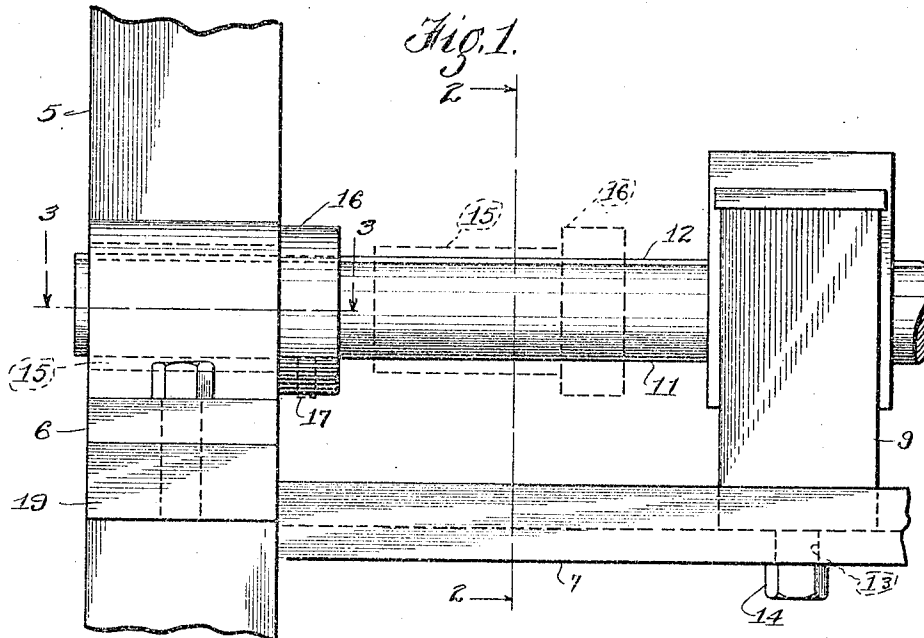
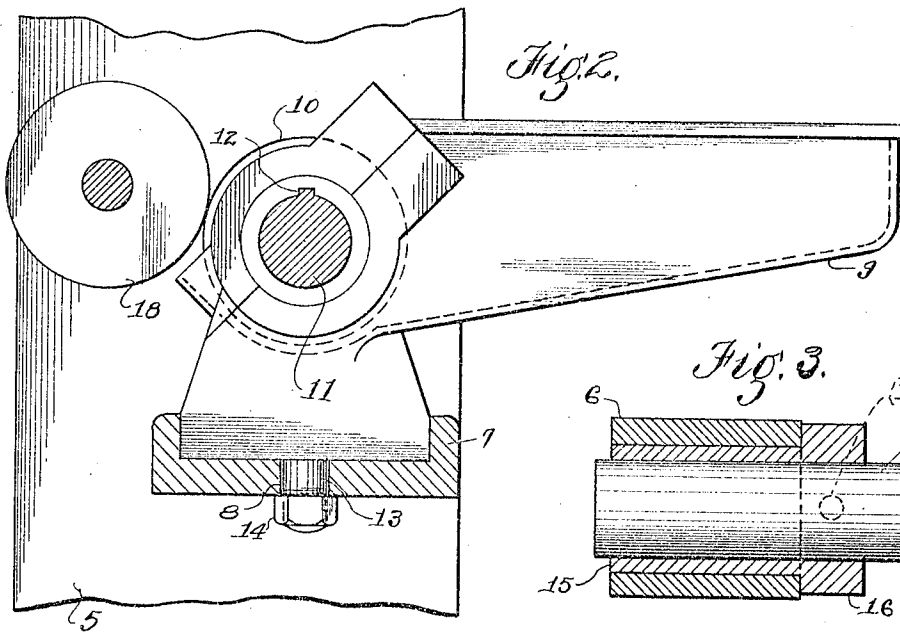
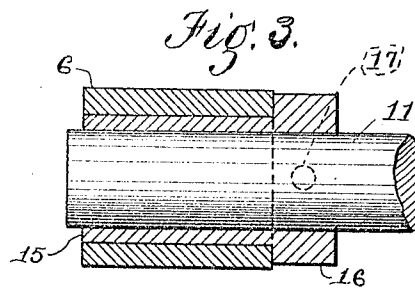


H. LANGE.
 INK FOUNTAIN CONSTRUCTION.
 APPLICATION FILED JAN. 8, 1917.

1,291,559.

Patented Jan. 14, 1919.



Inventor:
 Henry Lange.
 by *Emmanuel A. Stouse* Atty.

UNITED STATES PATENT OFFICE.

HENRY LANGE, OF LOS ANGELES, CALIFORNIA, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO OSCAR L. MOORE, OF CHICAGO, ILLINOIS.

INK-FOUNTAIN CONSTRUCTION.

1,291,559.

Specification of Letters Patent.

Patented Jan. 14, 1919.

Application filed January 8, 1917. Serial No. 141,164.

To all whom it may concern:

Be it known that I, HENRY LANGE, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Ink-Fountain Constructions, of which the following is a specification.

This invention relates to ink fountain constructions suitable for use with rotating presses and pertains especially to a construction whereby the fountain can be removed from the press or installed thereon quickly and conveniently while the press is in operation.

It is an object of this invention to provide a supporting base, an ink receptacle and a shaft for rotating the impeller of the fountain, whereby the fountain may be quickly and conveniently disengaged from its base and a new one substituted. Certain details of structure are provided whereby the operating shaft may be removed from the receptacle quickly and conveniently. Heretofore when it was desired to change inks, the ink fountains were either cleaned, washed and filled with ink, or the fountain, shaft and its bearing disassembled to remove the fountain. Because of the common ink fountain constructions this has been wasteful of time and requires considerable labor. With my construction both labor and time are saved.

I have illustrated an embodiment of my invention in the accompanying drawing, in which:

Figure 1 is a front elevation of a portion of a printing press frame with an ink fountain mounted thereon.

Fig. 2 is a section as seen on the line 2—2 of Fig. 1.

Fig. 3 is a section as seen on the line 3—3 of Fig. 1.

Referring more particularly to the drawing, 5 indicates the printing press frame upon which is mounted a stationary bearing block 6, and a stationary base for supporting the ink fountains indicated by 7. The bearing block may be of any suitable construction. The supporting base 7 is in the form of a channel with the legs turned upwardly and is provided with a slot 8 extending longitudinally thereof. The fountain is of a common construction and it is merely necessary that it have an impeller

for ink which is disposed within the ink receptacle 9 with a shaft axially removable from the impeller. I have herein shown an ink receptacle in which is disposed a cylinder 10, forming the impeller. A shaft 11 extends therethrough and is provided with a key 12. The ink cylinder 10 is provided with a bore and a key way, so that it is splined to the shaft 11 by these interengaging devices.

Secured to the bottom of the ink receptacle is a bolt 13 which is disposed to extend through the slot 8 and is provided with a nut 14, whereby the ink receptacle may be disposed in proper position on the base 7 and fixed in position at will by tightening the nut 14. The ink receptacle shown herein is of a kind which is suitable for inking numbering heads used with presses. Shaft 11 extends through bearing block 6 and mounted upon the shaft is a bushing 15. Bushing 15 is provided with a thrust collar 16, preferably integral therewith and is secured to the shaft at will by means of a set screw 17. Bushing 15 is journaled in the bearing.

To remove the ink fountain, set screw 17 is loosened permitting the withdrawal of the shaft 11. When it has been withdrawn from the ink fountain, nut 14 is removed from the bolt 13, permitting the ink fountain to be removed and replaced by another. The position of the bushing 15 when removed from the bearing block 6 is shown in dotted lines in Fig. 1. If it is merely desired to change the position of the ink fountain along the supporting base, nut 14 is unloosened and the ink fountain may be moved along the supporting base to its new position. Bushing 15 permits the use of a key 12 co-extensive with the shaft. It is obvious that these changes may be made without stopping the operation of the press.

The ink cylinder 10, as is usual with fountains of this character, engages a distributing cylinder 18. The bearing block 6 may be mounted on a shelf 19 which extends from the frame, but any other suitable construction may be used.

What I claim is:

1. In an apparatus of the character described, in combination, a stationary bearing, a bushing rotatable therein, an impeller shaft supported in said bushing and movable longitudinally through said bear-

- ing, said bushing and shaft having inter-engaging means whereby said bushing is rotated with said shaft and is longitudinally movable relative thereto, means adapted, at will, to fix said bushing and shaft against longitudinal movement relative to each other, an ink impeller mounted on said shaft having means adapted to engage said engaging element of said shaft to effect rotation of said impeller by said shaft and permit longitudinal movement relative to said shaft, an ink receptacle coöperatively associated with said impeller, a stationary base on which said receptacle is removably supported and is adapted to be adjusted, and means adapted, at will, to fix said receptacle and said ink impeller at different positions on said support longitudinally of said shaft.
2. In an apparatus of the character described, in combination, a stationary bearing, a bushing rotatable therein, an impeller shaft supported in said bushing and movable longitudinally through said bearing, said bushing and shaft having inter-engaging means whereby said bushing is ro-
- tated with said shaft and is longitudinally movable relative thereto, means adapted, at will, to fix said bushing and shaft against longitudinal movement relative to each other, an ink impeller mounted on said shaft having means adapted to engage said engaging element of said shaft to effect rotation of said impeller by said shaft and permit longitudinal movement relative to said shaft, an ink receptacle coöperatively associated with said impeller, a supporting base comprising a channel in which the base of said receptacle removably rests and along which it is adapted to be adjusted, and means adapted, at will, to fix said receptacle and impeller at different positions in said channel longitudinally of said shaft, said bushing having a shoulder adapted to coöperate with said bearing to take the thrust on said shaft when said bushing is fixed to said shaft.
- In witness that I claim the foregoing I have hereunto subscribed my name this 22d day of December, 1916.

HENRY LANGE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."