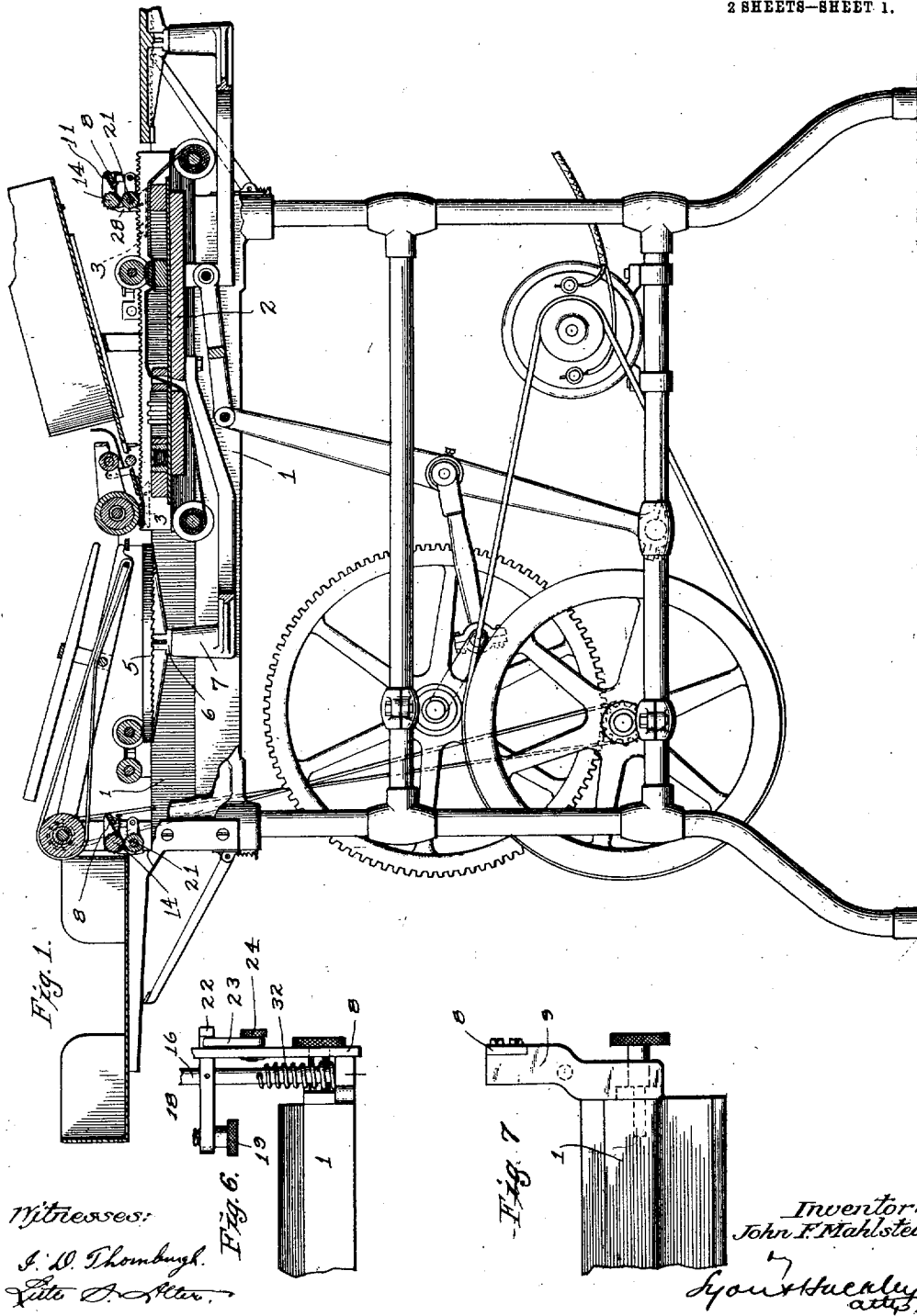


J. F. MAHLSTEDT.
 INK FOUNTAIN.
 APPLICATION FILED JUNE 13, 1911.

1,018,434.

Patented Feb. 27, 1912.

2 SHEETS—SHEET 1.



Witnesses:

J. D. Thombugh.
 J. A. Allen.

Fig. 6.

Fig. 7.

Inventor:
 John F. Mahlstett.

By *John H. Hickey*
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Fig. 2.

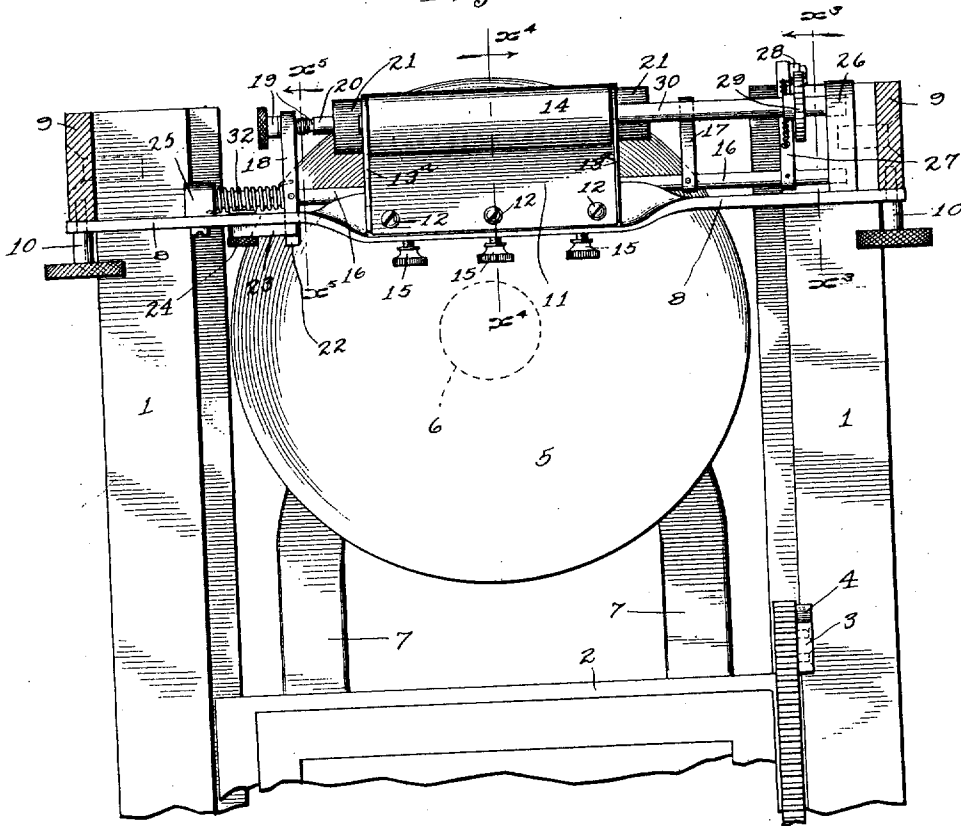


Fig. 3.

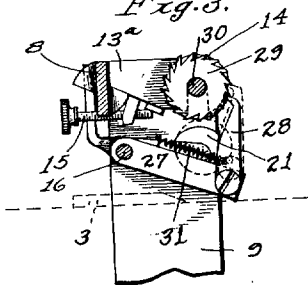


Fig. 4.

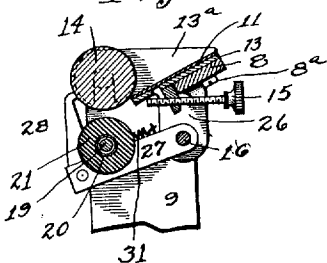
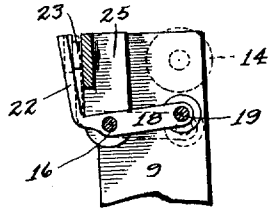


Fig. 5.



Witnesses:

S. W. Thornburgh
 L. D. Allen

Inventor:
 John F. Mahlstett

By *Spaulding & Co.*
 attys

UNITED STATES PATENT OFFICE.

JOHN F. MAHLSTEDT, OF LOS ANGELES, CALIFORNIA.

INK-FOUNTAIN.

1,018,434.

Specification of Letters Patent.

Patented Feb. 27, 1912.

Application filed June 13, 1911. Serial No. 632,968.

To all whom it may concern:

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

This invention relates to ink fountains for use on printing presses, being especially adapted for use on a machine such as shown in a companion application of mine, filed July 15, 1910, Serial No. 572141.

The objects of the invention are to provide various improvements in construction, which will be fully brought out in the following specification:

Referring to the drawings: Figure 1 is a side elevation partly in section of a printing machine equipped with the fountain. Fig. 2 is a plan view of the ink fountain and adjacent portion of the printing machine. Fig. 3 is a section on line x^3-x^3 Fig. 2. Fig. 4 is a section on line x^4-x^4 Fig. 2. Fig. 5 is a section on line x^5-x^5 Fig. 2. Fig. 6 is a plan of a portion of the fountain as applied to rear end of the frame. Fig. 7 is an end elevation of that portion of the fountain as shown in Fig. 6.

1 designates the frame of the machine and 2 designates the reciprocating bed, having a block 3 with an inclined face 4 secured to the side thereof.

5 designates the ink disk, pivoted at 6 to a bracket 7, carried bodily by the bed 2 and rotated by means not necessary to show herein.

8 designates a cross bar which is secured to block 9 by thumb screws 10, which enable the bar 8 to be readily attached or detached and the bar 8 carries the ink fountain.

The ink reservoir of which there are two, one at each end of the machine consists of a flexible plate 11 secured by screws 12 to the reservoir 13 and arranged at an inclination and provided with side walls 13^a and secured to the bar 8 by screws 8^a as seen in Fig. 4. Journaled in the side walls 13^a is a fountain roll 14 which barely escapes the lower edge of the plate 11. Adjusting screws 15 serve to regulate the position of the edge of the plate 11 with respect to the roll 14, the plate 11 being somewhat flexible. A shaft 16 extends under the ink reservoir and rigidly secured thereto are arms 17 and 18. In the

arm 18 is a thumb screw 19, which supports one end of a tube 20 which in turn supports a ductor roll 21, the front end of the thumb screw 19 being journaled in arm 18. The arm 18 has an extension 22, and a stop 23 is pivotally supported on a pin 24, which extends into the cross bar 8, the stop 23, being adapted to be turned into a position between the extension 22 and the cross bar 8, as indicated in Fig. 5 and to thereby hold the arm 18 tilted upwardly with shaft 20 and ductor roll 21 in a raised position above the plane of the ink disk 5.

The shaft 16 is supported at one end in a bearing 25, which is secured to the cross bar 8 and at its other end is supported in a bearing 26. Rigidly secured to the shaft 16 is an arm 27 on the end of which is pivoted a pawl 28, the pawl 28 engaging a ratchet 29 on a shaft 30 which supports the fountain roll 14. A coil spring 31 is connected under pawl 28 and to the arm 27 and holds the pawl against the ratchet 29. The end of the arm 27 is in the path of movement of the block 3 when the arm is in its lower position and as the reciprocating bed 2 moves the block 3 against the arm 27 the arm is lifted and the pawl 28 acts to turn the ratchet 29 and fountain roll 14. The lifting movement of the arm 27 also causing the arms 17 and 18 to swing up and move the ductor roll 21 into contact with the fountain roll 14, so that as ratchet 29 is turned up by the pawl the fountain roll which turns with the ratchet is in contact with the ductor roll, applies ink to the ductor roll. As the bed 2 moves in the other direction the arm 27 descends being moved down by a spring 32 which is secured at one end to the shaft 16, and at its other end to the bracket 25, and the shaft 16 being thus turned swings down the arm 27 thereby moving the ductor roll away from the fountain roll, and during the next rearward movement of the bed 2 the ink disk 5 is moved under the ductor roll 21 and ink is applied to the ink disk from the ductor roll.

The teeth of the ratchet 29 are preferably undercut so that they overhang as clearly shown in Fig. 3. The object of this being to hold the end of the pawl 28, in engagement with the tooth of the ratchet and preventing the pawl from slipping off the tooth.

By adjusting the screws 15 the proper amount of ink is delivered to the fountain roll 14.

What I claim is:

- 5 1. In a printing press, a frame, a reciprocating bed, a block with an inclined face carried by the bed, a cross bar supported by the frame, an ink reservoir secured to the cross bar, a fountain roll adjacent to the
10 ink reservoir, a ratchet for operating the fountain roll, a shaft below the reservoir, arms on said shaft, a ductor roll, journaled in said arms, another arm on said
15 shaft, a pawl on the latter arm engaging said ratchet, said latter arm being in the path of movement of said block.
2. In a printing press, a frame, a bed, a block with an inclined face carried by the bed, a cross bar supported by the frame, an
20 ink reservoir secured to the cross bar, a fountain roll adjacent to the ink reservoir, a ratchet for operating the fountain roll, a shaft below the reservoir, arms on said shaft, a ductor roll journaled in said arms,
25 another arm on said shaft, a pawl on the latter arm engaging said ratchet, said latter arm being in the path of movement of said block, one of the first mentioned arms having an extension, a thumb screw, a stop
30 pivotally mounted on said thumb screw and adapted to be moved into or out of position between said extension and said cross bar.
3. In a printing press, a frame, a bed, a
35 block with an inclined face carried by the

bed, a cross bar, an ink reservoir on the cross bar, a fountain roll adjacent to the ink reservoir, a ratchet for operating the fountain roll, a shaft below the reservoir, arms on said shaft, a ductor roll journaled 40 in said arms, another arm on said shaft, a pawl on the latter arm engaging said ratchet, said latter arm being in the path of movement of said block, a thumb screw on one of the first mentioned arms acting as a pivot 45 for the ductor roll, and thumb screws securing the cross bar to said frame.

4. In a printing press, a frame, a bed, a block with an inclined face carried by the bed, a cross bar, an ink reservoir 50 on the cross bar, a fountain roll adjacent to the ink reservoir, a ratchet for operating the fountain roll, a shaft below the reservoir, arms on said shaft, a ductor roll journaled in said arms, another arm on said 55 shaft, a pawl on the latter arm engaging said ratchet, said latter arm being in the path of movement of said block, a thumb screw on one of the first mentioned arms acting as a pivot for the ductor roll, and 60 thumb screws securing the cross bar to said frame, and means for throwing said ductor roll into and out of operative position.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 65 6th day of June, 1911.

JOHN F. MAHLSTEDT.

In presence of—

G. T. HACKLEY,
GLADYS RUSSELL.