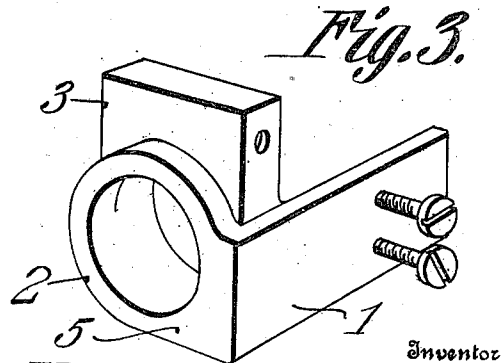
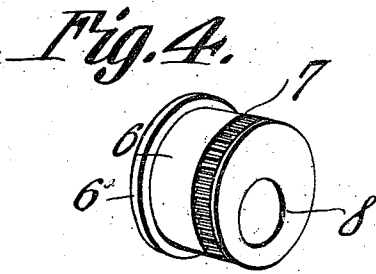
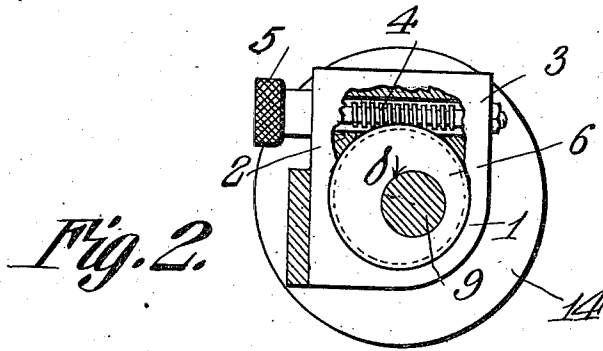
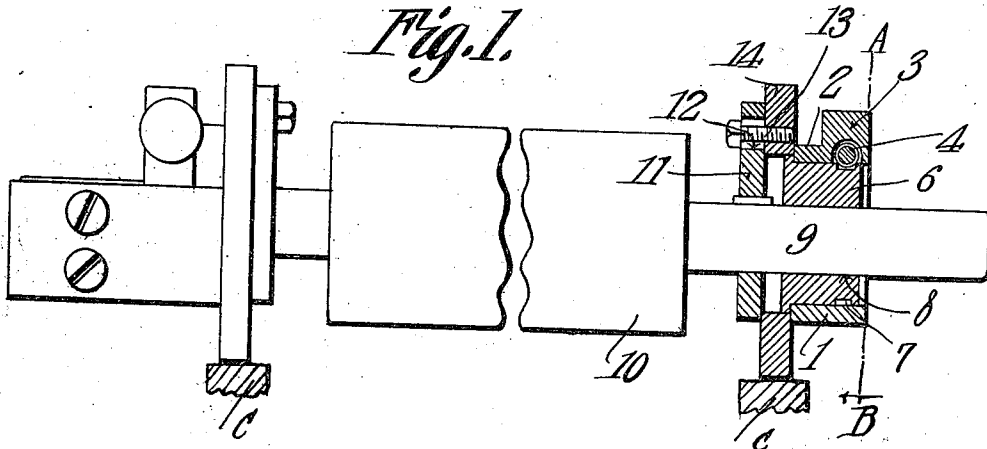


H. O. ATWOOD.
 ROLLER BEARING FOR PRINTING PRESSES.
 APPLICATION FILED MAY 26, 1909.

973,098.

Patented Oct. 18, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

HARRY O. ATWOOD, OF WEST PHILADELPHIA, PENNSYLVANIA.

ROLLER-BEARING FOR PRINTING-PRESSES.

973,098.

Specification of Letters Patent.

Patented Oct. 18, 1910.

Application filed May 26, 1909. Serial No. 498,436.

To all whom it may concern:

Be it known that I, HARRY O. ATWOOD, a citizen of the United States, residing at West Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Roller-Bearing for Printing-Presses, of which the following is a specification.

This invention relates to printing presses and more particularly to adjustable bearings for the gudgeons of the inking roller.

Heretofore considerable difficulty has been experienced in maintaining the inking roller in such a position as to bear with the proper degree of pressure upon the type, this being due to the fact that the rollers often shrink subsequent to their initial adjustment.

The object of the present invention is to provide means whereby a minute adjustment of the gudgeon can be obtained, said means being simple in construction and easy to operate.

With these and other objects in view the invention consists in certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings, the preferred form of the invention has been shown.

In said drawings, Figure 1 is a view partly in elevation and partly in section and showing the roller mounted within the said bearings. Fig. 2 is a section on the line A-B of Fig. 1. Fig. 3 is a perspective view of a supporting bracket constituting the body portion of the bearing. Fig. 4 is a perspective view of the cylindrical bearing block.

Referring to the figures by characters of reference 1 designates a bracket having a ring-like extension 2 projecting perpendicularly from one end thereof, there being a box or standard 3 projecting upwardly from the ring-like extension and constituting a bearing for a worm 4 having a head 5 at one end by means of which it may be conveniently rotated. A cylindrical bearing block 6 is mounted to rotate within the extension 2 and provided adjacent one end with a worm gear 7 preferably integral therewith and which is constantly in mesh with the worm 4. A flange 6' is preferably formed upon that end of the block 6 which is farthest removed from the gear 7. The block 6 extends be-

yond both faces of the extension 2 and has a bore 8 arranged longitudinally therein but eccentric, this bore being designed to receive the gudgeon 9 of a roll 10.

A plate 11 is keyed or otherwise secured to the gudgeon 9 and has a radial slot 12 therein within which a screw 13 or the like is slidably mounted, this screw being in engagement with a roller 14 journaled on the projecting end of the block 6. This roller 14 is designed to travel along the track C and motion will be transmitted from the roller through the screw 13 to the plate 11 and from this plate to the gudgeon of the roll 10. The block 6 is of course held against rotation under ordinary conditions by the worm 4.

Should the roll 10 shrink to an objectionable extent it would become desirable to shift it toward the type. With the present structure this can be effected simply by turning the worm 4, so as to cause the block 6 to partly rotate. Inasmuch as the gudgeon 9 is eccentrically mounted in this block it will be apparent that this rotation of the block in one direction will move the gudgeon 9 and the roll 10 downwardly a desired distance. The plates 11 will also be shifted to a slight extent with relation to the roller 14. The center of the roller 14 however remains fixed irrespective of any adjustment of the block 6. After this adjustment of the parts has been effected the machine may be set in motion and the roller 14 will travel along the track and motion will be transmitted therefrom, as before, through the screw 13 and the plate 11. In view of the fact that the gudgeon is eccentrically mounted, the plate 11 will constantly shift with relation to the roller 14 during the rotation of said roller, this being permitted in view of the fact that said plate is movably mounted on the screw 13.

By means of the mechanism described a very minute adjustment of the roll 10 may be effected without the necessity of detaching any of the parts. The roll is always operatively connected to the roller 14. The mechanism is very simple and durable in construction and can be readily manipulated. The adjustable bearing is of course to be duplicated at the other side of the press.

Various changes can of course be made in the construction and arrangement of the

parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claims.

What is claimed is:—

- 5 1. The combination with a supporting structure, of a bearing block mounted for rotary adjustment therein, said block having an eccentric bore therein, a revoluble element bearing upon said block, a gudgeon mounted
10 for rotation within the eccentric bore, and means for transmitting motion from the revoluble element to the gudgeon irrespective of the adjustment of the block within the structure.
- 15 2. The combination with a support engaging structure having a ring-like portion, of a bearing block mounted for rotary adjustment within said ring-like portion and hav-

ing an eccentric bore, means for rotating said block, a gudgeon journaled within the bore, a revoluble element mounted upon the block, a plate secured to and revoluble with the gudgeon, and a connecting device extending from the revoluble element and movably engaged by the plate, said revoluble
20 device and the plate and gudgeon being revoluble together irrespective of the adjustment of the bearing block.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature
25 in the presence of two witnesses. 30

HARRY O. ATWOOD.

Witnesses:

GEO. W. COLSHER,
ELI T. SPEAKMAN.