L. G. STRONG.

BEARER FOR PRINTING PRESSES.

APPLICATION FILED MAY 3, 1919.

1,326,111. Patented Dec. 23, 1919.

Fig. 1.

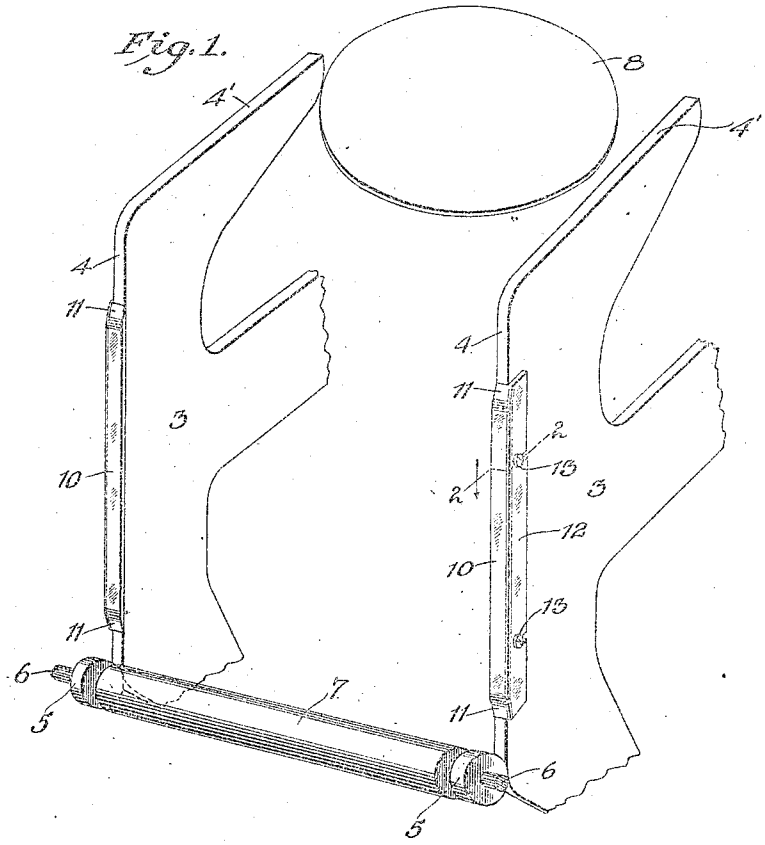
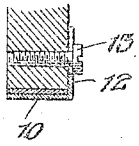


Fig. 2.



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BEARER FOR PRINTING-PRESSES.

1,326,111. Specification of Letters Patent. Patented Dec. 23, 1919.

Application filed May 3, 1919. Serial No. 294,600.

To all whom it may concern:

Be it known that I, LORENZO G. STRONG, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Bearers for Printing-Presses; and I do hereby 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.

This invention relates to printing presses and particularly to presses of the Gordon and the Chandler and Price types and the invention particularly resides in improvements in the track construction over which the truck-wheels or rollers operate to transfer ink from a source of supply to the form which is mounted on the bed of the press and toward which in presses of these types a platen moves to carry paper or other material being printed upon toward the form.

It is one of the objects of the present invention to provide extremely simple, practicable, inexpensive, efficient and durable attachments comprising track means for printing presses. A further object of the present invention is to enable the ready variation of the degree of pressure of rollers which obtain ink from the source of supply, upon the form in the press and a further feature is to provide such a means which may be connected to the press with expedition and with a minimum requirement of change or alteration of the press construction and may be attached with a minimum expense consistent with the substantial nature of the attachment and to allow for instantaneous removal of the attachment by a simple release of fastening means without detaching the fastening means themselves. A further object is to provide track members which are capable of ready and independent adjustment so as to vary the plane of the path of travel of the truck rollers or wheels to and fro and therefore enable the accurate and refined adjustment of the tracks so as to secure absolutely uniform pressure at both ends of the inking rollers and also to enable the independent variation of the plane or path of travel of the opposite ends of the rollers.

With the above and other objects in view as will become manifest to those skilled in this art, the invention consists in the construction, the combination, and in details and elements or parts as more particularly described in the following specification relative to the embodiment of the invention illustrated in the accompanying drawings herein.

Figure 1 is a perspective view of a sufficient portion of a well-known form of press to illustrate the invention which is shown applied thereto.

Fig. 2 is a cross-section of plane 2—2 of Fig. 1.

The type of press illustrated in the accompanying drawings has a frame structure including side members 3—3 with tracks 4—4 on their edges these edges lying in common planes at different portions and over these tracks are designed to run trucks not illustrated, which include truck-wheels or rollers 5—5 of a width approximating the face of the tracks 4—4 and these rollers are mounted on a shaft 6 on which is mounted an ink roller 7 designed to be carried during the oscillation of the truck, up and down the front faces of the tracks 4 and rearwardly and forwardly over the top portions 4′ thereof at which portion of the tracks the inking rollers, of which 7 is one, are designed to run over an inking plate shown at 8 to receive therefrom a quantity of the ink which during the operation of the inking roller is utilized between the rollers and subsequently applied to the type faces in a form mounted between the side frames 3—3 and not shown.

The invention in this case consists of members designed to be readily attached to the tracks so as to vary the plane of the path of movement of the truck rollers as 5—5 during the portion of their cycle in which they run over or adjacent to the form to be inked so that the degree of pressure of contact of the rollers upon the type form and which contact is technically known as "kissing" can be precisely and very accurately predetermined so as to regulate the quantity of ink applied to the form and also further, in a measure protect the rollers by overcoming excessive pressure which, as is commonly known, soon mutilates and renders the rollers useless, especially when these are slightly oversize or generally when new.

Various means have been proposed to vary this contact or "kissing" of the rollers upon the form and so far as I am informed the means proposed have been inherently expen-

sive, complicated and because of movability during the action of the press, or because of insufficient base for mounting, looseness results and the effectiveness of the mechanism is impaired. Again forms of the mechanism proposed to secure the desired object require more or less expensive alteration and expert skill during attachment to the press.

Therefore I have devised and constructed an adjustable trackway consisting of track members 10 of flat strip-like form of suitable length and which are adapted to be secured flat-wise upon the faces of the tracks 4, these members have a suitable thickness to stand the imposed strain and have a reasonable durability under wear. The upper and lower ends of the strip portions of the members 10 are shown as beveled down toward, at 11, the track face 4, so as to present an incline of gradual angle on which the rollers 6 will track easily. While the track members 10 may be secured by suitable means, an efficient and practical form of device is shown herein by making the members of angle iron plainly shown in Fig. 2, the side flanges 12 of which are designed to extend along the side faces of the press frame portions 3—3 and at suitable locations in the side flanges 4 are provided openings, here shown as extending to the edges of the flanges 12 so that the track members may be pushed rearwardly against the track faces 4, and the flanges 12 pass beneath the heads of suitable screws 13, tapped into the frame portions 3—3. From this it will be seen that the only alteration of the press structure required is the tapping and drilling of the holes to receive the fastening screws 13 and obviously any person of ordinary ability can tap and drill these holes and apply the screws 13, after which the bearers or track members 10 can readily be set to the press tracks by passing their slotted portions in the flanges 12 around the screws 13 and then tightening up the screws. Further it will be seen that the relative position of the track members 10 as to the track faces 4 can be quickly varied by loosening the screws 13, to a sufficient degree to allow the outward or inward movement of the bearers to the required position and then the screws 13 can be set again. In the event that the bearers tracking portions as 10 are adjusted outwardly from the face of the tracks 4 then any suitable shims can be inserted between the bearer portions 10 and the track faces 4 to secure the desired support. From the above it will be seen that to entirely remove the bearers or track members 10, it is only necessary to slightly loosen up the screws 13 and immediately slip off the bearers.

Thus, by the present apparatus, I am enabled to provide for the refined adjustment of the degree of pressure between the contacting inking rollers and the form in the press and further it is possible to adjust each of the members 10 independently of the other so as to provide a uniform contact from one side of the form to the other and I am enabled particularly to obtain proper adjustment of the pressure of the truck rollers or wheels to secure proper contact especially when new rollers are introduced on the press.

What I claim is:—

1. A bearer for inking roller truck-wheels of printing presses, consisting of a piece of angle iron one flange of which is adapted to be laid upon the face of the usual track of the press, and which flange has its upper face beveled down to present gradual inclines for the wheels to track on, and means for securing the bearer in place, the side flange being provided with openings, in the form of transverse slots extending in from the edge of the flange so that the bearer can be adjusted and detached by loosening the screws without removing the latter.

2. A bearer for inking roller truck wheels of printing presses consisting of a plate adapted to be laid upon the face of the usual track of the press and having its upper face beveled down to present gradual inclines for the wheels to track on, and provided with means for affixing said plate to the usual track of said press in adjustable relation to regulate the kiss of the rollers on the face of the form.

In testimony whereof I affix my signature.

LORENZO G. STRONG.