W. W. HESSON.

DEVICE FOR PRINTING ON WRAPPING PAPER.

APPLICATION FILED SEPT. 1, 1911.

1,025,137. Patented May 7, 1912.

Fig. 1.

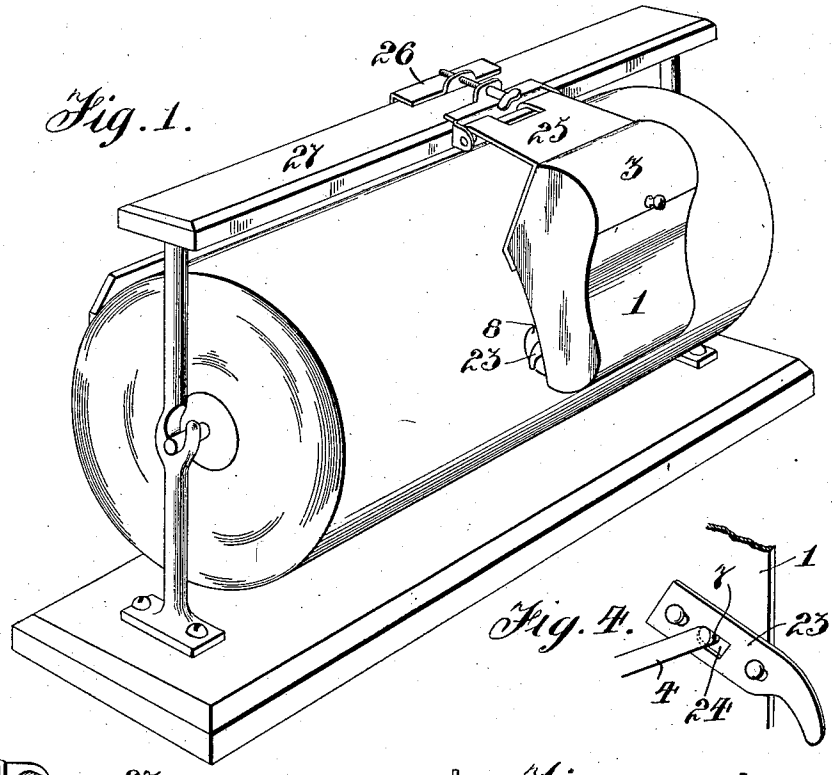


Fig. 4.

Fig. 2.

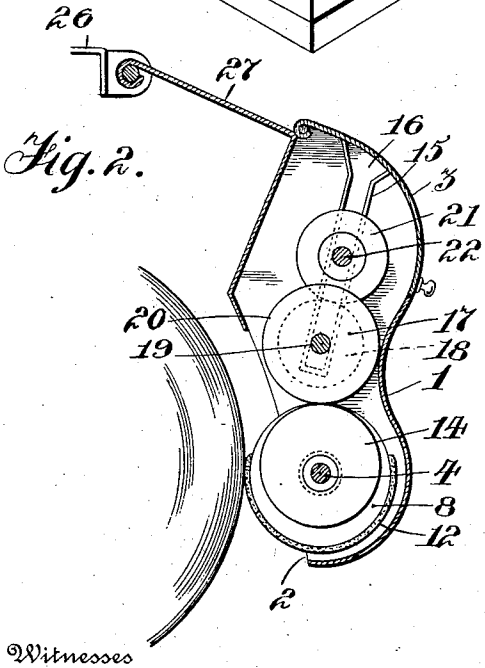
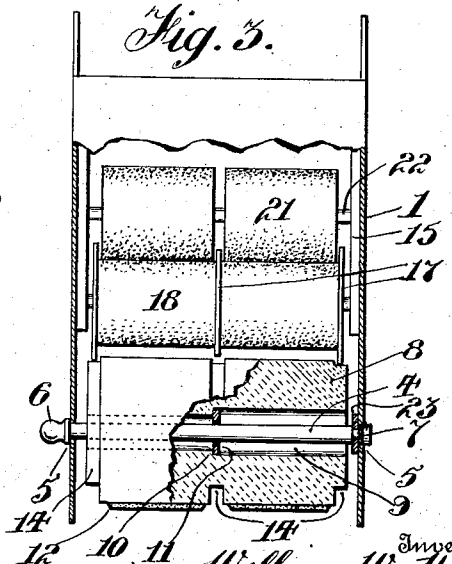


Fig. 3.



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DEVICE FOR PRINTING ON WRAPPING-PAPER.

1,025,137. Specification of Letters Patent. Patented May 7, 1912.

Application filed September 1, 1911. Serial No. 647,251.

To all whom it may concern:

Be it known that I, WILLIAM WALLACE HESSON, a subject of the King of Great Britain, resident of the city of Toronto, county of York, Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Devices for Printing on Wrapping-Paper; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention relates to improvements in devices for printing on wrapping paper, as described in the following specification and illustrated in the accompanying drawings that form part of the same.

The invention consists essentially in the novel construction and arrangement of parts whereby the printing roller is supported in contact with the paper to be printed upon, and whereby the inking pad is brought into contact with the type on the rotation of the printing roller.

The objects of the invention are, to devise a simple and effective form of device for printing upon wrapping paper as it is used, to obviate the difficulties met with in the use of this class of device in uneven and partial printing, and to provide a device which may be arranged to print in several colors.

In the drawings, Figure 1 is a perspective view of my device shown attached to a wrapping paper stand. Fig. 2 is an enlarged, vertical sectional view through the casing showing the rollers in elevation. Fig. 3 is a front elevational view with the casing partly in section. Fig. 4 is an enlarged perspective detail of the means for securing the spindle of the printing roll in place.

Like numerals of reference indicate corresponding parts in each figure.

Referring to the drawings, 1 is a casing preferably formed of thin sheet metal and having an opening 2 at the bottom or inner side thereof and a hinged cover 3 closing the open top.

4 is a spindle extending through the holes 5 in the sides of the casing 1 and having a head 6 at one end adapted to abut the casing and at its other formed with an annular groove 7 therein. The groove portion being arranged just to the inner side of the casing.

8 is a roller of wood or other suitable material having a central circular orifice 9 extending from end to end thereof, said orifice being of two diameters and forming a shoulder 10 mid-way of the length of said roller.

11 is a metal washer inserted into the larger portion of the orifice 9 and abutting the shoulder 10 and forming an arbor, said arbor having a central hole therethrough fitting loosely on the spindle 4. The roller 8 being thus supported on the narrow arbor 11 will rotate freely and will be free to swing longitudinally to follow any irregularities in the roll of paper to be printed upon. Suitable type faces 12 are placed on the periphery of the roller 8.

14 are eccentric portions formed on the ends and in the center of the roller 8.

15 are narrow trough shaped guides secured to the inner side walls of the casing 1 and having flaring upper ends 16.

17 is the inking roller formed with a solid core 18 having a spindle 19 extending through the center thereof, the ends of said spindle extending into the trough-shaped guides 15.

20 are metal disks concentrically secured to the roller 17 and adapted to engage and rest upon the eccentric portions 14 of the roller 8, said disks being of a suitable diameter to hold the inking portion of the roller out of contact with the roller 8 when riding upon the high portion of the eccentrics but arranged so as to lower the ink roller in sufficient time on the rotation of the eccentrics to bring the ink roller into contact with the type surfaces. The central washer is of smaller diameter than the others and is loose upon the spindle so that different lengths of inking pad may be used if desired.

21 are ink supply rollers mounted on a suitable core having a spindle 22 extending into the trough guides 15, said supply rollers being arranged to fit loosely between the disks 20.

The device is herein shown and described with a double printing pad but it must be understood that a single printing roller may be used or any suitable number of rollers to print any desired number of colors. Further, it must be understood that other suitable means for inking the type may be devised so long as the main feature of a printing roller supported centrally of its length and free to swing longitudinally is used. The roller spindle is secured in place by a sliding catch member 23 slidably secured to the inside of the casing and having an

opening 24 through which the end of the spindle projects. The slide extends into the annular groove cut in said spindle thus preventing its withdrawal but allowing it to rotate freely. The casing 1 is supported from a bracket 25 pivotally secured to the clamp bracket 26 secured to the top bar of the paper roll stand 27. The casing swings inwardly on its pivot and by its own weight holds the printing roll in contact with the paper.

In the use of this device the ink rollers are supplied with suitable ink and transfer the color to the rollers 17. As the merchant pulls the paper from the rolls the roller 8 engaging the surface thereof is rotated. As the roller 8 rotates the ink roller 17 is rolled upon the eccentric portions 14 thereby having the ink distributed from the rollers 21 on the surface and is lowered into contact with the type portions of the roller 8 said roller 17 rolling over the type and inking the face thereof. The roller 8 is free to swing upon the arbor 11 and the ink rollers being supported thereby will follow the swinging movement insuring the type being properly inked each time.

What I claim as my invention is:—

1. In a device for printing on wrapping paper, a printing roller supported intermediate of its length and free to swing upon its support, means for inking said roller, and means for supporting said printing roller in contact with the paper to be printed upon.

2. In a device for printing on wrapping paper, a printing roller, a casing supported adjacent to the paper to be printed upon, a spindle secured in said casing, a roller loosely encircling said spindle and supported therefrom mid-way of its length and free to tilt on said central support, and an inking roller supported within said casing and adapted to ink the printing roller.

3. In a device for printing on wrapping paper, a casing supported adjacent to the paper to be printed, a spindle extending across said casing, a printing roller having a longitudinal orifice extending centrally therethrough, an arbor secured in said orifice centrally of the length of said roller and journaled upon said spindle, and an inking roller adapted to ink said printing roller.

4. In a device for printing on wrapping paper, a casing, a printing roller supported centrally of its length within said casing and free to swing upon its support and having cams arranged at the ends thereof, a flanged inking roller having its flanges engaging the cams of said printing roller and adapted to rest thereon, said flanges holding the inking roller from contact with the printing roller when running on the high portion of said cams and allowing the inking roller to engage the printing roller on the further rotation of the cams.

5. In a device for printing on wrapping paper, a casing, a printing roller supported centrally of its length within said casing and free to swing upon its support and having cams arranged at the ends thereof, a flanged inking roller having its flanges resting upon said cams and adapted to move into and out of contact with the surface of the printing roller on the rotation thereof, and inking supply rollers arranged between the flanges of said inking roller and supported therebetween on said casing.

6. In a device for printing on wrapping paper, in combination, a casing, an inking roller supported centrally of its length from said spindle and free to swing at the ends upon its central support and having cams formed at its ends, an inking roller having flanges adapted to engage said cams and a centrally arranged spindle, guide ways arranged in the side of said casing adapted to engage the ends of the inking roller, and an ink supply roller having its spindle extending into said guide-ways said roller resting upon said inking roller.

Signed at Boston Mass. U. S. A. this nineteenth day of August A. D. 1911.

WILLIAM WALLACE HESSON.

Witnesses:

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JAMES L. GILLINGHAM.