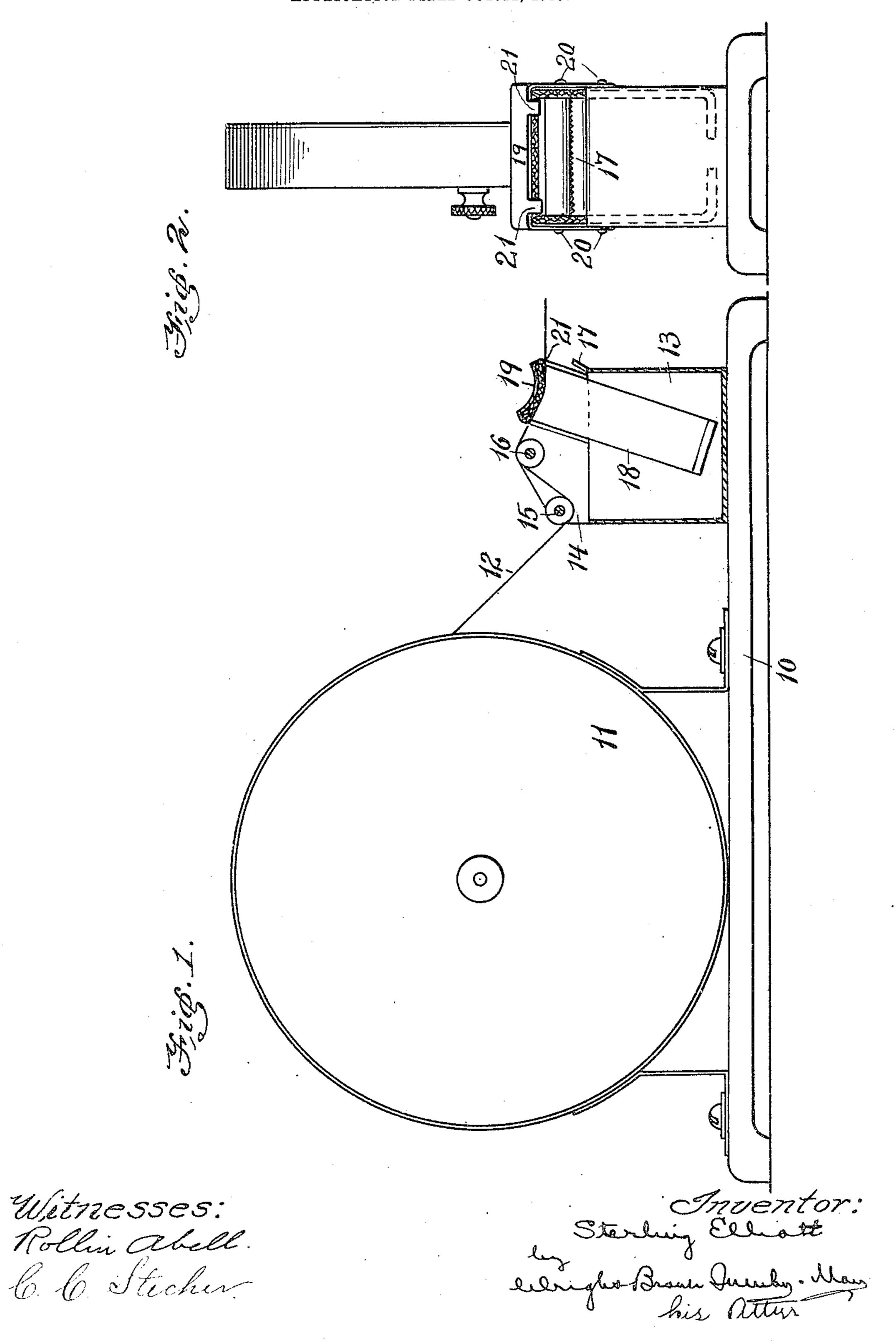
No. 856,136.

S. ELLIOTT. STRIP SERVING DEVICE. APPLICATION FILED OCT. 12, 1905.



UNITED STATES PATENT OFFICE.

STERLING ELLIOTT, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO NATIONAL BINDING MACHINE COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MAINE.

STRIP-SERVING DEVICE.

No. 856,136.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed October 12, 1905. Serial No. 282,389.

To all whom it may concern:

Be it known that I, STERLING ELLIOTT, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Strip-Serving Devices, of which the following is a

specification.

This invention relates to devices or apparatus for supplying strips of paper employed to for wrapping or binding packages, and has particular reference to that type of apparatus of this character employing a support for a coil of the paper strip which has been previously gummed on one side and then dried, 15 and having means for moistening the gummed side of the strip as the latter is drawn from its coil, and having also means for displacing the free end of the strip after the portion to be used has been severed therefrom. So far 20 as the apparatus shown is concerned however, an ungummed strip of paper might be employed, in which case the reservoir or tank for containing the liquid to be transferred to the upper-side of the strip would contain an 25 adhesive instead of water.

The object of my present invention is to provide an apparatus of the character specified in which the moistening surface will be always above the strip, a space being provided to permit the free end of the strip when not handled, to drop away from the moistener and rest in position to be readily grasped.

To this end the invention consists in the construction and combination of parts substantially as hereinafter described and claimed.

Of the accompanying drawings:—Figure 1 is a side elevation, partly in section, of an apparatus or device embodying this invention. Fig. 2 is an end view from the right of

Fig. 1.

Upon a base 10 is suitably supported a casing 11 for the roll or coil of the paper strip 12, or it may be supposed to be a reel for such a strip. A substantially rectangular tank or reservoir 13 is mounted upon said base and has side pieces or extensions 14 in which are mounted two rollers 15 and 16. At the front edge of the tank or reservoir is a cutter 17, and between the roller 16 and cutter 17 is located the moistener 18. Said moistener is shown as having substantially an inverted U shape. Said moistener may be supported

by any suitable means in the position substantially as shown, but I prefer to employ a 55 support comprising a bridge-piece 19 having an inverted U shape, the ends of said bridgepiece being connected to the sides of the reservoir as by rivets 20. The bridge or support 19 is formed with lugs 21 which are bent over 60 and under the edges of the moistener 18 so as to support the horizontal portion of the moistener and prevent it from dropping upon the strip 12. The moistener 18 may be composed of any suitable material adapted to act 65 by capillary attraction to raise the liquid in the tank 13 and keep the under horizontal portion of said moistener in condition for use. Any suitable moistener may be employed, that herein shown being adapted to the type 7° of my invention here selected for illustration.

In operation the strip 12 is passed under the roller 15 and over the roller 16, then under the moistener supported by the bridge and out through the space between said 75 bridge and cutter 17. When the strip is to be used it will be drawn outward in the direction in which the free end is represented in Fig. 1. When a sufficient length has been obtained the operator will simply carry the 80 strip down against the cutter 17 so as to sever the strip, and the end will remain in a downwardly inclined direction out of contact with the moistener. It will be observed that in this type of the invention I 85 employ guiding means for the strip between the support for the strip and the moistener, and that the strip severing means is located in proximity to the moistener, but is spaced therefrom, the relative location of the mois- 90 tener and the strip severing means being such that the operative pulls the strip in a given direction to draw it across or in contact with the moistener, and then swings or moves the strip through an arc, the ex- 95 tent of which depends upon the extent of separation and relative location of the moistener and strip severing means, thereby to remove the strip from contact with the moistener and to bring it into operative en- 100 gagement with the severing means, so that when the strip is being severed, it is out of contact with the moistener. It is apparent that the relative location of the guiding means, the moistener and the severing means 105 may be varied as desired, an important fea-

ture of my invention being, in this embodiment thereof, such location of parts that the strip while being severed, may be withdrawn or separated from the moistener. The pres-5 ence of the roller 15 is not absolutely essential. If present the strip may pass over it and also over the roller 16, or said roller 15 may be placed higher if desired. This would still result in the paper dropping away from to the wick or moistener when the free end is released.

Having thus described my invention I claim:--

1. An apparatus of the character specified, 15 comprising a tank or reservoir, a horizontal moistener elevated above the top of the tank and having a space whereby the strip may be led beneath said moistener, and between it and the tank and a support for the strip to 20 serve as a guide against which the strip may be drawn when raised in contact with the moistener.

2. An apparatus of the character described comprising a support or casing 11 for a strip 25 of paper or the like, a reservoir 13 supported in operative relation thereto, a guide 15 for the strip, a moistener 18 supported in operative relation to the reservoir, and strip severing means 17 located in proximity to the 30 moistener, the location of the strip severing means and the construction of the parts being such that the strip is out of contact with the moistener during the severing action.

3. An apparatus of the character specified, 35 comprising a tank or reservoir, and an inverted moistening device having an exposed surface above the liquid in the tank or reservoir, means being provided whereby a strip may be drawn in contact with the 40 under surface of the moistener and whereby said strip, when released, will drop away from said surface.

4. An apparatus of the character specified comprising a tank, a moistener having an 45 end therein, and a portion intermediate its ends exposed to a strip to be moistened, the strip passing during the moistening action between such intermediate portion of the moistener and the tank.

5. An apparatus of the character specified comprising a tank or reservoir, a moistening strip having ends therein, and a portion intermediate the ends exposed for application of a strip to be moistened thereto, the strip 55 passing during the moistening action between such intermediate portion and the

6. An apparatus of the character specified comprising a tank or reservoir, and a mois-60 tening device operatively connected thereto and having a face exposed for engagement therewith of the strip to be moistened and a reinforcing or backing piece for the moistener to support the same in the proper 65 moistening position the strip when not being drawn upon, being supported out of contact with the moistener.

7. An apparatus of the character specified comprising a tank or reservoir, a moistening device operatively connected to the tank 70 and having an exposed strip moistening portion, and a supporting bridge piece for the moistener the strip when not being drawn upon, being supported out of contact with the moistener.

8. An apparatus of the character specified comprising a tank or reservoir, a moistener operatively connected to said tank, means to guide the strip to said moistener, and a strip severing means located in proximity to the 80 moistener the construction and location of parts being such that during the severing action the strip is out of contact with the moistener.

9. An apparatus of the character specified 85 comprising a tank or reservoir, a moistener operatively connected thereto, a strip support at one side of the moistener, and a st.ip severing means adjacent the other side of the moistener the construction of parts being 90 such that during the severing action the strip is out of contact with the moistener.

10. An apparatus of the character specified comprising a frame, a tank or reservoir mounted thereon, a moistener operatively 95 connected to the tank, means to guide a strip to the moistener, and a strip severing means supported by the frame, the construction of parts being such that during the severing action the strip is out of contact with the 1co moistener.

11. An apparatus of the character specified comprising a tank or reservoir, a moistener having a moisture receiving portion depending therefrom and in said tank or 105 reservoir and having an exposed strip moistening surface the strip passing in operation between the moistener and the tank.

12. An apparatus of the character specified comprising a tank or reservoir, a mois- 110 tener having a moisture receiving portion depending therefrom and in said tank or reservoir and having an exposed strip moistening surface, and a severing means upon the tank the strip passing in operation be- 115 tween the moistener and the tank.

13. An apparatus of the character specified comprising a tank or reservoir, a moistener having a moisture receiving portion depending therefrom and in said tank or 120 reservoir and having an exposed strip moistening surface, and a severing means in close proximity to the moistener the strip passing in operation between the moistener and the tank.

14. An apparatus of the character described comprising a tank or reservoir and a moistening device having an exposed surface above the liquid in the tank or reservoir, mean's being provided whereby a strip may 130

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be drawn in contact with the under surface of the moistener and whereby the moistener and strip may be separated after the moist-

ening of the strip.

fied comprising a tank or reservoir, a moistener operatively connected to the tank, means to guide the strip to the moistener, and a strip severing means located in proximity to the moistener, the location of the strip severing means and construction of the parts being such that the strip is out of contact with the moistener during the severing action.

15 16. An apparatus of the character specified comprising a tank or reservoir, a moistener operatively connected thereto, a strip support at one side of the moistener, and a strip severing means adjacent the other side of the moistener, the construction and relation of parts being such that the strip is out of contact with the moistener during the

severing action.

17. An apparatus of the character speci-25 fied comprising a support for a strip of paper or the like, a tank or reservoir in operative relation thereto, a moistener operatively connected to the tank, guiding means for the strip between the support therefor and the 30 moistener, and a strip severing means located in proximity to the moistener but spaced therefrom, the relative location of the moistener and the strip severing means being such that the operative pulls the strip in 35 one direction to draw it across the moistener and then swings it in an arc to remove it from the moistener and to bring it into operative engagement with the severing means while removed from the moistener.

18. An apparatus of the character specified comprising strip supporting means, a tank or reservoir in operative relation thereto, a strip moistener operatively connected to the tank, guiding means for the strip between the strip supporting means and the tank, strip severing means carried by the tank and in proximity to the moistener but spaced therefrom, the relative location of the

moistener and the strip severing means being such that the operative pulls the strip in 50 one direction to draw it across the moistener and then swings it in an arc to remove it from the moistener and to bring it into operative engagement with the severing means while removed from the moistener.

19. An apparatus of the character specified comprising strip supporting means, a tank or reservoir adjacent thereto, a moistener operatively connected to the tank, guiding means for the strip between the sup- 60 porting means and the moistener, strip severing means formed upon an edge of the tank or reservoir and spaced from the moistener, the relative location of the moistener and the strip severing means being such that the operative pulls the strip in one direction to draw it across the moistener and then swings it in an arc to remove it from the moistener and to bring it into operative engagement with the severing means while removed from 70 the moistener.

20. An apparatus of the character specified comprising strip supporting means, a tank or reservoir mounted in proximity thereto, a moistener operatively related to 75 said tank or reservoir, strip guiding means between the strip supporting means and the moistener, a back or bridge piece supporting the moistener with a portion thereof exposed, and a strip severing means mounted 80 upon a wall of the tank or reservoir and spaced from the moistening means, the relative location of the moistener and the strip severing means being such that the operative pulls the strip in one direction to draw 85 it across the moistener and then swings it in an arc to remove it from the moistener and to bring it into operative engagement with the severing means while removed from the moistener.

In testimony whereof I have affixed my signature, in presence of two witnesses.

STERLING ELLIOTT.

Witnesses:

M. B. MAY, C. C. STECHER.