

No. 723,785.

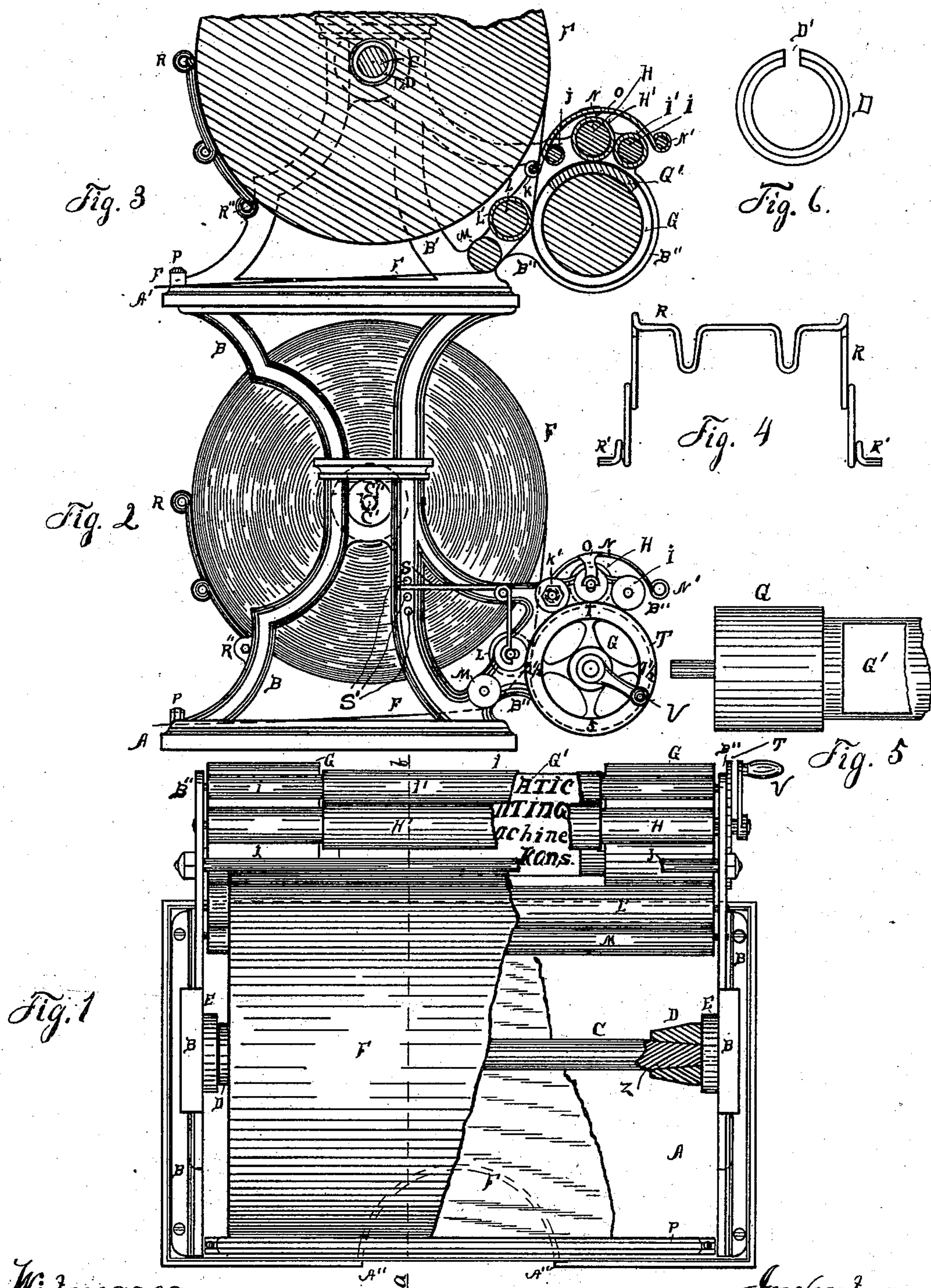
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N. T. POOL.

DEVICE FOR PRINTING MERCHANTS' ADVERTISING CARDS ON
WRAPPING PAPER.

APPLICATION FILED MAR. 21, 1902.

NO MODEL.



Witnesses.
J. H. Hunt
E. Roof.

Inventor
Norman T. Pool
By his Attorney
F. M. Homstock.

UNITED STATES PATENT OFFICE.

NORMAN T. POOL, OF TOPEKA, KANSAS.

DEVICE FOR PRINTING MERCHANTS' ADVERTISING-CARDS ON WRAPPING-PAPER.

SPECIFICATION forming part of Letters Patent No. 723,785, dated March 24, 1903.

Application filed March 21, 1902. Serial No. 99,368. (No model.)

To all whom it may concern:

Be it known that I, NORMAN T. POOL, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Improvement in Devices for Printing Merchants' Advertising-Cards on Wrapping-Paper, of which the following is a specification.

My invention relates to improvements in devices for printing wrapping-paper from the rolls, in which shape it is usually furnished, or from sheets, as the case may be, the devices as a whole being semi-automatic and operated by pulling the papers through the rolls of the machine, or it may be operated by means of the handle of the printing and measuring roller thereof and made to print paper in sheets or paper bags.

The objects of my invention are, first, to produce a simple device for the printing of wrapping-paper and paper bags that shall be entirely practical to the average layman; second, to so arrange the device as a whole that one may measure the length of paper desired, or, to reverse the order, to use the measuring device for running through the printing-rolls single sheets of paper or paper bags. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a broken plan view. Fig. 2 is an end view. Fig. 3 is a section of the upper printing device, taken through the line *a b* of Fig. 1. Fig. 4 is a detail of the retarding-spring. Fig. 5 is a detail of the printing-roller; and Fig. 6 is a detail of the cylindrical wedge, showing the longitudinal slot cut therein.

Similar letters refer to similar parts throughout the several views.

Letters *A A'* refer to the wooden bases on which the metal standards *B B'* stand and to which they are attached by screws or other suitable means. *A''* indicates a semicircular cut in the said bases that enables the operator to more freely catch hold of the wrapping-paper *F*.

C is a wooden roller with metal gudgeons, that find position through the slots *C''* to the bearings *C'*. Each end of this roller is slightly tapered, as shown at *Z*, Fig. 1, and upon this taper play the cylindrical wedges *D*, which

are slotted throughout their length, that they may spring open, as may be demanded by their function and their position on the taper of the roller *C*. The roller *C* is passed through the opening in the roll of paper, and the wedges *D* are forced up the taper *Z*, wedging the said paper tightly upon the said roller. The bosses *E* of the standards *B B' B' B'* are slotted, as shown at *C''*, (see Fig. 2,) that the roller *C*, together with a roll of paper, may be readily placed in its bearings.

The retarding-spring *R* is formed as shown in Fig. 4. Its ends *R' R'* are preferably hexagonal in cross-section. These ends pass into a like conformation of the frames *B B'*, as shown at *R''*, enabling the operator to increase the pressure of the retarding-spring on the face of the roll of paper *F* by simply setting the said spring one face backward or forward, as may be desired. As will no doubt be understood, the pressure of the retarding-spring will decrease in proportion to the diminishment of the size of the roll of paper. This is an important feature in my invention in that the tension on the roll of paper is kept practically uniform, preventing any slack from forming and tending to keep the paper as it comes from the roll in alinement.

Projecting out from the standards *B B'* are the secondary standards *B''*, that carry the printing devices of my invention.

All of the rollers herein described are preferably made of wood with metal gudgeons.

The main roller *G* is formed with an annular depression as to its length, as shown in detail in Fig. 5. In this depression is set the rubber-type card *G'*, that gives its impress in anilin ink to the paper passing between the said type and the impression-roller *L*. The ink-rollers *H* and *I* are primary and secondary, the roller *H* only coming in contact with the face of the type, the secondary roller *I* being designed as a feed and ink-distributing roller. Both of these rollers are covered with felt and are such as are in common use for the distribution of anilin ink. The roller *H* is held against the face of the type by means of the weight of the protecting cover or guard *N*, the dogs *O* thereof resting on the gudgeons of the said roller, as shown in Fig. 2. The cover *N* is hinged to the binding-rod *K*, which is held in place by means of the nuts *K'*.

The pressure of the roller H on the printing-roller G can be increased or decreased by means of a weight laid upon or attached to the said cover at N'. The impression-roller
 5 L is incased with rubber. The bearings for its gudgeons, as well as the bearings for the gudgeons of the ink-roller H, are elongated, as shown in Fig. 2. The gudgeons of the im-
 10 pression-roller L are journaled in the lower ends of the right-angular springs, as shown at S, Fig. 2. These springs are pivoted to the secondary standards and are held in their adjusted positions by means of the studs S',
 15 with which the free ends of the said springs engage. In this connection there is a secondary guide-roller M, proved by experience to make the working of my invention more effective.
 20 Located on the extreme front edge of the base is the tear-off straight edge P.
 At one end of the frame B'', preferably at the right side, is an indicating-dial on which may be placed figures representing inches. One
 25 rotation of the roller G in this case is equal to ten inches. The crank V when pulling the paper from the roll forms the indicator, and the same is true when the said crank is used to force the paper from the roll.
 30 In practical use the roller C is passed through the center opening in the roll of paper and the cylindrical wedges D are forced into their positions, firmly binding the said roll of paper to the said roller. The retard-
 35 ing-spring R is then sprung forward out of the way, and the roll of paper attached, as stated, to the roller C is placed via the slot C'' in the bearings C', when the retarding-spring R is allowed to come in contact with
 40 the face of the roll of paper. The end of the

said roll of paper is then passed downward between the impression-roller L and the printing-roller G and under the roller M and through the tear-off straight edge P, when the machine is ready for use. It will be un-
 45 derstood that ink has been applied to the rollers I H. When it is desired to print paper bags, the end of the roll of paper is withdrawn from between the impression-roller L and the printing-roller G and the paper bags
 50 then fed singly therebetween, which bags are printed by rotating the roller G, as in the former operation.

Having thus described my invention, what I claim as new, and desire to secure by Letters
 55 Patent, is—

In a wrapping-paper-printing machine, the combination with the standards, of roller-sup-
 60 porting means secured thereto, outwardly-extending secondary standards formed integral with the first-named standards, a printing-roller journaled in the outer ends of said secondary standards, inking-rollers journaled
 65 in the said secondary standards above the said printing-roller, an impression-roller, right-angular springs pivoted to the secondary standards and supporting the said im-
 pression-roller, and studs spaced apart and formed integral with the first-named stand-
 70 ards, said springs having their free ends adapted to engage the said studs whereby the same are adjusted, substantially as described.

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

NORMAN T. POOL.

In presence of—

E. ROOF,
 W. MCCLINTOCK.