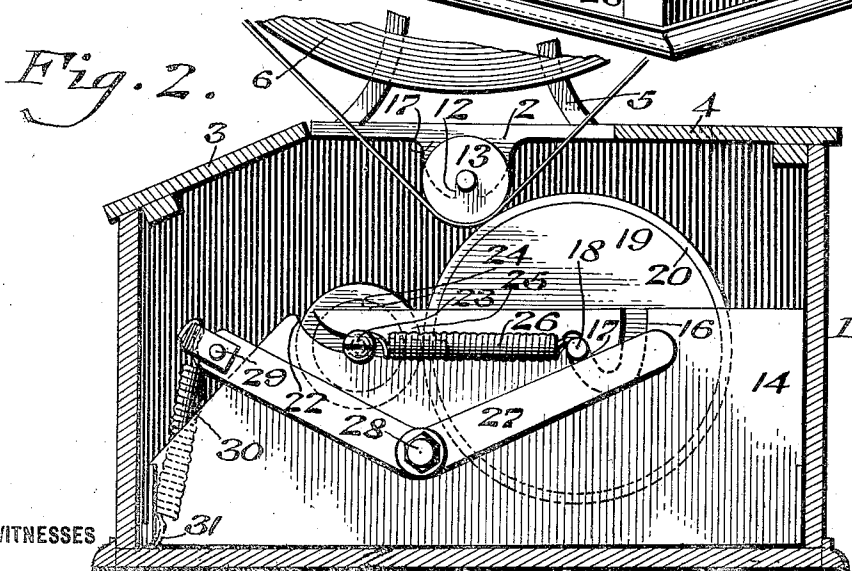
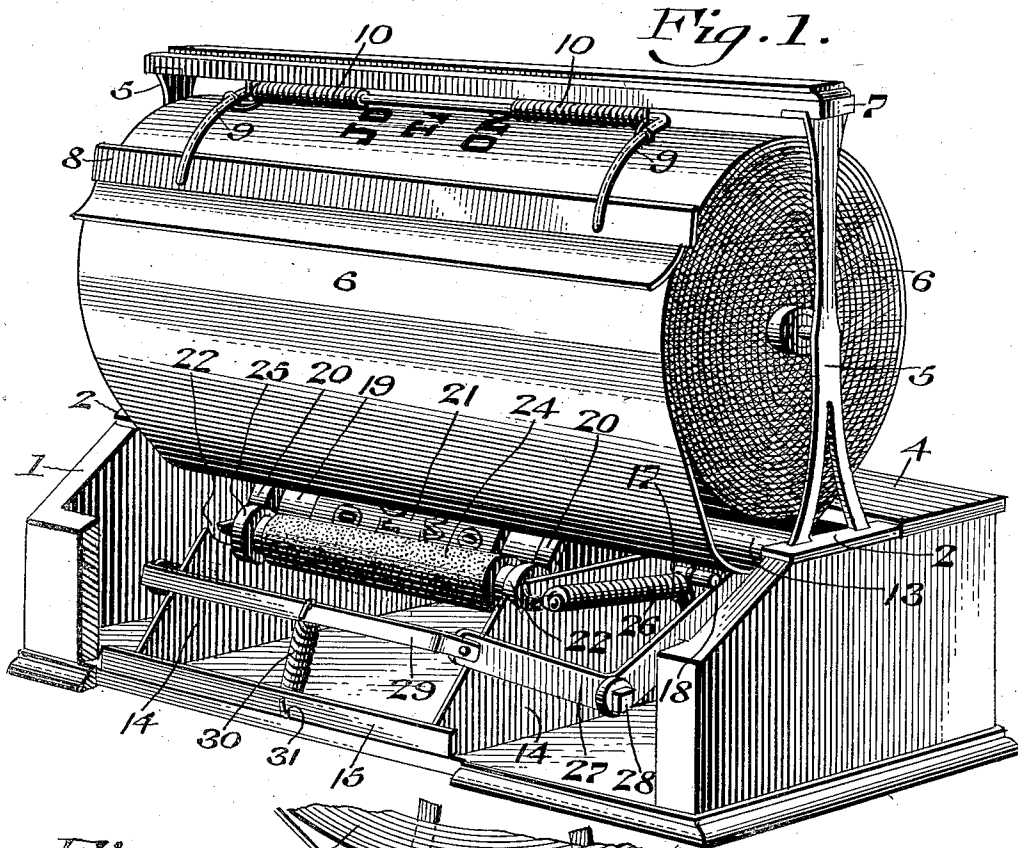


M. W. LEE.
 PRINTING ATTACHMENT FOR ROLLS.
 APPLICATION FILED APR. 1, 1912.

1,062,979.

Patented May 27, 1913.



WITNESSES

INVENTOR

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UNITED STATES PATENT OFFICE.

MOSES W. LEE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO NATIONAL ROLL PRINTER COMPANY, OF READING, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

PRINTING ATTACHMENT FOR ROLLS.

1,062,979.

Specification of Letters Patent.

Patented May 27, 1913.

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To all whom it may concern:

Be it known that I, MOSES W. LEE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Printing Attachment for Rolls, of which the following is a specification.

The object of my present invention is to devise a simplified and compact printing attachment for paper or other sheets which will be accurate and reliable in its action and which may be economically manufactured, and wherein the parts are readily accessible for the purpose of inspection or other purposes.

With the above in view, my invention consists of a novel construction of a printing attachment which is adapted to cooperate with a roll of paper or other desired material whereby any desired data may be printed on the roll, as the paper is being withdrawn therefrom.

It further consists of a novel construction of a support and a novel manner of mounting thereon the impression roll and the ink roll.

It further consists of a novel construction of a printing attachment.

It further consists of a novel construction of a support, novel means for retaining the ink roll in proper relation with respect to the impression roll and novel means for placing a tension on the impression roll so that the same will be maintained in proper engagement with the paper which is being withdrawn from the roll.

It further consists of a novel manner of mounting the paper roll.

It further consists of other novel features of construction all as will be hereinafter fully set forth.

For the purpose of illustrating my invention, I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a perspective view of

a printing attachment for paper or other rolls embodying my invention, certain portions thereof having been removed for the sake of clearness of illustration. Fig. 2 represents a sectional elevation of Fig. 1.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings:—1 designates a casing in which the printing mechanism is adapted to be contained, said casing being provided at its top with brackets 2, and removable covers 3 and 4. The brackets 2 carry standards 5 in which is journaled in any desired manner a paper roll 6, said standards being connected at their upper ends by means of a cross bar 7.

8 designates a paper cutter which comprises a blade carried by arms 9 which are pivotally carried by the cross bar 7 and provided with springs 10 mounted in such a manner as to cause the blade 8 to engage at all times with the paper roll irrespective of the diameter of the latter.

Each bracket 2 is provided with a depending flange 11 having an aperture in its bottom portion as indicated at 12, in which is adapted to be seated the journals of a roll 13, it being understood that the paper coming from the front face of the roll passes beneath the roll 13, then around the roll and beneath the cutting blade 8.

The printing attachment is located within the casing 1 and comprises, in the present instance, side plates 14 which are connected by means of cross bars 15 and each of said plates are provided with a slot 16, which extends downwardly and then forwardly and then upwardly, as indicated at 17, thereby adapting the same to receive the journal 18 of the impression roll 19, which latter at its sides is provided with an annular strip of any desired material, such as for example, rubber, which will frictionally engage with the paper on the roll 13, as will be understood by reference to Fig. 2. The impression roll 19 is provided intermediate the annular strips 20, with an impression plate 21 having the desired data thereon which it is desired to impress or print upon the paper, as it is being withdrawn from the roll.

Each support 14 is provided near its forward end with a downwardly and rearwardly extending slot 22 thereby adapting

the same to receive the journals 23 of the ink roll 24, which latter may be constructed in any desired manner, it being understood that the ink roll 24 is provided with annular flanges 25, which coact with the annular strips 20 on the impression roll 19, so that the ink pad 24 will coöperate in the proper manner with the impression plate 21.

26 designates springs one end of which is mounted on one of the journals 18, while the other end thereof is mounted on one of the journals 23, so that the impression roll and ink rolls are always maintained in proper relation with respect to each other.

It will be seen that the slot 12 in the depending brackets 11 is in the under face thereof, so that in order to maintain the impression roll 20 in proper relation with respect to the paper passing beneath the roll 13, I provide a tension device which consists of the bent or curved arms 27 which are pivotally supported to the side plates 14 by means of fastening devices 28, it being seen that the arms 27 near their rear end engage the journals 18 of the impression roll 19. The forward end of the arms 27 are connected by a bar 29 to which latter is secured one end of a spring 30, the other end thereof being seated in a recess 31 in the cross bar 15 of the support. It will be seen that by such a construction, I not only cause the impression roll 19 to be pressed against the paper passing beneath the roll 13, but I also retain the roll 13 in its proper position.

In the operation, it will be understood that as the paper is withdrawn from the roll 6 that the portion passing beneath the roll 13 will, at the proper time, receive an impression from the data on the printing plate 21, so that at predetermined distances apart on the paper, an impression will be made thereon of the advertising or other data which is on the printing plate 21. The paper is detached from the roll by the cutting blade or straight edge 8 in the usual and well known manner.

Special attention is directed to the manner in which the impression roll or the ink roll may be readily removed, it being seen that when it is desired to remove the impression roll to place other printing matter thereon, or for any other purpose, it is simply necessary to press downwardly on the impression roll so that the journals 18 thereon will pass rearwardly down the inclined slot 17 and then upwardly in the slot 16, so that the parts may be readily removed as is apparent. If it is desired to remove the ink roll it is simply necessary to move the same forward and upwardly whereupon the same will be disengaged upon the slot 22 in which the latter is journaled.

It will now be apparent that I have devised a novel and useful construction of a printing attachment for rolls which em-

bodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

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

1. In a device of the character stated, a casing, a paper roll carried thereby, a roll mounted in said casing and beneath which a sheet of paper passes, a support carried by said casing and having slots extending downwardly, laterally and upwardly, an impression roll having journals engaging said slots, said support having rearwardly extending slots therein, an ink roll journaled in said rearwardly extending slots, yielding means for maintaining said ink roll and impression roll in operative and assembled position with respect to said support, arms journaled in said support and having one end engaging the journals of said impression roll, and a tension device for said arms whereby said impression roll is maintained in operative relation with respect to the paper withdrawn from the paper roll.

2. In a device of the character stated, a casing, a paper roll carried thereby, a support carried by said casing and comprising side plates and cross bars connected therewith, said side plates having slots extending downwardly, laterally and upwardly and slots extending downwardly, laterally and rearwardly, an impression roll contained in the downwardly, laterally and upwardly extending slots, an ink roll carried in said other slots, a spring coöperating with said rolls to maintain them in assembled condition with respect to said plates, a roll journaled in said casing and between which and the impression roll the paper passes, and yielding means for maintaining said impression roll against the paper.

3. In a device of the character stated, a casing having a removable cover, a roll of sheet material rotatably mounted above said casing, a support carried by said casing and having outwardly, laterally and upwardly extending slots, and downwardly and rearwardly extending slots, an impression roll arranged in said first slots, an ink roll mounted in said second slots, yielding means for maintaining said rolls in operative relation with respect to each other, and in assembled condition with respect to said support, arms journaled in said support and bearing against the journals of the impres-

sion roll, a spring secured to said arms and to said support to maintain said impression roll in operative position, and a roll carried by said casing and between which and the impression roll a sheet passes from the sheet carrying roll.

4. In a device of the character stated, a casing having a removable portion, a support carried by said casing and comprising side members having a downwardly, laterally and upwardly extending slot, an impression roll journaled in said slots, said support having slots therein, an ink roll journaled in the last named slots, yielding means for maintaining the ink roll and the impression roll in working relation and in assembled condition with respect to the side members, arms journaled in said side members and engaging the impression roll journals, yielding means co-acting with said arms to place a yielding tension on the impression roll journals, brackets carried by said casing, each having an aperture in its under face and a roll journaled in said aperture and between which and the impression roll the sheet of material passes.

5. In a device of the character stated, a casing having a removable portion, a support carried by said casing and comprising side members each having a downwardly, laterally and upwardly extending slot, an impression roll journaled in said slots, said support having slots therein, an ink roll journaled in the last named slots, yielding means for maintaining the ink roll and the impression roll in working relation and in

assembled condition with respect to the said members, arms journaled in said side members and engaging the impression roll journals, yielding means co-acting with said arms to place a tension against the impression roll journals, brackets carried by said casing, each having an open slot in its under face, and a roll journaled in said open slots and between which and the impression roll the sheet of material passes.

6. In a device of the character stated, a casing having a removable portion, a support located within said casing and comprising side members each having a downwardly, laterally and upwardly extending slot, an impression roll journaled in said slots, said support having slots therein, an ink roll journaled in the last named slots, yielding means for maintaining the ink roll and the impression roll in working relation and in assembled condition with respect to the said members, arms journaled in said side members and engaging the impression roll journals, yielding means co-acting with said arms to place a tension against the impression roll journals, brackets carried by said casing, each having an open slot in its under face, a roll journaled in said open slots and between which and the impression roll the sheet of material passes, and a spring actuated bar bearing against the impression roll.

MOSES W. LEE.

Witnesses:

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C. D. McVAY.