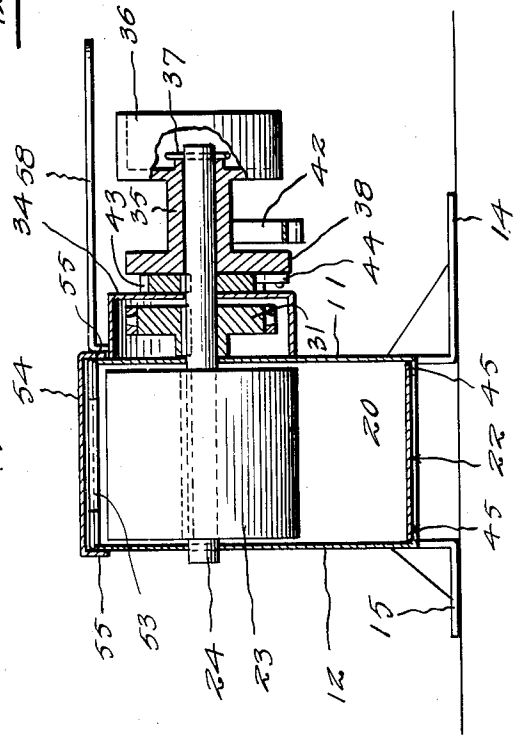


Fig. 4.

Inventor
A. LaGrange

By Watson E. Coleman
Attorney

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LABEL DISPENSING AND MOISTENING MACHINE

Arthur La Grange, Vinton, Iowa

Application October 24, 1933, Serial No. 695,043

6 Claims. (Cl. 91—51)

This invention relates to labels and more particularly to a dispensing means for dispensing moistened labels.

An object of this invention is to provide a means for dispensing labels which may be applied to articles of different kinds and which are dispensed with the gummed portion thereof moistened and ready for application to the article.

Another object of this invention is to provide a device of this kind whereby a predetermined length of gummed paper is dispensed from one end of the machine and includes means whereby prior to the dispensing operation, the gummed paper may be addressed or otherwise labeled so that when it is dispensed or projected from the machine in a moistened state, the paper is ready for application to the article to which it is to be applied.

The above and various other objects and advantages of this invention will in part be described and in part be understood from the following detailed description of the present preferred embodiment, the same being illustrated in the accompanying drawings wherein:—

Figure 1 is a top plan view of a device constructed according to the preferred embodiment of this invention.

Figure 2 is a detail side elevation partly in section of the device.

Figure 3 is a longitudinal section on the line 3—3 of Figure 1.

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

Referring to the drawings wherein like numerals of reference designate corresponding parts throughout the several views, the numeral 10 designates generally a housing comprising side walls 11 and 12, a top wall 14 and one end wall 13. The opposite end of the housing 10 is open, the purpose for which will be hereinafter described.

The housing 10 is supported in upstanding relation to a desired support by means of legs 14 and 15 engaging the side walls 11 and 12, respectively. The housing 10 is divided by means of a partition or inner wall 16 and a second partition or inner wall 17 into a water chamber 18, a paper receiving chamber 19, and an end chamber 20. The lower edge of the wall or partition 16 is turned up, as at 21, and is spaced from a bottom member 22 so that the paper in the chamber 19 may be passed between the lower edge 21 and the bottom 22, the purpose for which will be hereinafter described. A drum 23 is secured to a shaft 24 journaled in the side walls 11 and 12 and is disposed in the end chamber 20.

An idler roller or pressure member 25 is secured to a shaft 26 journaled in the side walls 11 and 12, and preferably the side walls 11 and 12 are provided with an elongated bearing slot 27 so that the idler roller 25 may have relative movement toward or away from the roller 23.

A pair of springs 28 are secured at one end to the side walls 11 and 12 and extend upwardly and engage against the shaft 26 and act to constantly urge the idler roller 25 against the roller 23.

A moistening drum 29 is mounted on a shaft 30 journaled in the side walls 11 and 12, and is disposed within the water chamber 18, which is positioned at the end opposite from the end chamber 20. The shaft 24 has secured thereto a sprocket or toothed wheel 31 and in like manner, the shaft 30 has a sprocket 32 secured thereto outside of the housing 10. Preferably, the sprocket 32 is relatively smaller in diameter than the sprocket 31 so that the winding drum 29 will be rotated at a speed relatively faster than the driving drum 23. A chain or flexible member 33 is trained over the sprockets 31 and 32 so that the winding drum 29 will be rotated coactive with the rotation of the power drum 23. A shield or housing 34 is secured to the side wall 11 and is disposed about the sprockets 31 and 32 and the chain 33, so that these moving parts will be suitably enclosed.

A sleeve 35 is loosely disposed on the shaft 24 and is provided with a hand wheel or operating member 36. A pin 37 extends through the shaft 24 and holds the sleeve 35 against endwise movement on this shaft. A cam wheel 38 is secured to the inner end of the sleeve 35 and is provided with diametrically opposed cam portions 39 and 40. A stop member or lug 41 is secured to the housing 34 and is adapted to be engaged by either of these cam members 39 or 40 and acts to stop rotation of the wheel 36 after it has made substantially a half turn. A spring 42 is secured at one end to the lug 41 and at the other end to the cam member 38 and acts to return the wheel 36 to operative position. A toothed wheel or ratchet 43 is secured to the shaft 24 and a pawl 44 is carried by the cam member 38 and is adapted to engage the ratchet 43 so that the shaft 24 will be rotated in one direction coactive with the rotation of the wheel 36.

The bottom 22 is slidable on inwardly extending flanges 45 carried by the bottom walls 11 and 12, and the confronting edges of these flanges 45

are spaced apart a distance so that when the bottom member 22 is withdrawn as by an offset handle structure 46, the paper compartment 19 will be exposed so as to permit the insertion of the roll of paper P within this compartment. The inner end of the bottom member 22 is adapted to engage a resilient clamp 47 having a flaring edge portion so as to facilitate the engagement of this end of the clamp 47 with the inner end of the bottom 22.

A water tank 48 is adapted to be disposed in the water chamber 18 and is provided with a notched portion 49 within which the shaft 30 is loosely received. The inner portion of the side walls of this tank 48 are provided with upwardly extending portions 50 constituting splash guards so that the water splashed by the moistening drum 29 will not splash out of the tank 48 and flow downwardly therefrom onto the bottom 22 and along this bottom 22 into the paper receiving chamber 19.

The periphery of the drum 29 is provided with an annular groove 51 within which an arm 52 carried by the tank 48 is adapted to engage. This arm 52 constitutes a means whereby the label or gummed strip of paper will be prevented from adhering to the moistening drum 29 and being carried about this drum and submerged in the water of the tank 48.

The strip of paper P is threaded between the rolled edge 21 of the wall 16 and the bottom 22 and is disposed between the two drums or rollers 23 and 25. The top of the housing 10 is provided with a slot 53 so that the strip of paper can be pulled therethrough.

A removable plate or cover 54 provided with marginal flanges 55 is disposed on top of the housing 10 in spaced relation to the top 14 so that the strip of paper P can easily move between this plate 54 and the top 14. The plate 54 has a cut out portion or window 56 adjacent one end thereof and at the end adjacent the moistening drum 29.

A cutting edge 57 is integral with the end of the plate 54 adjacent the drum 29 so that after the label passes the window 56 and is moistened by the drum 29, the label may be lifted up and twisted partially and thereby cut by the cutter 57.

A hand rest 58 is secured to the side wall 11 and extends over the housing 34, and is of a sufficient width to provide a rest on which the hand may be conveniently placed during the writing of the desired matter on the label exposed through the window 56.

In the use and operation of this label dispensing and moistening means, the label, which is preferably in strip form and disposed in a roll, is placed in the paper receiving chamber 19 and threaded between the two rollers 23 and 25. The cover 54 may be removed so as to facilitate the threading of the paper as well as the bottom 22, which may be pulled longitudinally of the housing 10 sufficiently to expose the end chamber 20 and the paper receiving chamber 19. After the paper has been forced between the two rollers 23 and 25, the wheel 36 may be oscillated or turned so as to move the strip of gummed paper over the top 14 and through the slot 53. When the paper has passed the slot 53, the cover 54 can be placed on top of the housing 10 and the wheel 36 oscillated sufficiently to move the label for exposure through the window 56. After the desired material has been written or otherwise placed on the label, the wheel 36 can be oscillated to project the strip of paper P beyond the cutter 57 and for engagement with the periphery of the moistening drum 29 which, in the present instance, extends slightly above the top 14. The arm 52 will prevent the gummed label moistened by the drum 29 from adhering to the drum and being carried thereby into the tank 48.

It will be obvious from the foregoing that the cover 54 may have any desired size of window therein so that labels of different lengths may be used with the same type of machine, that is, the label having a given width within the minimum and maximum width of the cover. These machines may be so built as to accommodate labels of any desired size including length and width.

It is, of course, understood that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims.

What is claimed is:—

1. A label dispensing and moistening means, comprising a housing open along the bottom thereof, opposed flanges carried by the lower edges of the bottom, a bottom wall slidably engaging the flanges, means for releasably holding said wall against movement, a compartment in the housing for holding a strip of labels in roll form and opening through the bottom of the housing, means for exposing a predetermined length of the strip on the top of the housing, means for moving a predetermined length of the strip for exposure on the top of the housing, and means for moistening the strip after it has been exposed on the top of the housing.

2. A label dispensing and moistening means, comprising a housing open along the bottom thereof, opposed flanges carried by the lower edges of the bottom, a bottom wall slidably engaging the flanges, a compartment in the housing for holding a strip of labels in roll form and opening through the bottom of the housing, means for exposing a predetermined length of the strip on the top of the housing, means for moving a predetermined length of the strip for exposure on the top of the housing, and means for moistening the strip after it has been exposed on the top of the housing.

3. A label dispensing and moistening means, comprising a housing open along the bottom thereof, opposed flanges carried by the lower edges of the bottom, a bottom wall slidably engaging the flanges, a compartment in the housing for holding a strip of labels in roll form and opening through the bottom of the housing, means for exposing a predetermined length of the strip on the top of the housing, means for moving a predetermined length of the strip for exposure on the top of the housing, a strip moistening member, and a liquid reservoir for said strip moistening member resting on said bottom wall.

4. A label dispensing and moistening means, comprising a housing open along the bottom thereof, opposed flanges carried by the lower edges of the bottom, a bottom wall slidably engaging the flanges, a compartment in the housing for holding a strip of labels in roll form and opening through the bottom of the housing, means for exposing a predetermined length of the strip on the top of the housing, means for moving a predetermined length of the strip for exposure on the top of the housing, a strip moistening member, a liquid reservoir for said strip moisten-

ing member resting on said bottom wall, and means carried by the bottom wall for releasably holding the reservoir in operative position.

5. A label dispensing and moistening means, comprising a housing open along the bottom thereof, opposed flanges carried by the lower edges of the bottom, a bottom wall slidably engaging the flanges, a compartment in the housing for holding a strip of labels in roll form and opening through the bottom of the housing, a cover engaging the top of the housing and having a window therethrough to expose a predetermined length of label, means for moving a predetermined length of the strip for exposure through said window, and means for moistening the strip after it has been exposed through said window.

6. A label dispensing and moistening means, comprising a housing open along the bottom thereof, opposed flanges carried by the lower edges of the bottom, a bottom wall slidably engaging the flanges, a compartment in the housing for holding a strip of labels in roll form and opening through the bottom of the housing, a cover engaging the top of the housing and having a window therethrough to expose a predetermined length of label, flanges carried by the cover and frictionally engaging the housing to detachably secure the cover to the housing, means for moving a predetermined length of the strip for exposure through said window, and means for moistening the strip after it has been exposed through said window.

ARTHUR LA GRANGE.