E. L. BROWNSON.

STRIP SERVING APPARATUS.

APPLICATION FILED APR. 25, 1907. RENEWED JUNE 4, 1909.

1,250,790.

Patented Dec. 18, 1917.

3 SHEETS—SHEET 1.

Fig. 1.

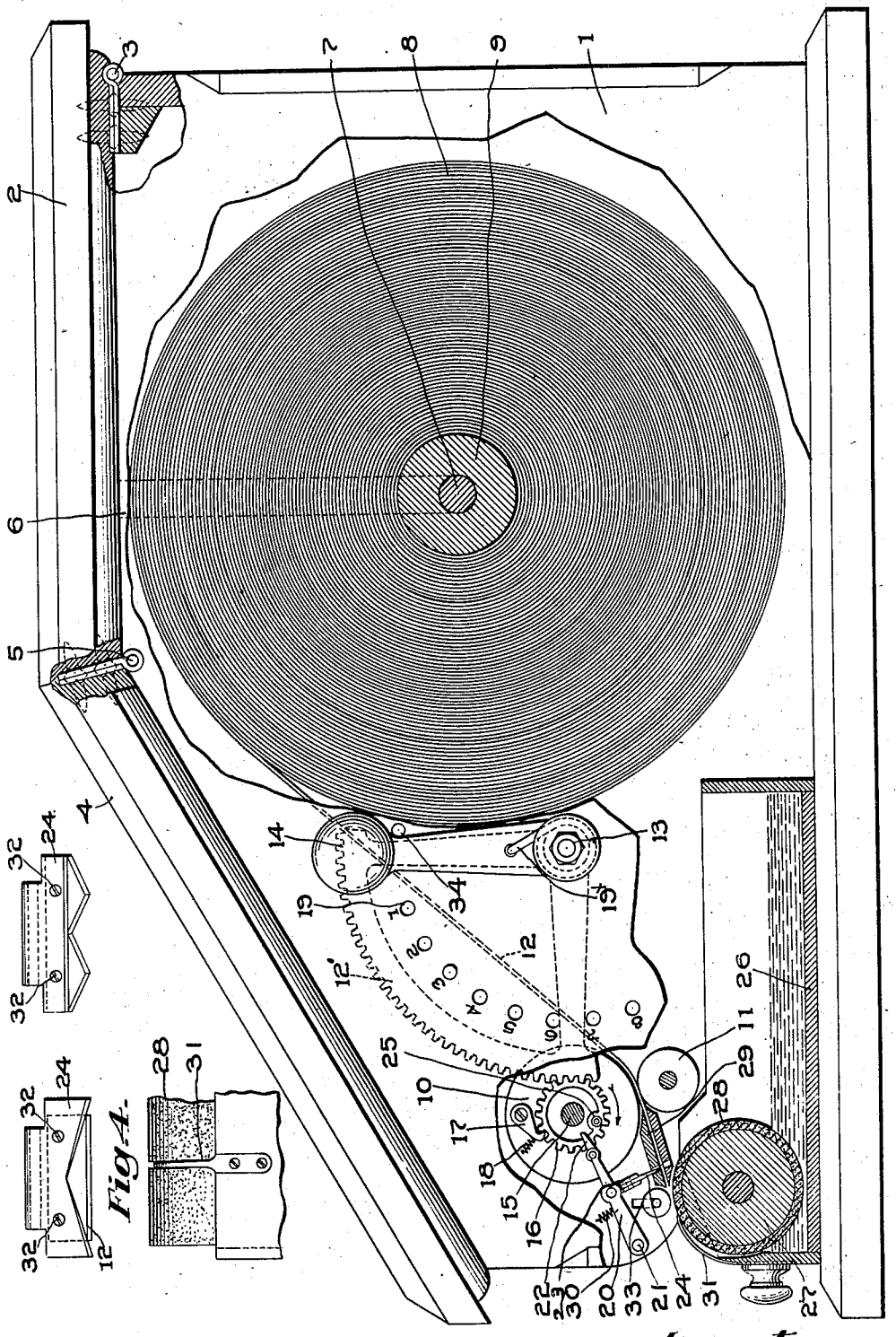


Fig. 3.

Fig. 2.

Fig. 4.

Witnesses:

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3 SHEETS—SHEET 2.

Fig. 5.

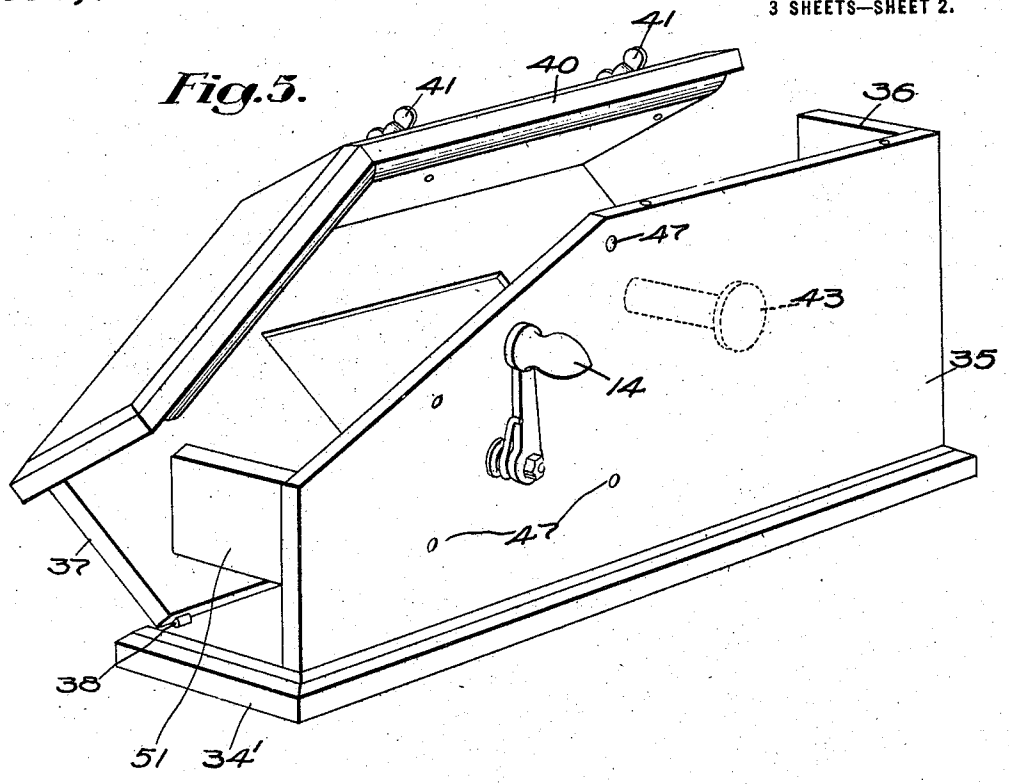


Fig. 6.

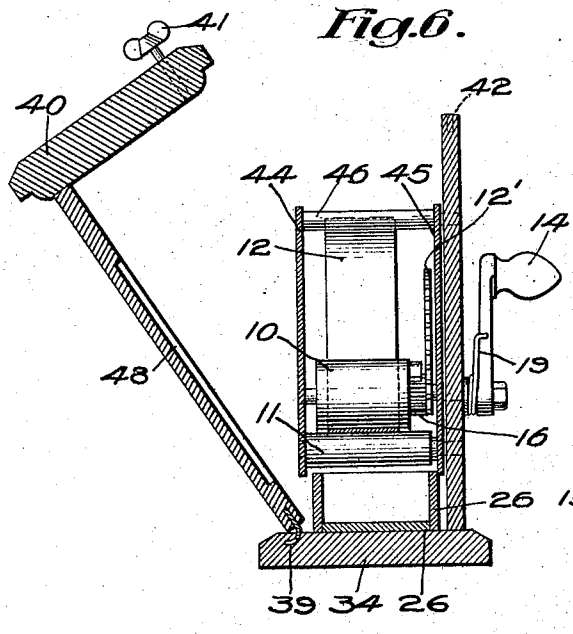
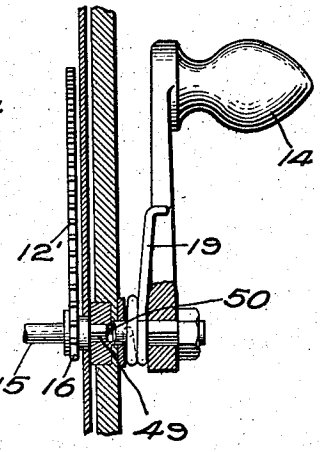


Fig. 7.



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3 SHEETS—SHEET 3.

Fig. 8.

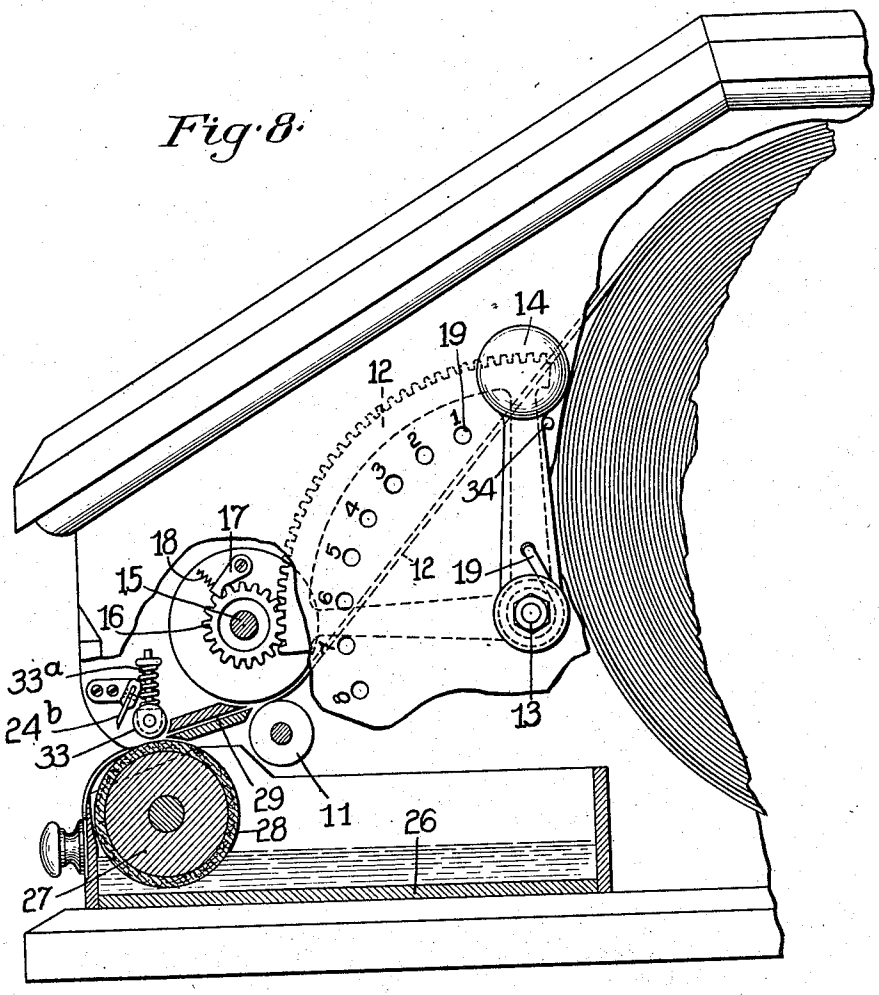


Fig. 9.

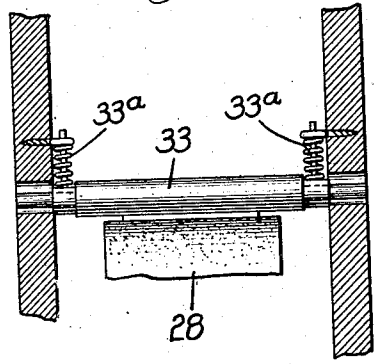
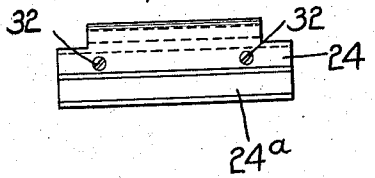


Fig. 10.



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UNITED STATES PATENT OFFICE.

EARL L. BROWNSON, OF ALLSTON, MASSACHUSETTS, ASSIGNOR TO NATIONAL BINDING MACHINE COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MAINE.

STRIP-SERVING APPARATUS.

1,250,790. Specification of Letters Patent. Patented Dec. 18, 1917.

Application filed April 25, 1907, Serial No. 370,174. Renewed June 4, 1909. Serial No. 500,125.

To all whom it may concern:

Be it known that I, EARL L. BROWNSON, a citizen of the United States, residing at Allston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Strip-Serving Apparatus, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to devices or apparatus for supplying strips of paper or the like employed for wrapping or binding packages or for use as labels of any desired and predetermined length, and has particular reference to that type of apparatus employing a support for a coil of paper or other strip previously gummed upon one side and then dried, and having means for moistening the gummed side of the strip as the latter is withdrawn from its coil. It is apparent, however, that an ungummed strip of paper or other suitable material might be employed, in which case the moistening device for the strip, suitably positioned with respect thereto, would contain an adhesive instead of water.

In order that the principles of my invention may be readily understood, I have disclosed a single type or embodiment thereof in the accompanying drawings, wherein—

Figure 1 is a view partially in side elevation and partially in vertical section of one type of my invention, parts being broken away to indicate clearly the operation and relation of parts;

Fig. 2 is a form of cutting blade that may be employed in connection with my invention;

Fig. 3 is another form of cutting blade that may be employed in connection with my invention;

Fig. 4 is a detail representing a form of means for directing the moistened strip beyond the moistener;

Fig. 5 is a perspective view of the preferred form of casing wherein the mechanism is mounted, the casing being represented as partially opened and the mechanism removed therefrom;

Fig. 6 is a vertical, transverse section of the casing and mechanism positioned therein; and

Fig. 7 is a vertical, sectional detail representing a preferred manner of rotatably connecting the feeding mechanism and the operating handle therefor.

Fig. 8, is a view similar to Fig. 1 but partly broken away and representing the severing device as stationary; Fig. 9 is a transverse section representing the spring pressed roll for holding the strips in moisture receiving relation; Fig. 10 is a detail in side elevation of a blade having a straight edge.

Having reference to that single type or embodiment of my invention herein selected for illustration and referring more particularly to Fig. 1, the casing wherein preferably the strip serving apparatus is located is represented at 1, it being of any suitable material, either metallic or non-metallic, having a base and opposite sides rising therefrom and preferably a rear closed end, a cover of any suitable type preferably being provided. Herein I have represented a cover comprising a member 2 hinged at 3 to the casing, the cover having herein a second member 4 hinged to the member 2 at 5, preferably so as to be positioned in the inclined direction shown, it resting upon the correspondingly shaped forward portion of the casing.

Preferably the casing is provided in its opposite side walls with vertically disposed slots 6 open at their upper ends to receive the spindle 7 of the coil or roll of paper or other suitable material 8 preferably gummed upon one side and dried, such roll being wound upon a spool 9 beyond the opposite faces of which the spindle 7 preferably projects to be guided so as to be positioned in the slot 6. Any suitable tensioning means may be employed to suitably tension the strip during delivery thereof.

I contemplate the use of gummed portions of this strip not only as binding strips to be wrapped about packages or the like but also as labels of any desired length to be applied to bottles, cans or the like to indicate the contents or to convey desired information. To that end, in this type of my invention, I have provided means whereby a strip of any desired length may be fed and severed, and have provided means whereby predetermined lengths may be fed and severed so as preferably to have smooth edges. I have further provided means whereby the

predetermined length of strip to be fed may be varied within any desired limits. Certain features of my invention are capable of use in strip serving devices not employing strip feeding means, as will be fully apparent from the claims. In other words, certain features of my invention, as for example the guiding means, other means acting upon the free end of the strip, the severing means and the moistening means and other features may be and are of general application. The other features of my invention will be more fully set forth hereinafter.

While I may employ feeding means of any desired type, herein I have indicated for the purpose an upper feed roll 10 and a lower feed roll 11 suitably mounted in the casing 1 and adapted to receive an end 12 of the strip between them and positively to feed the same forward when a movement of rotation is imparted to said rolls. While the rolls 10 and 11 may be of any suitable material, I contemplate forming the roll 10 of metal and the roll 11 of rubber or any suitable material may be employed. Any suitable means may be employed to impart a movement of rotation to said rolls. Herein for the purpose I have represented a segmental gear 12′ suitably mounted in the casing upon a spindle or stud 13 to which a rotative movement may be imparted by a suitable handle 14 mounted upon an end of said spindle projecting through the wall of the casing, so that the handle may be suitably positioned exteriorly of the casing.

The roll 10 is loosely mounted upon the spindle 15 which has fast thereon a pinion 16 meshing with the teeth of the segmental gear 12. Pivoted upon the roll 10 is a pawl 17 spring pressed as by a spring 18 into engagement with the teeth of the pinion 16, and having herein a tooth inclined upon its rear face and having a front face that is substantially radially disposed with respect to the pinion 16, whereby upon movement of the pinion 16 in the direction of the arrow the roll 10 is rotated in the same direction and whereby upon movement of the pinion 16 in the opposite direction the roll 10 may remain stationary. It is apparent that the length of strip fed by the rolls 10 and 11 is dependent upon the extent of depression of the handle 14. I may provide any suitable means to limit or determine the amount of depression of the handle 14, if such type of feeding means be employed, and herein for the purpose I have indicated a series of openings 19 in the casing and numbered consecutively, any one of which is adapted to receive therein a peg or suitable stop which is thereby interposed in the path of movement of the handle 14 to limit the feeding movement of the segmental gear 12. Any suitable means may be employed whereby a predetermined length of strip may be fed and whereby such length may be varied to suit different conditions that may arise. For example, I may desire to feed and sever very short labels to be applied to bottles or the like or I may desire labels of longer lengths for wrapping or binding strips to be applied to packages. It is apparent, therefore, that the mechanism shown by me is illustrative merely and that I contemplate the provision of means for varying within wide limits the length of strip to be fed.

When the handle 14 reaches the limit of its feeding movement, as by engagement with a stop suitably positioned in one of the openings 19, I may reverse the movement of the handle manually or otherwise. Herein I contemplate the employment of automatic means for returning the handle to its normal position and in the type of the invention shown I employ a coil spring 19× having one end connected to the handle and the other end suitably disposed whereby the spring is compressed upon the forward or feeding movement of the handle so that when released it is automatically returned to the position indicated in Fig. 1. Any other suitable form of spring may be employed or any other form of mechanism preferably automatically to operate the severing mechanism.

I contemplate imparting to the handle 14 or other operating means a feeding movement, and then a further movement to operate the severing mechanism. In the present type of the invention such further movement is represented as a reverse or return movement of the handle. As a convenient type of severing mechanism herein operated automatically upon the return movement of the handle 14, is, in this type of the invention, indicated a lever 20 suitably pivoted in the casing at 21 and having pivoted to its free end a projecting member 22 adapted to yield freely upwardly but upon downward movement thereof to compel movement therewith of the lever 20. Depending from the lever is a socket 23 having a removable blade 24 carried thereby and adapted to be projected into the path of and to sever the strip when a suitable length thereof has been projected by the feeding mechanism. In order to sever the strip adjacent the moistening point, the severing blade is preferably located directly above the moistener. To more readily sever the strip, the blade is preferably downwardly directed and preferably directed toward the moistener. Herein the pinion 16 is provided with a pin or stud 25 adapted in the rotation of the pinion to engage the pivoted member 22. Upon movement of the pinion 16 in the direction of the arrow to feed the strip the pin 25 engages the pivoted member 22 tilting the same upwardly and passing by it, such pivoted member being then returned

preferably by its own weight to the position shown. Upon the reverse movement of rotation of the pinion 16 the pin 25 engages the upper face of the pivoted member and thereby depresses the lever 20 and projects the blade 24 to sever the strip. It is apparent that any suitable means to operate the cutting blade may be employed and that the blade may be located either above or below the strip as desired. I may employ any suitable means to moisten the strip, which, in the present type of the invention, is delivered from the coil thereof gummed face downward. Herein I employ a reservoir 26 suitably supported and preferably removably mounted in the casing 1 to contain water or a suitable adhesive and elongated substantially horizontally to contain an ample supply of water or other moistening liquid, and having any suitable moisture conveying device, herein represented as a roll 27 having an absorbent surface 28. The moistener effectively wets the strip delivered thereto. By effective wetting, I mean such an application of a moistening agent to a gummed strip or of an adhesive to a non-gummed strip as will render such strip adhesive, so that it may be applied to and will tightly adhere to an article, as a strip or a label. There is thus no prolonged contact of any part of the strip with the moistener, which would remove more or less of the adhesive and weaken the strip. Located between the roll 27 and the feeding rolls 10 and 11, I preferably provide a strip guiding device 29 herein represented as upper and lower preferably metallic members slightly spaced apart to receive between them the strip, and provided with slots to receive the blade 24 when projected into cutting relation. The strip guiding device 29 constitutes a guard or lip overhanging the rear portion of the moistener 28 and preventing contact of the strip with the moistener at such point. The moistener, herein shown as a roller, but which may (as regards certain aspects of my invention) be any unyielding moistener, presents a bodily fixed portion of its surface to the strip, so that however rapidly the strip be delivered from the apparatus and whatever be the conditions of use, the strip and the moistener remain in constant and effective contact, so that all portions of the gummed face of the strip are moistened.

In the type of the invention shown it will be observed that the severing mechanism is located in the rear of the line or area of contact of the strip with the moistener. While I am not to be limited to such location, I find this construction preferable in certain types of the invention, inasmuch as after the moistening operation it is unnecessary to remove the free end of the coil or strip from the moistening device by movement of the strip or the moistening device. It will be observed that herein the strip is severed by movement of the severing device toward the strip, although it will be apparent that the strip may be moved toward the severing device if desired, and as shown in Fig. 8. In said figure, the blade 24^b is stationarily mounted in the casing in any suitable manner. The strip is served in the manner described in connection with Fig. 1, and when the desired length has been fed, the operator grasps the free end of the strip and deflects it against the blade 24^b, thereby severing the same. After the strip is severed, the end thereof lies housed between the members of the guiding device 29 to be projected upon the next feeding movement of the rolls 10 and 11.

Preferably the lever 20 has a tension spring 30 connected thereto to elevate the cutting blade after the severing action thereof. If desired and as indicated in Figs. 1 and 4 I provide a directing or guiding member 31 formed as a narrow and preferably metallic strip secured to the reservoir 26 and having its free end engaging a narrow annular groove 32′ in the roll 27 whereby the end of the strip as fed is separated from the surface of the said roll.

While any suitable severing blade or device may be employed, herein I employ a blade 24 adapted to be removably secured as by screws 32 within the socket 23, or I may employ a blade having a straight cutting edge as shown at 24^a Fig. 10, and preferably such as to impart a smooth edge to the strip, but herein I employ a blade shaped to initially engage the strip at a plurality of separated points. In Fig. 2, I have represented the blade as of an inverted V shape and adapted when projected to engage the strips 12 initially at opposite edges thereof, thereby to firmly position it, the paper being smoothly severed upon further movement of projection. In Fig. 3, I have represented the blade as of W shape adapted to initially engage the strip at a plurality of separated points between the edges thereof.

It will be apparent that within the scope of my invention I may employ a plurality of coils 8 suitably mounted in the casing and having means whereby such coils may be operated upon either conjointly or separately.

If desired I may provide a roll or other device 33 preferably located above the moistening roll 27 and herein yieldingly engaging the upper surface of the strip to hold the same in moisture receiving relation so that the free end of the strip may normally be held in contact with the moistening roll during the strip serving and the strip severing operation. Herein the roll 33 is mounted in suitable slots in the side walls of the casing 1. If desired, such roll may

be downwardly spring pressed as indicated at 33[a] in Figs. 8 and 9. The springs 33[a] are of sufficient strength to hold the paper in moisture receiving relation during the serving and severing operations.

It will be noted that the roll or other device 33 is arranged transversely of the strip and is directly above and close to the strip contacting portion of the bodily fixed moistener, so that the said device serves to hold or press the strip against the bodily fixed moistener during the serving or severing operations, thus keeping the strip at all times in its true service path and insuring the moistening of all portions of its gummed surface. My invention comprehends means to hold the fed strip in moisture receiving relation to the moistener; *i. e.* to hold the fed strip down onto the upper face of the moistener. Any other suitable device than that shown may be employed so long as it is arranged to hold the fed strip down onto the upper surface, preferably of limited extent, of the moistener at all times; that is, during the period of rest as well as during the serving and severing operations, so that the portion of the strip outside the plates 29 is never normally free from the moistener.

In the rear of the operating handle 14 is positioned a pin or stop 34 removably positioned in a hole in the casing and interposed in the path of the return movement of the handle 14. It is desirable at times to disengage the gear that engages the pinion upon the feed roll 10 to permit adjustment or change of relation of the parts. In the present type of my invention, this may be accomplished by removing the pin 34 so that the handle 14 may be turned to a position whereby the gear 12 is disengaged from the pinion 16.

While I have herein disclosed means for feeding the strip and means for automatically severing the same, it is apparent, referring more particularly to the form of apparatus shown in Fig. 8, that in operating the machine the operative may either start the feed of the strip by means of the handle engaged by one hand while seizing the strip end between the fingers of the other hand to guide or lay it upon the article or package to be sealed, finishing the draft by drawing wholly upon the strip end, or conjointly by so drawing upon it and continuing the movement by the handle, or by the handle alone, although where no definite length is required it is usually found more convenient to draw the strip up and between the fingers which direct it, so that my invention is not limited in this aspect thereof, the advantage of leaving the strip end projecting into space and free from contact with any surface or roller to impair the moistened adhesive face thereof being present in the form of my apparatus represented in said Fig. 8, irrespective of the particular manner of drawing the strip from the machine.

Referring to the said Fig. 8, after the desired length of strip has been suitably served, the free end is grasped by the operator and is led forward the desired length and is then deflected to one side, herein upward against the edge of a blade or knife 24[b] suitably mounted in the casing and fixed; that is to say, requiring deflection of the strip to effect the cutting or severing of the strip. The knife in said Fig. 8, is shown in advance of and above the moistener, and thus is spaced from the service path of the strip so as to require deflection of the strip for severing. The free protruding end after the severing operation springs down from the blade and stands projecting into space with its leading end free from the blade and the moistener so as to be readily engaged by the operator when the device is to be next used.

In Figs. 5 and 6 I have indicated a form of casing which preferably I employ to receive the operating parts of the mechanism. In the present embodiment of my invention such form of casing comprises a base 34′, having a side 35 upstanding therefrom and preferably readily connected therewith the rear end 36 of the casing being rigidly connected to said side and the base 34′. Removably connected with the base 34′ along a longitudinal line of the latter, and preferably by a removable connection permitting an outward swinging movement, is the opposite side 37, herein shown as connected removably to the base by a plurality of outwardly curved lugs or projections 38 adapted to be received within correspondingly shaped recesses 39 in the base, whereby when said side is swung outwardly it may be bodily removed from the base. Any other suitable form of connection between the base and side may be employed. Preferably, the cover 40 is rigidly connected with the side 37 and is provided with any suitable form of fastening device whereby it may be connected to the side 35. Herein I have represented set screws 41, mounted in said top and adapted to engage openings 42 in the side 35.

While the coil of paper may be supported in any suitable manner in the casing, preferably I bolt or otherwise secure to the inner face of the side 35 a stationary spindle 43 whereby the coil of paper is supported entirely by the side 35. The strip feeding mechanism may be operatively supported in any suitable manner. Herein I provide a frame, composed of opposite side members 44, 45 connected by spacing rods as 46. The side 35 is provided with sockets or openings 47 adapted to receive pins projecting laterally from the wall 45 of the frame, which pins may if desired be formed as extensions of the rods 46. Between the walls 44 and

of the frame are supported for rotatable movement the rolls 10 and 11 and the segmental gear 12.

The side 37 is preferably recessed, as indicated at 48, to receive and support the wall 44 when said side is vertically positioned, thus firmly and securely positioning the frame carrying the feeding mechanism.

It will be apparent that when the cover is swung outwardly the parts of the mechanism are readily accessible for any desired manipulation. The frame carrying the feeding mechanism may be readily removed for repairs or for other purposes from the side 35. In order to permit the separation of said frame without disturbing the operating handle 14, the end of the spindle or stud, upon which the roll 10 is mounted, is polygonally formed as indicated at 49 in Fig. 7, and receives thereon the correspondingly shaped recessed end 50 of the handle 14 which is rotatably mounted in the side 35 of the casing. If desired, a removable box may be secured in the casing to receive the handle. The spring 19 being positioned between the handle and the side 35 of the casing permits the ready separation of the parts in the manner described. Formed with or suitably attached to the side 35 is a short front wall 51, adapted to be abutted against by the side 37 when vertically positioned. A space is left between the lower edge of the wall 51 and the base 34′ to permit the positioning of the moistening tank 26, which may at any time be readily removed from the casing.

Having thus described my invention, I desire it to be understood that although I have employed specific terms, they are used in a generic and descriptive sense, and not for purposes of limitation, the scope of the invention being set forth in the following claims.

Claims:

1. A strip serving apparatus adapted to deliver or present to the user for manual application, unapplied strips of paper or the like having an exposed, wetted, adhesive face, comprising strip supporting means, a moistener in wetting relation to the strip issuing from said strip supporting means, means to feed at will the determined length of strip for presentation for such manual application, and means effective at will so to sever the strip at the determined point as to produce a wetted, adhesive, severed, unapplied strip of predetermined length for manual application.

2. A strip serving apparatus adapted to deliver or present to the user for manual application, unapplied strips of paper or the like having an exposed, wetted, adhesive face, comprising strip supporting means, a moistener in wetting relation to the strip issuing from said strip supporting means, means to feed the determined length of strip for presentation for manual application, means effective so to sever the strip at the determined point as to produce a wetted, adhesive, severed, unapplied strip of predetermined length for manual application, and means to vary the length of the delivered or presented strip.

3. A strip serving apparatus adapted to deliver or present to the user for manual application, unapplied, severed strips of paper or the like having an exposed, wetted adhesive face, comprising strip supporting means, a moistener in wetting relation to the strip issuing from said strip supporting means, means to feed a variable length of strip for presentation for such manual application, and means so to sever the strip at the determined point as to produce a wetted, adhesive, severed, unapplied strip of predetermined length for manual application.

4. A strip serving apparatus adapted to deliver or present to the user unapplied strips of paper or the like having an exposed, wetted, adhesive face comprising strip supporting means, a moistener in wetting relation to the strip issuing from said strip supporting means, manually variable means to feed the determined length of strip for presentation for manual application, and means so to sever the strip at the determined point as to produce a wetted, adhesive, severed, unapplied strip of predetermined length for manual application.

5. A strip serving apparatus adapted to deliver or present to the user unapplied strips of paper or the like having an exposed, wetted, adhesive face comprising strip supporting means, a moistener in wetting relation to the strip issuing from said strip supporting means, means to feed the determined length of strip for presentation for manual application, adjustable limiting means to limit the feeding action of said feeding means, and means effective so to sever the strip at the determined point as to produce a wetted, adhesive, severed, unapplid strip of predetermined length for manual application.

6. A strip serving apparatus adapted to deliver or present to the user for manual application unapplied strips of paper or the like having an exposed, wetted, adhesive face comprising strip supporting means, a moistener in effective wetting relation to the strip issuing from said strip supporting means, means to feed at will the determined length of strip for presentation for such manual application, stopping means to limit the feeding movement, and means so to sever the strip at the determined point as to produce a wetted, adhesive, severed, unapplied strip of predetermined length for manual application.

7. A strip serving apparatus adapted to deliver to the user strips of paper or the like having an exposed, adhesive face for the purpose specified comprising strip supporting means, a moistener from which the strip may be delivered for separate use with an exposed, adhesive face, means operative in one direction to feed a strip and operative in the opposite direction to sever the strip and guiding means to present the strip to the moistener.

8. A strip serving apparatus adapted to deliver or present to the user for manual application unapplied strips of paper or the like having an exposed, wetted, adhesive face, comprising strip supporting means, a moistener in moistening relation to the strip issuing from said strip supporting means, means to feed the determined length of strip for presentation for such manual application, and means located at the rear of the moistening point and effective, so to sever the strip at the determined point in rear of the moistened area as to produce a wetted, adhesive, severed, unapplied strip of predetermined length for manual application.

9. A strip serving apparatus adapted to deliver to the user severed, unapplied strips of paper or the like having an exposed, adhesive face for manual application, comprising strip supporting means, means to render the strip adhesive located in effective wetting relation to said strip, strip feeding means, strip severing means, means to project said severing means into the path of movement of the strip, said severing means being located in the rear of the point of contact of the moistener and the strip, and means for supporting the free end of the strip in its normal path of movement after the severing action in exposed position to be grasped by the user.

10. A strip serving apparatus adapted to deliver or present to the user for manual application, unapplied, severed strips of paper or the like having an exposed, wetted, adhesive face, comprising strip supporting means, a moistener in wetting relation to the strip issuing from said strip supporting means, means to feed a variable length of strip for presentation for such manual application, and means to sever the strip in the rear of the moistener, thereby to produce a wetted, adhesive, severed, unapplied strip of predetermined length for manual application.

11. A strip serving apparatus adapted to deliver to the user, strips of paper or the like having an exposed, adhesive face for the purpose specified, comprising strip supporting means, a tank or reservoir, a moistener in operative relation thereto and in effective wetting relation to the strip and from which the strip may be delivered for separate use with an exposed, adhesive face, manually operable means operable from the movement thereof in one direction to feed the strip, means operative upon return movement of the feeding means to sever the strip, and two guiding members at opposite faces of the strip and extending close to the knife to prevent buckling thereof.

12. A strip serving apparatus adapted to deliver to the user unapplied strips of paper or the like having an exposed, adhesive face for manual application comprising strip supporting means, a moistener from which the strip may be directly delivered for separate use with an exposed, adhesive face, means operative in one direction to feed a strip in the rear of the moistener and means acting automatically upon the manual release of the feeding means and operative in the opposite direction to sever the strip.

13. A strip serving apparatus adapted to deliver to the user strips of paper or the like having an exposed, adhesive face for the purpose specified comprising strip supporting means, a tank or reservoir, a moistener in operative relation thereto and in effective wetting relation to the strip and from which the strip may be delivered for separate use with an exposed, adhesive face, manually operable means operative upon movement thereof in one direction to feed a strip, means operative upon return movement of the feeding means to sever the strip and guiding means to present the strip to the moistener.

14. A strip serving apparatus adapted to deliver to the user severed, unapplied strips of paper or the like having an exposed, adhesive face for manual application comprising strip supporting means, a moistener from which the strip may be directly delivered for separate use with an exposed, adhesive face, strip feeding means, strip guiding means between the moistener and the feeding means, strip severing means in the rear of the point of contact of the moistener and the strip, said guiding means extending along the path of the strip in the rear of and also in advance of the severing means, and means to project the strip severing means into the guided path of movement of the strip, whereby the free end of the strip may be held by said guiding means after the severing action.

15. A strip serving apparatus adapted to deliver to the user strips of paper or the like having an exposed, adhesive face for the purpose specified comprising strip supporting means, a moistener from which the strip may be delivered for separate use with an exposed, adhesive face, strip feeding means, upper and lower guides extending along the service path of the strip and adapted to receive between them the strip and located between the moistening means and the feeding means, strip severing mechanism located in

the rear of the point of contact of the moistener and the strip, and means to project the same into the path of movement of the strip between the guides.

16. A strip serving apparatus adapted to deliver to the user strips of paper or the like having an exposed, adhesive face for the purpose specified, comprising strip supporting means, a moistener from which the strip may be delivered for separate use with an exposed, adhesive face, means to feed the strip to the moistener, a casing having a base and a side rising therefrom, operating means for said feeding means mounted upon said side and connected to said feeding means, an opposite side movably connected to the base along a longitudinal line thereof to permit a movement of said opposite side outward and relative to the base, and interengaging provisions for mounting the strip feeding means upon the said side rising from the base.

17. A strip serving apparatus adapted to deliver to the user strips of paper or the like having an exposed, adhesive face for the purpose specified, comprising strip supporting means, a moistener from which the strip may be delivered for separate use with an exposed, adhesive face, means to feed the strip to the moistener, a casing having a base and a side fixed therewith, operating means for said feeding means mounted upon said side and connected to said feeding means, an opposite side mounted upon said base to swing outwardly thereon along a longitudinal line of said base, a cover attached to said swinging side, and interengaging provisions for mounting said strip feeding means upon the said side fixed with the base.

18. A strip serving apparatus adapted to deliver to the user strips of paper or the like having an exposed, adhesive face for the purpose specified, comprising strip supporting means, a moistener from which the strip may be delivered for separate use with an exposed, adhesive face, means to feed the strip to the moistener, a casing for the apparatus having a base and a side rising therefrom, operating means for said feeding means mounted upon said side and connected to said feeding means, an opposite side movably connected to said base along a longitudinal line of said base and adapted to swing outwardly relative to said base, a frame for the apparatus removably connected to said first mentioned side and interengaging provisions for mounting said operating means for the strip feeding means upon the said side rising from the base.

19. A strip serving device comprising a tank or reservoir, a moistener operatively related to the tank, means to support a strip roll from which the strip may be served toward and in contact with the moistener, and severing means for the strip located directly above the moistener, permitting severance adjacent the moistening point.

20. A strip serving apparatus adapted to deliver or present to the user unapplied strips of paper or the like having an exposed adhesive face for the purpose specified, comprising strip supporting means, a moistener in operative relation to said strip supporting means, means so to feed the strip and to sever the same as to produce a moistened, severed unapplied strip of predetermined length, and means to vary such predetermined length.

21. A strip serving device comprising strip supporting means, a moistener occupying a fixed moisture receiving and conveying position in the service path of the strip, a guard or lip overhanging the rear portion of the moistener and closely adjacent the same to prevent contact of the strip therewith at such portion, and strip severing means positioned to sever the strip against said lip or guard and close to the moistener.

22. A strip serving device comprising in combination a base, a strip roll support, a casing having side walls and an open front, a tank or reservoir positioned in said casing and removable therefrom through said open front, a bodily fixed moistener mounted in said reservoir and presenting to the strip a moistening portion that is bodily unyielding, said moistener being removable with the reservoir through the said open front of the casing, a severing blade located directly over and close to the moistener and supported by said casing and constructed to sever the strip normal to the edges thereof, and a presser guide arranged transversely of the strip and directly over and in close proximity to the unyielding, strip contacting portion of the moistener, and serving to hold the free end of the strip in effective, uninterrupted, moistening contact with the moistener during the serving and severing operations.

23. A strip serving apparatus adapted to deliver or present to the user for manual application, unapplied strips of paper or the like having an exposed, wetted, adhesive face, comprising strip supporting means, two pairs of coacting rolls between which the strip passes from the supporting means, the forward pair of rolls being idly rotatable, one roll of the rear pair of rolls being a positively driven feed roll, and one roll of the forward pair of rolls being a moistener roll, a reciprocating device for operating said positively driven feed roll, a strip severing blade between the moistener roll and the positively driven feed roll, and means operatively related to and actuatingly moved by said reciprocating device to turn said feed roll on the forward stroke only, of said reciprocating device, thus imparting strip feeding movement to said feed roll, and also

to operate the severing blade on the return stroke of said reciprocating device so as to sever the strip at an unmoistened portion thereof.

24. A strip serving apparatus adapted to deliver or present to the user for manual application, unapplied strips of paper or the like having an exposed, wetted, adhesive face, comprising strip supporting means, two pairs of co-acting rolls between which the strip passes from the supporting means, the forward pair of rolls being idly rotatable, one roll of the rear pair of rolls being a positively driven feed roll, and one roll of the forward pair of rolls being a moistener roll, a reciprocating device for operating said positively driven feed roll, a strip severing blade between the moistener roll and the positively driven feed roll, and devices including a pinion and a blade-operating projection operatively related to and moved by said reciprocating device, respectively to turn said feed roll on the forward stroke only, of said reciprocating device, thus imparting strip feeding movement to said feed roll, and to operate the severing blade on the return stroke of said reciprocating device, so as to sever the strip at an unmoistened portion thereof.

25. A strip serving apparatus adapted to deliver or present to the user for manual application, unapplied strips of paper or the like having an exposed, wetted, adhesive face, comprising strip supporting means, two pairs of co-acting rolls between which the strip passes from the supporting means, the forward pair of rolls being idly rotatable, one roll of the rear pair of rolls being a positively driven feed roll, and one roll of the forward pair of rolls being a moistener roll which is positioned directly at the severed-strip-discharge end of the apparatus and from which moistener roll the severed, unapplied strip is presented to the user for manual application, a strip severing blade between said moistener roll and the positively driven feed roll, and members actuatingly moved by said reciprocating device and operatively associated therewith and with the feed roll and severing blade, and including a pinion and clutch, and a blade-operating projection, respectively to turn said feed roll on the forward stroke only, of said reciprocating device, thus imparting strip feeding movement to said feed roll, and to impart strip severing movement to the severing blade upon the return movement of said reciprocating device.

26. A strip severing apparatus adapted to deliver or present to the user for manual application, unapplied strips of paper or the like having an exposed, wetted, adhesive face, comprising strip supporting means, strip feed rolls, at least one of which is positively driven, a moistener in wetting relation to the strip issuing from said strip supporting means and from which moistener the strip is immediately presented to the user for manual application, an idle roll coöperating with said moistener, a shaft whereon said positively driven feed roll is mounted, a movable feeding member for said positively driven feed roll, a clutch device operatively arranged with respect to said shaft and said positively driven feed roll for effecting, in coöperation with the movable feeding member, the feeding of the strip through the feed rolls to a predetermined extent during each feeding movement of said positively driven feed roll and the shaft, a severing blade in the rear of and adapted to sever the strip close to the moistener, and means for operating said severing blade.

27. A strip serving apparatus adapted to deliver or present to the user for manual application unapplied strips of paper or the like having an exposed, wetted, adhesive face, comprising strip supporting means, strip feed rolls, at least one of which is positively driven, a moistener in wetting relation to the strip issuing from said strip supporting means and from which moistener the strip is immediately presented to the user for manual application, an idle roll coöperating with said moistener, a shaft whereon said positively driven feed roll is mounted, a feeding member for said positively driven feed roll, a clutch device operatively arranged with respect to said shaft and said positively driven feed roll for effecting, in coöperation with said movable feeding member, the feeding of the strip through the feed rolls to a predetermined extent during each feeding movement of said positively driven feed roll and its shaft, a severing device positioned between the moistener and the strip supporting means, and a member operatively associated with and actuated by said movable feeding member to operate the severing device to sever the strip at an unmoistened portion thereof.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

EARL L. BROWNSON.

Witnesses:
HATTIE L. TOWNSEND,
IRVING U. TOWNSEND.

Correction in Letters Patent No. 1,250,790.

It is hereby certified that in Letters Patent No. 1,250,790, granted December 18, 1917, upon the application of Earl L. Brownson, of Allston, Massachusetts, for an improvement in "Strip-Serving Apparatus," an error appears in the printed specification requiring correction as follows: Page 8, line 59, claim 26, for the word "severing" read *serving;* and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 5th day of February, A. D., 1918.

[SEAL.]

R. F. WHITEHEAD,

Acting Commissioner of Patents.

Cl. 91—14.5.