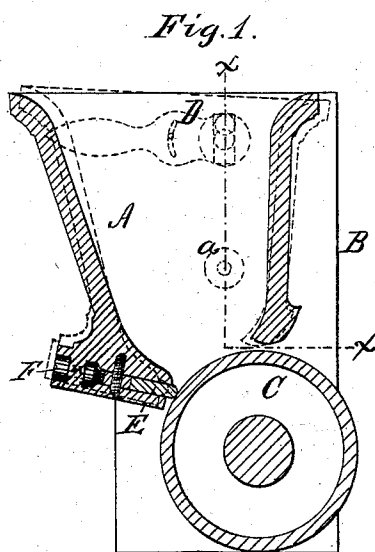
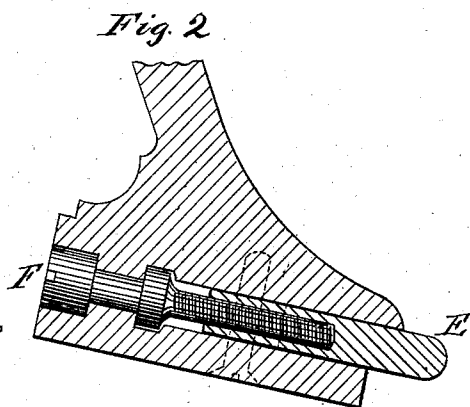
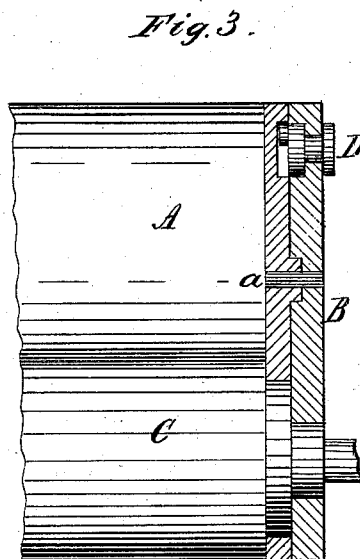


A. CAMPBELL.
INK-FOUNTAINS FOR PRINTING-PRESSES.

No. 194,218.

Patented Aug. 14, 1877.



Witnesses:

John Tyler.....
Jno. J. Bonner.....

Inventor.

Andrew Campbell

By Attorney.

Wm. C. W. Carter

UNITED STATES PATENT OFFICE.

ANDREW CAMPBELL, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN INK-FOUNTAINS FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. **194,218**, dated August 14, 1877; application filed October 24, 1876.

To all whom it may concern:

Be it known that I, ANDREW CAMPBELL, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Ink-Fountains for Printing-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My invention relates to novel improvements in ink-fountains for printing-presses.

It has for its objects controlling the flow of ink, and preventing the accumulation of lint and dirt in the ink from lodging in the opening between the roller and the knife or doctor.

With these ends and objects in view, my invention consists, first, in making the movement of the fountain or bowl the means whereby the flow of ink is increased or diminished; and, secondly, in making the scraper or doctor with a rounded working-edge, as will be hereinafter more fully set forth.

To enable those skilled to more fully understand the construction and operation of my improved fountain, I will proceed to describe the same, referring by letters to the accompanying drawings, in which—

Figure 1 is a vertical cross-section of an ink-fountain embodying the features of my invention. Fig. 2 is a similar section, on an enlarged scale, of the knife and its bearings, showing the manner of adjusting the same; and Fig. 3 is a section at the line *x x*, Fig. 1, showing the means by which the fountain or bowl is made to control the flow of ink.

Similar letters indicate like parts in the several views.

A represents the fountain or bowl, pivoted at *a* to a suitable frame, B, and directly over the ink-roller C, and adapted to rock upon the pivot or bearing at *a* by means of a suitable eccentric or lever, as shown at D; or it may be made to move bodily in a vertical line by suitable guides and levers, which any mechanic could readily substitute for the eccentric lever and pivoted bearing shown.

The escape of ink at the back of the fountain is prevented or avoided in the usual way.

E is a knife or doctor, arranged in the foot

of the front of the fountain or bowl, and adapted to be adjusted so as to bring it in proper and variable relations with the periphery of the ink-roll by means of set-screws F.

The knife or doctor E is rounded at its forward or working edge, in order that if in contact with the inking-roll such contact would be only tangential, or such as exists between two circles, the object of such construction being to prevent the accumulation of dirt or lint from the paper which works itself into the ink-fountain, and which, in fountains provided with the ordinary knife, lodges above the edge of the knife, and between it and the roll, retarding the flow of ink, and necessitating the use of a moving comb, or the throwing away of large quantities of dirty ink.

The form of knife shown at E permits the dirt and lint to pass freely through, and it accumulates upon the composition roll, from which it can be readily removed; and being removable, its forward rounded edge may be reground at any time it may become worn concentric with the perimeter of the ink-roll C.

I have shown in dotted lines at Fig. 1 the ink fountain or bowl as swung upon its center *a*, to change its relation to the ink-roll C. The same effect may be produced by use of the cam or eccentric shown at D.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the ink-roll C, the ink-bowl A, hung above the roller, as described, whereby a vibratory movement of the bowl may obtain for the purpose of controlling the flow of ink, substantially as herein described.

2. In combination with an ink-fountain, an independent adjustable and removable scraper or doctor, having its forward edge rounded, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand and seal this 10th day of October, 1876.

ANDREW CAMPBELL. [L. S.]

Witnesses:

A. C. CAMPBELL,
THOS. TRUSLOW.