E. C. ELDER.

HOLDER FOR ROLL PAPER BINDING STRIPS.

APPLICATION FILED MAR. 4, 1908.

906,518. Patented Dec. 15, 1908.

Fig. 1.

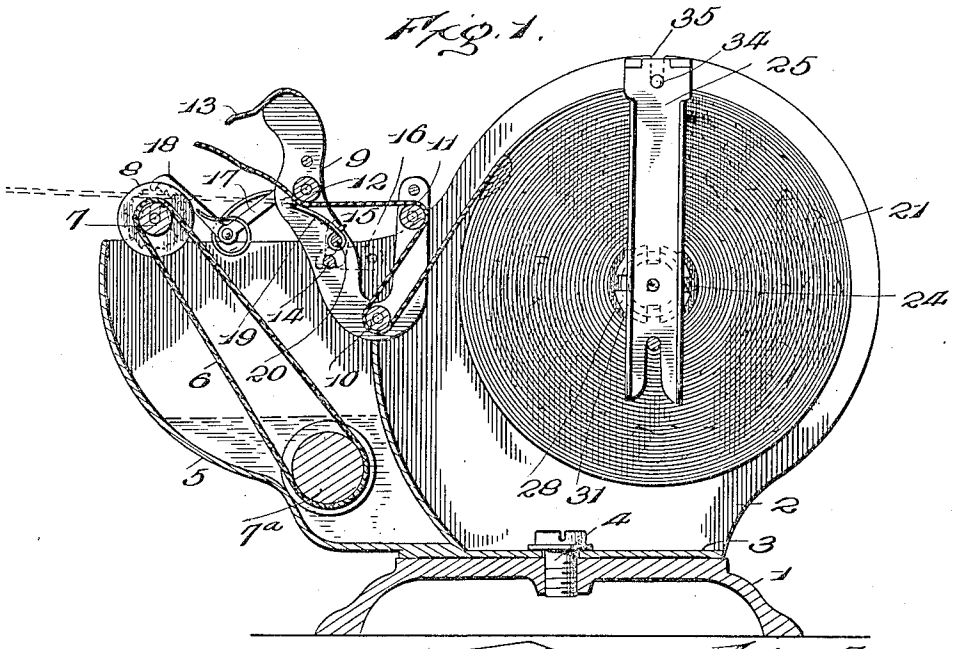


Fig. 2.

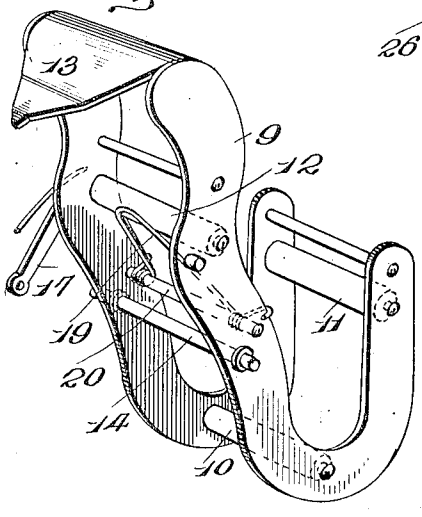


Fig. 3.

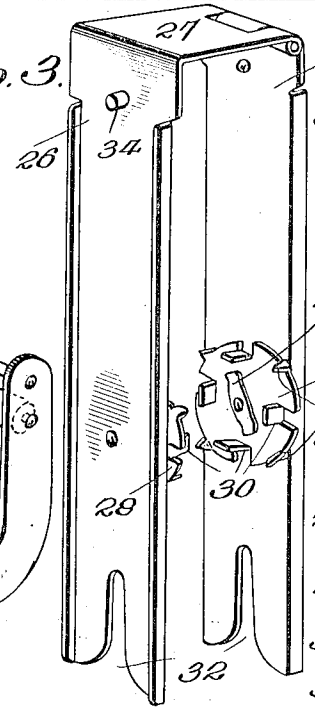
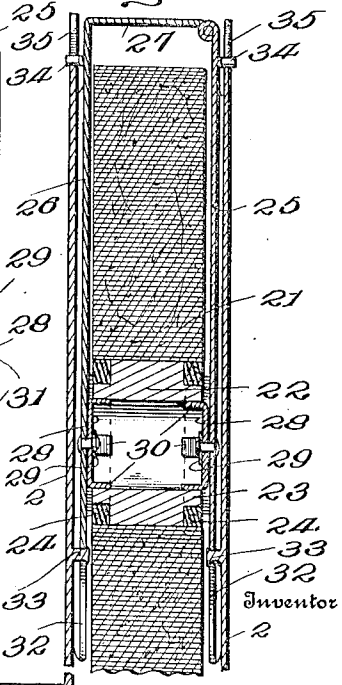


Fig. 4.



Witnesses

J. M. Munn

W. N. Woodson

Inventor

E. C. Elder

By R. A. R. Lacey.

Attorneys

UNITED STATES PATENT OFFICE.

EDWIN C. ELDER, OF HAMPTON, NEW BRUNSWICK, CANADA.

HOLDER FOR ROLL-PAPER BINDING-STRIPS.

No. 906,518. Specification of Letters Patent. Patented Dec. 15, 1908.

Application filed March 4, 1908. Serial No. 419,124.

To all whom it may concern:

Be it known that I, EDWIN C. ELDER, subject of the King of England, residing at Hampton, New Brunswick, Canada, have invented certain new and useful Improvements in Holders for Roll-Paper Binding-Strips, of which the following is a specification.

This invention comprehends certain new and useful improvements in holders for moistening and cutting roll paper strips provided with a surface of adhesive material and intended for use in binding securely paper wrapped packages, and the invention relates particularly to that type of device of this character which embodies a vertically disposed casing in which the paper roll is mounted to rotate, the paper being drawn off by the bundle wrapper from the roll through a guiding frame mounted in the casing and at the same time moistened upon its under surface, the moistened strip of the desired length being severed from the roll in a practically automatic manner.

The object of this invention is an apparatus of this character provided with an improved paper holding frame in which the paper roll is mounted to rotate in the casing, said frame being so constructed that it may be easily applied to and removed from the roll whenever desired and holding the roll in the casing in a manner to permit of the proper rotation as the strip is withdrawn, without permitting the roll to run free and disarrange the paper thereon.

With this and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and then point out the novel features in the appended claims.

For a full understanding of the invention and the merits thereof, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a vertical longitudinal section of my improved holder; Fig. 2 is a perspective view of a rocker frame employed; Fig. 3 is a similar view of the roll-carrying frame; and, Fig. 4 is a vertical transverse section through the center of the roll.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates the stand of my improved invention, which stand is designed to be supported on a counter, or any other desired support, and 2 designates a vertically disposed casing which is provided with a base 3 by which it is mounted to turn on the standard about a vertically disposed pivot or axis 4. The casing 2 is forwardly extended as indicated at 5 to form a reservoir. An endless moistening band 6 of felt or the like is supported on a preferably spiked roller 7 journaled in the outer end of the reservoir or extension 5 and a weight 7^a is suspended within the band down in the reservoir, so as to maintain the band properly taut as the roller 7 is rotated. The roller 7 carries at one side, a pair of disks 8 between which a ratchet surface is formed, said ratchet surface being designed for engagement by a pawl hereinafter specified. 9 designates a rocker frame which is mounted within the casing at the reservoir end thereof and which is provided with a lower roller 10, an upper roller 11 at one side of said pivot or axis, and another roller 12 at the opposite side of said axis, between the same and the moistening band. The paper strip, as clearly illustrated in the drawing, first passes from the roll underneath the lower roller 10 and thence backwardly and around or over the upper roller 11. It is thence passed forwardly underneath the third roller 12 and is passed outwardly underneath a preferably V-shaped knife 13 carried in the outer upper end of the rocker frame. The rollers 10 and 11 so counterbalance the rocker frame that the said frame is held with the knife in an elevated position, but when the strip is drawn forwardly from the roll through the frame, the frame will be rocked on its pivot studs 14 and the knife will be automatically brought out towards the strip so that the operator, after the proper amount of paper has been withdrawn may sever the desired portion by a quick upward jerk of the paper. Preferably the rocker frame is removable, its pivot studs being inserted in slots 15 formed in the casing and held therein by pivoted latches 16 as shown.

In order that the rocking movement of the frame 9 may effect an automatic intermittent movement to the endless moistening band 6, said frame carries an arm 17 to which a spring-pressed pawl 18 is pivoted, said pawl engaging with the ratchet of the roller 7 and

turning the same every time the rocker frame is pulled forwardly by the withdrawal of the strip.

In order to properly support the severed end remaining on the roll after a portion of the strip has been removed so that such end may be readily grasped by the operator for a subsequent actuation of the device, I provide a spring tongue 19 which is secured to a transverse rod 20 mounted in the frame 9, the free end of said tongue being adapted to project underneath and bear upwardly against the roller 12, so as to prevent the severed end from dropping down into the reservoir and to hold it properly projected for a subsequent operation.

One of the main features of my present invention is the means for holding the paper roll in the casing. The roll, designated 21 is mounted upon a core. This core 22 may be made of wood or metal and is hollow as shown and is preferably provided at each end with a reduced portion 23. Cork collars 24 are slipped over the reduced ends 23 and secured thereon in any desired way.

The frame for directly holding the roll embodies preferably channeled side bars 25 and 26, one of said side bars being formed with an angularly disposed end constituting a cross bar 27 to which the other side bar is hinged, as clearly illustrated in the drawings. Each of said side bars carries on its inner face a drag or friction disk 28 held against free rotation by means of an arched spring 29 secured to its centrally located pivot and bearing upon the face of the disk as shown. Each disk 28 is formed with a series of centering lugs 30 designed to be slipped into the hollow core 22, said lugs being preferably stamped out of metal or other material of which the disks are formed. In addition to the centering lugs 30, each disk 28 is formed at its margin with a plurality of inwardly projecting spurs 31 designed to penetrate the cork or other penetrable collar 24 of the core. It will thus be seen that the frame may be readily applied to the roll with the core in the latter by causing the side bars 25 and 26 to straddle or embrace the roll, one being swung inwardly towards the other, the two series of centering lugs of the respective disks being entered into the ends of the core and the spurs penetrating the edges thereof that are constituted by the core or other collars 24. The frame, with the roll in it is then slipped downwardly between the two side plates of the casing 2, the side bars being formed at their lower ends with recesses 32 having flared entrance portions adapted to receive studs 33 projecting forwardly from the side plates of the casing and said side bars being also provided in their upper ends with outwardly projecting studs 34 designed to slip downwardly into the recesses 35 in the upper edges of the casing walls, so as to securely hold the frame in place, and the paper roll in proper position for the withdrawal of the paper strip.

From the foregoing description in connection with the accompanying drawing, it will be seen that I have provided a very simple, durable and efficient construction of holder for paper rolls of the character herein before set forth, in which the paper will be effectively moistened as it is drawn from the roll and capable of being easily and preferably severed at the desired point, the severed end being held projected in proper position for a subsequent operation, and in which the frame for directly supporting the paper roll may be easily applied thereto and be passed therefrom so as to replace one roll by another after the first has become exhausted.

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

1. In a device of the character described, the combination with a roll and a casing for containing said roll, of a frame adapted to hold the roll within the casing, said frame embodying side bars, means for removably holding said side bars within the casing, and friction disks rotatably mounted upon said side bars and adapted to engage the roll.

2. In a device of the character described, the combination with a roll and a casing for containing said roll, of a frame adapted to hold the roll within the casing, said frame embodying hingedly connected side bars, means for removably holding said side bars within the casing, said side bars being adapted to straddle the roll, and friction disks rotatably mounted on said side bars and adapted to engage the roll at opposite sides thereof.

3. In a device of the character described, the combination with a roll provided with a hollow core, and a casing adapted to contain said roll, of a frame adapted to hold the roll within the casing, said frame embodying side bars adapted to straddle said roll, means for supporting said frame within the casing, friction disks rotatably carried by said side bars and provided with centering lugs adapted to enter the core at opposite sides of the roll, and means for securing said disks to the core.

4. In a device of the character described, the combination with a roll provided with a core, said core being formed with penetrable ends, and a casing adapted to contain said roll, of a frame adapted to hold the roll within the casing, said frame embodying side bars adapted to straddle the roll, disks rotatably secured to said side bars and provided with spurs adapted to penetrate the ends of the core, and means for supporting said frames in the casing.

5. In a device of the character described, the combination with a roll provided with a core, said core embodying a body portion formed with reduced ends and penetrable collars encircling said ends, and a casing

adapted to contain said roll, of a frame for holding said roll within the casing, said frame embodying side bars adapted to straddle the roll, means for supporting the frame within the casing, and friction disks rotatably carried by said side bars and formed with spurs designed to penetrate said collars.

6. In a device of the character described, the combination with a roll and a casing adapted to contain said roll, of a frame for holding said roll within the casing, said frame embodying side bars adapted to straddle the roll, the roll being supported to turn between said side bars, said side bars being provided at one end with recesses and being adapted to be slipped into the casing, the casing being formed on its inner walls with pins designed to be accommodated in such recesses, the side bars being formed with outwardly projecting pins, and the casing being formed with recesses to receive said last named pins.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN C. ELDER. [L. S.]

Witnesses:
BENJAMIN S. ELDER,
WILLARD E. HARRIS.