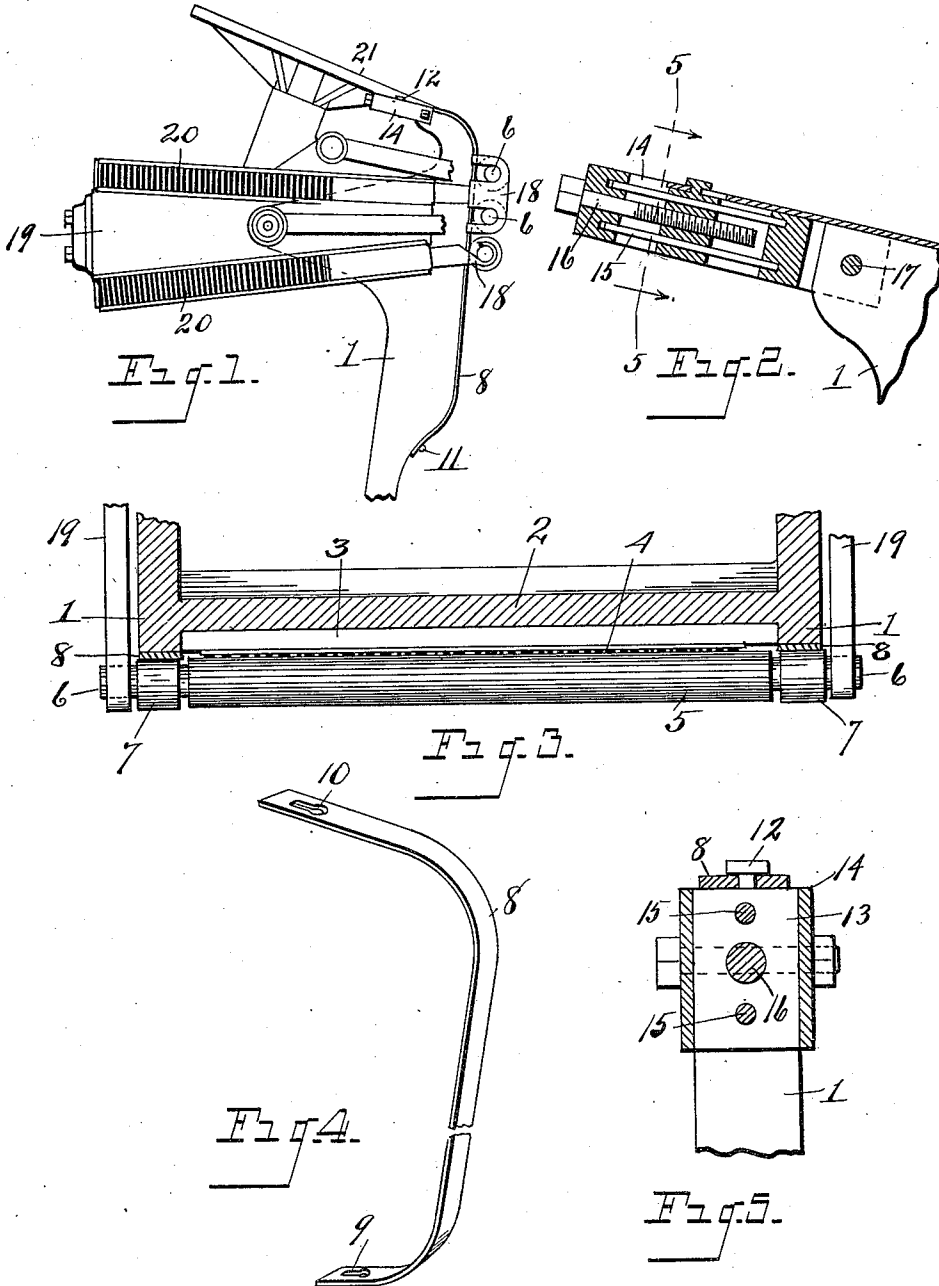


V. J. OLSZEWSKI.
PRINTING PRESS.
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Patented Dec. 3, 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

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PRINTING-PRESS.

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To all whom it may concern:

Be it known that I, VALENTINE J. OLSZEWSKI, a citizen of the United States, residing at Detroit, in the county of Wayne, State of Michigan, have invented certain new and useful Improvements in Printing-Presses; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to printing presses, and especially to means for adjusting the ink rollers thereof, and consists in the construction and arrangement of parts hereinafter more fully set forth and pointed out in the claims.

The object of the invention is to provide simple and efficient means for adjusting the ink rollers of a printing press with respect to the type so as to prevent injury to the rollers through striking the type or bearing with too much force thereon when passing thereover in the operation of inking.

The above object is attained by the arrangement illustrated in the accompanying drawings, in which:—

Figure 1 is a fragmentary view in side elevation of the bed of a printing press, the pivoted roller frame mounted thereon, and the ink distributing disk, showing the application of my invention to the sides of the bed. Fig. 2 is a fragmentary view in section showing one of the tension devices at the upper end of the bed frame for placing tension upon the detachably mounted strips of tape which rest upon the outer edges of the sides of the bed and over which the trucks of the rollers pass. Fig. 3 is a fragmentary view in transverse section through the bed of a printing press, showing one of the inking rollers in elevation and illustrating the application of my invention for the purpose of adjusting the roller with respect to the type in the chase. Fig. 4 is a perspective view of one of said metal strips. Fig. 5 is a transverse section through the tension device, as on line 5—5 of Fig. 2.

Referring to the characters of reference, 1 designates the sides of the bed frame of a printing press, the bed being supported between said sides as shown at 2 in Fig. 3.

It is the common practice in the art of printing to mount the chase 3 in the bed so that the type 4 therein will stand flush with the raised sides 1 of the bed frame to enable the inking rollers 5 to roll over the face of the type and apply ink thereto after each operation of printing. It is also common in the art to provide the roller stock 6 at each end thereof with a truck 7, said trucks rolling upon the edges of the sides of the bed frame and serving to prevent the inking roller from bearing with too much force upon the type in its passage thereover. In time, however, the trucks 7 become worn as well as the roller stock upon which they revolve, thereby allowing the roller to bear with so much pressure upon the type as to cause the type to wear into the roller and tear fragments therefrom, which shortens the life of the inking roller and causes the particles which are worn therefrom to fill up the type and blur the printing. To overcome these objections I have provided means for adjusting the inking rollers with respect to the type, said means consisting of flexible metal strands 8 which vary in thickness, and which are detachably mounted on the edges of the sides of the bed frame, as shown in Figs. 1, 2, and 3. These strands serve as a track upon which the trucks 7 of the inking roller roll, the thickness of said strands being such as to insure the desired contact between the periphery of the inking roller and the type, thereby preventing the destruction of the inking roller by regulating the contact thereof with the type in the chase, and insuring a clean job of printing by preventing the filling up of the type with particles worn from the roller.

The adjusting strands 8 are provided at their lower ends with a key-hole shaped opening 9, and at their upper ends with a similar opening 10. Each of said strands is secured in place by engaging the opening 9 at its lower end over a headed pin 11 on the edge of the bed frame, and by engaging the opening 10 at its upper end over a headed pin 12 on a sliding block 13 mounted to slide in a case 14 on parallel guide rods 15 secured at their ends in the ends of said case. Threaded in the sliding block 13 in each case is an adjusting screw 16 which passes loosely through the outer end of said case. The cases 14 with the sliding blocks 13 therein are bolted to the upper ends of

the sides of the bed frame by means of transverse bolts 17. By turning the adjusting screw 16 the block 13 may be drawn longitudinally of the case 14 to place the desired tension upon the metal strip or strand 8 which is engaged by the pin 12 on said block.

By varying the thickness of the strips or strands 8 the inking rollers may be adjusted toward or from the type accordingly as conditions may require so that under all circumstances the proper contact between the type and roller may be had. The presence of the steel strips or strands upon the edges of the bed frame will prevent said frame from being worn by the trucks of the printing rollers, whereby the rollers may be always held in parallel relation with the face of the type. The inking rollers are journaled in the saddles carried by the pivoted roller frames 19 and connected in the usual way with the saddle springs 20. The inking rollers in their travel pass onto the ink distributing disk 21 in a manner well understood in the art.

To detach the strips or strands 8, when it is desired to remove them for the purpose of substituting therefor other strips or strands differing in thickness therefrom to effect the desired adjustment of the printing rollers with respect to the type, the screws 16 are turned so as to slide the blocks

13 inwardly upon their guides 15, whereby said strips or strands may be rendered sufficiently slack to enable their ends to be disengaged from the fastening pins.

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

1. In a printing press, a bed frame, type secured between the sides of the bed frame, printing rollers adapted to roll over the face of the type, flexible strips upon the edges of the sides of the frame, trucks on the stocks of the printing rollers engaging said strips, and means for detachably retaining said strips in position and for placing tension thereon.

2. In a printing press, a bed frame, a printing roller movable over the bed frame, detachable flexible strips mounted upon the edges of the bed frame, trucks on the stock of the printing roller rolling upon said strips, means for fastening said strips at their lower ends, slidable blocks engaging the upper ends of said strips, and means for moving said blocks to place upon said strips the desired tension.

In testimony whereof, I sign this specification in the presence of two witnesses.

VALENTINE J. OLSZEWSKI.

Witnesses:

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