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D. J. DEEGAN

ROLLER BEARER FOR PRINTING PRESSES

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INVENTOR,

INVENTOR,

BY

ATTORNEY.
ROLLING BERTER FOR PRINTING PRESSES.

To all whom it may concern:

Be it known that I, DANIEL J. DEEGAN, a citizen of the United States, residing in the city of Springfield, in the county of Clark, State of Ohio, have invented certain new and useful Improvements in Roller Bearers for Printing Presse of, of which the following is a specification.

One of the principal objects of my invention is to provide for printing presses, adjustable roller bearers whose positions in the chase may be readily varied to protect the type from being smudged by the roller. These roller bearers may be located vertically or horizontally in the chase at desired distances from the type, and have depressible bearer parts or members whose outer surfaces are in the same plane as the face of the type when the roller passes over them during the inking operation.

However, when the printing is done, it is an object of my invention to have the grippers engage the depressible parts of the roller bearers to force the type below the plane of the face of the type, whereby they cannot be printed upon the paper.

In the accompanying drawings illustrating my invention, Figure 1 is a plan view of a chase in which my roller bearers are mounted near the type. Figure 2 is a top plan view of one of the roller bearers. Figure 3 is a side view thereof. Figure 4 is a front view of a chase in the press, showing the inking roller passing over the roller bearers and the type, said bearers being mounted in the chase at a shorter distance from the type than in the chase shown in Figure 1. Figure 5 is a side view thereof. Figure 6 is a front view of the chase during the printing operation, said view being partly broken away to show how the roller bearers are engaged and depressed by the feed grippers to prevent said bearers from printing upon the paper. And Figure 7 is a side view of the same, partly in section.

Throughout the specification and drawings, similar reference characters denote corresponding parts.

Referring to the accompanying drawings for a detailed description of my invention, Figure 1 shows a chase containing type 2 and the usual furniture 3 and quoins 4. Locked in the chase with the type, on each side of and near the latter, are two roller bearers 5, 8. These roller bearers are adjustable in that they may be located and locked in the chase with the type in desired positions near the latter to permit an inking roller 6 to travel over them without smudging the type. Since a roller is subject to change in size due to climatic conditions, it is the object of these roller bearers 5, 8, which will now be described in detail, to provide an even track for the roller to travel upon near the type so that the latter will not be smudged by it.

Referring to Figures 2 and 3, each one of these roller bearers comprises a grooved member 7 containing two holes 8, 8 in its bottom portion to freely receive pins 9, 9 respectively that project inwardly from a relatively flat bearer or track element 10. Coil springs 11, 11 surround these pins, being at their inner ends wound around bosses 12, 12 in the bottom of each grooved member 7 and at their outer ends engaging the inner surface of the bearer element belonging to that grooved member. The bosses 12, 12 are counterbored to provide shoulders 13 which are adapted to be engaged by flanges 13 on the inner ends of the pins 9 to limit the outward movement of the bearer elements 10; or, in other words, to prevent the springs 11, 11 from forcing said elements 10 beyond the plane of the face of the type when the grooved members 7 are locked in the chase.

With their outer surfaces substantially flush with the face of the type in the chase, these bearer elements 10 form an even track for the roller 6 to travel over during the inking operation; and the closer these bearer elements are placed to the type, the more effective they will be in preventing the type from being smudged. However, they may be located at different distances from the type as shown in Figures 1, 4 and 6. At their ends these elements incline slightly inwardly to permit the inking roller to easily start its movement over them and gradually leave them. Their outer surfaces between their inclined ends are normally flush with the type as will be seen from the broken-away portion of Figure 5.

In order to prevent these bearer or track elements 10 making an impression upon the paper during the printing operation, they are adapted to be engaged and depressed below the face of the type by the feed grippers 14, 14 which hold the paper on the tympan. Referring to Figures 6 and 7, it
will be seen that when the type 2 is in printing engagement with the paper 15, the feed grippers 14, 14 have engaged and depressed the bearer elements 10 below the face of the type, against the compression of their springs 11, 11. Accordingly, they are thus prevented from printing upon the paper when the latter is engaged by the type. So soon as the printing operation is over, however, and the pressure of the feed grippers 14, 14 upon them is released, the springs 11, 11 will force these bearer elements 10 outwardly to their normal positions flush with the face of the type to form near the latter a track for the inking roller during its next inking operation.

It will thus be seen that I have provided for a printing press, simple and efficient roller bearers which prevent the type from being smudged during the travel of the roller over it, and are themselves prevented from printing upon the paper during the printing operation by reason of the engagement of the feed grippers with them.

I do not wish to be limited to the details of construction and arrangement herein shown and described, and any changes or modifications may be made therein within the scope of the subjoined claims.

Having described my invention, I claim:

1. In a printing press, the combination with a chase, of type arranged therein, a roller movable over said type to ink the same, feed grippers in said press, and depressible roller bearers adjustably mounted in said chase for engagement by said grippers, said bearers being normally flush with the face of the type to permit the roller to travel over them without smudging the type during the inking operation, and adapted to be depressed below the face of the latter by the feed grippers during the printing operation.

2. In a printing press, the combination with a chase, of type arranged therein, a roller movable over said type to ink the same, feed grippers in said press, grooved members adjustably mounted in said chase, and depressible bearer elements in said grooved members, said bearer elements being normally flush with the face of the type to permit the roller to travel over them without smudging the type during the inking operation, and adapted to be depressed below the face of the latter by the feed grippers during the printing operation.

3. In a printing press, the combination with a chase, of type arranged therein, a roller movable over said type to ink the same, feed grippers in said press, grooved members adjustably mounted in said chase, having holes in their bottom portions, bearer elements adapted to be received by said grooved members, pins on said bearer elements movable into the holes in the grooved members, and springs surrounding said pins, said bearer elements being normally flush with the face of the type to permit the roller to travel over them without smudging the type during the inking operation, and adapted to be depressed below the face of the latter, against the compression of said springs, by the grippers during the printing operation.

In testimony whereof I have hereunto set my hand this 5th day of February, 1923.

DANIEL J. DEEGAN.

Witness:

HOWARD S. SMITH.