J. C. PADGETT.

INK FOUNTAIN.

APPLICATION FILED MAY 14. 1908.

917,117.

Patented Apr. 6, 1909.

2 SHEETS—SHEET 1.

FIG. 1.

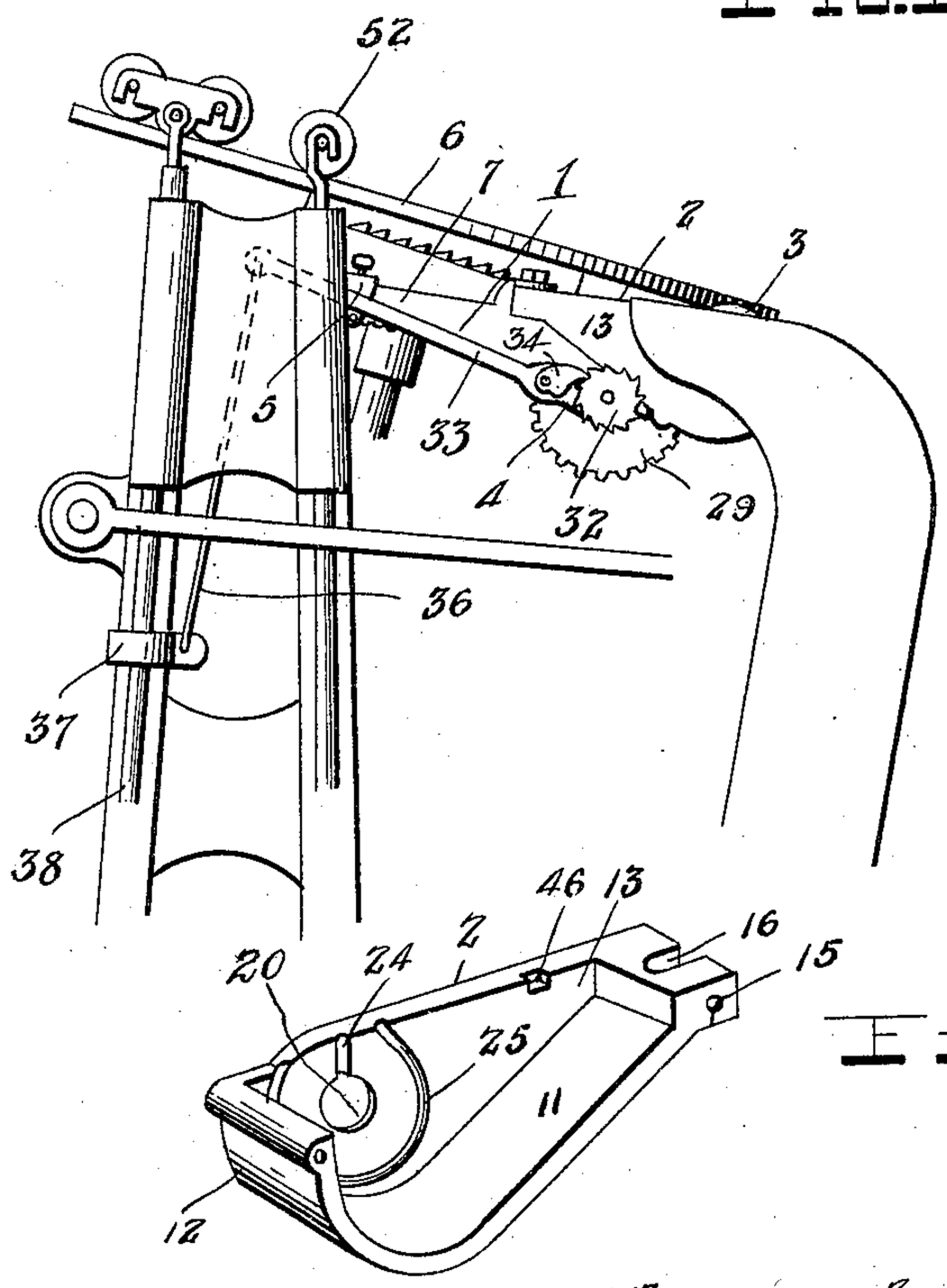


FIG. 6.

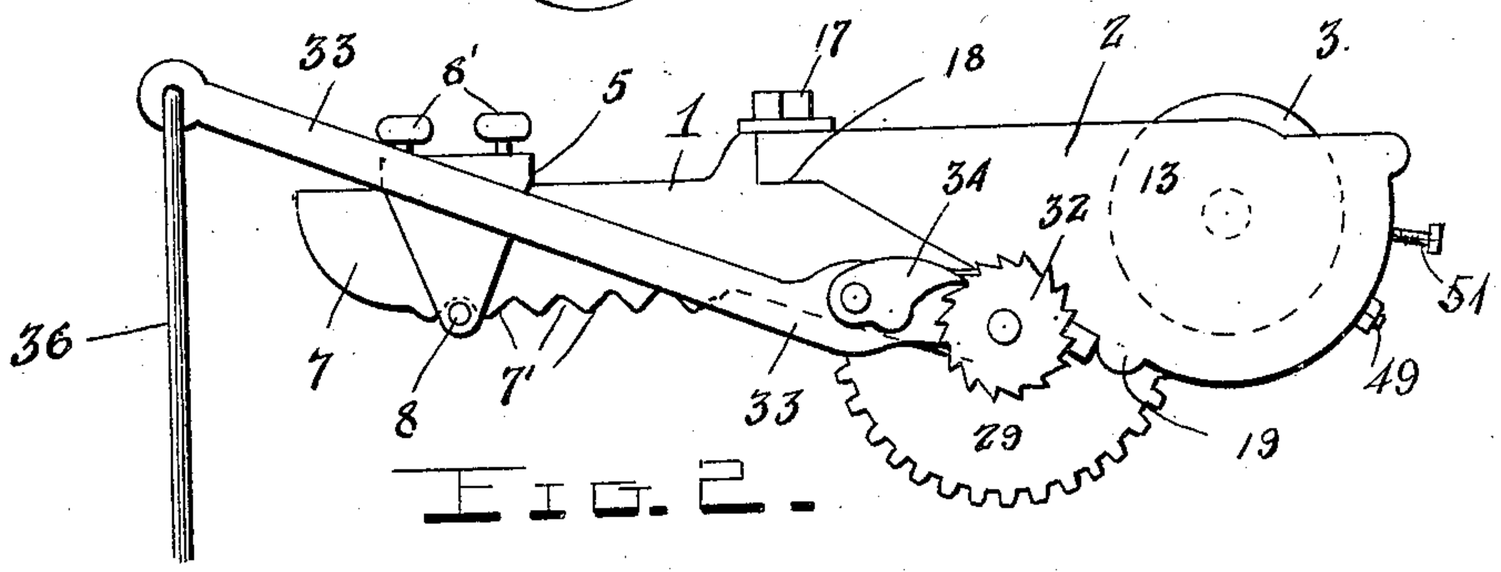


FIG. 2.

Inventor

John C. Padgett.

Witnesses

Chas. L. Griesbauer.

C. W. Griesbauer.

By H. R. Wilkinson & Co.

Attorneys

J. C. PADGETT.

INK FOUNTAIN.

APPLICATION FILED MAY 14, 1908.

917,117.

Patented Apr. 6, 1909.

2 SHEETS—SHEET 2.

FIG. 3.

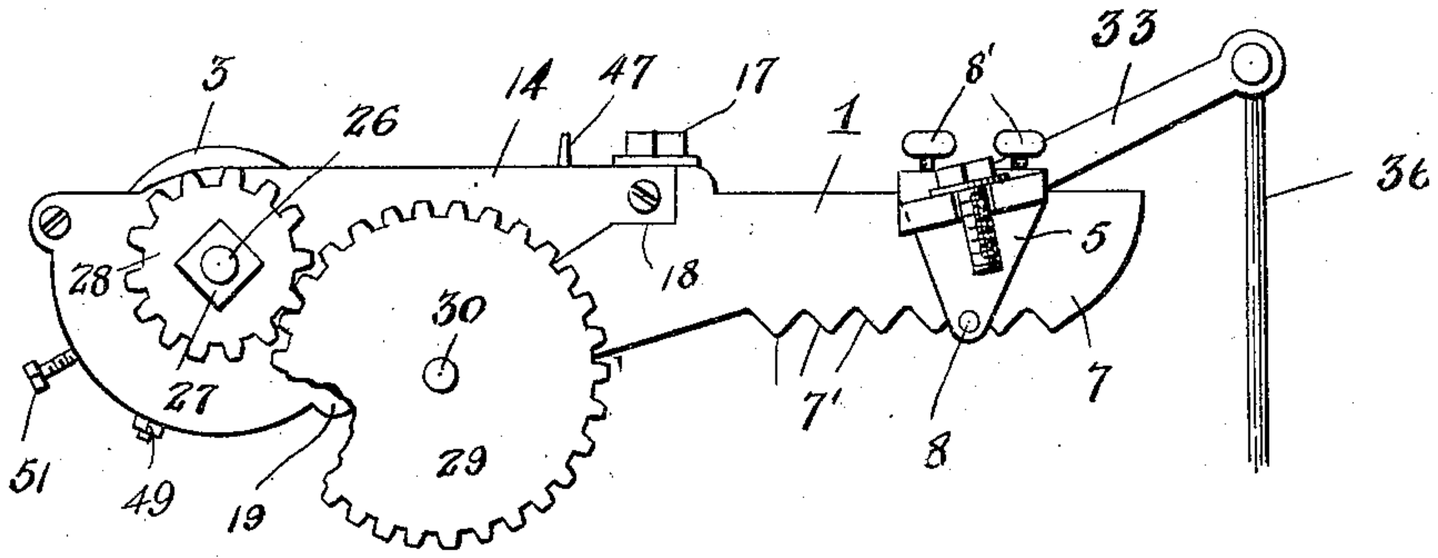


FIG. 4.

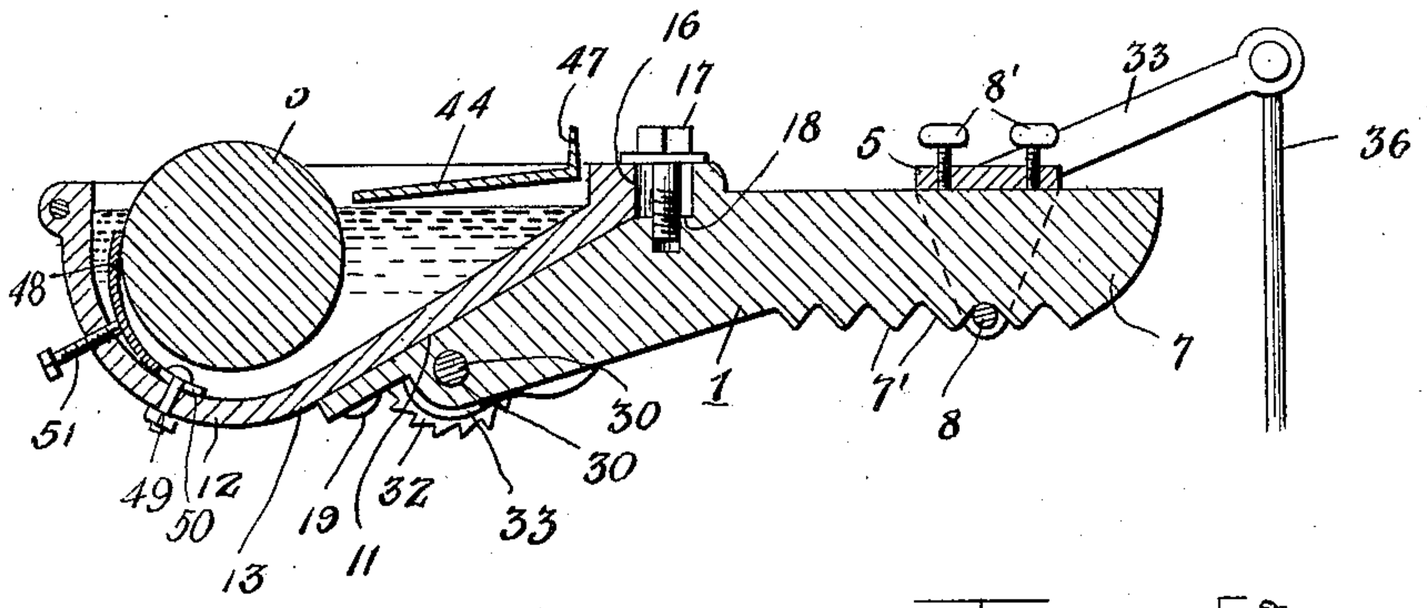
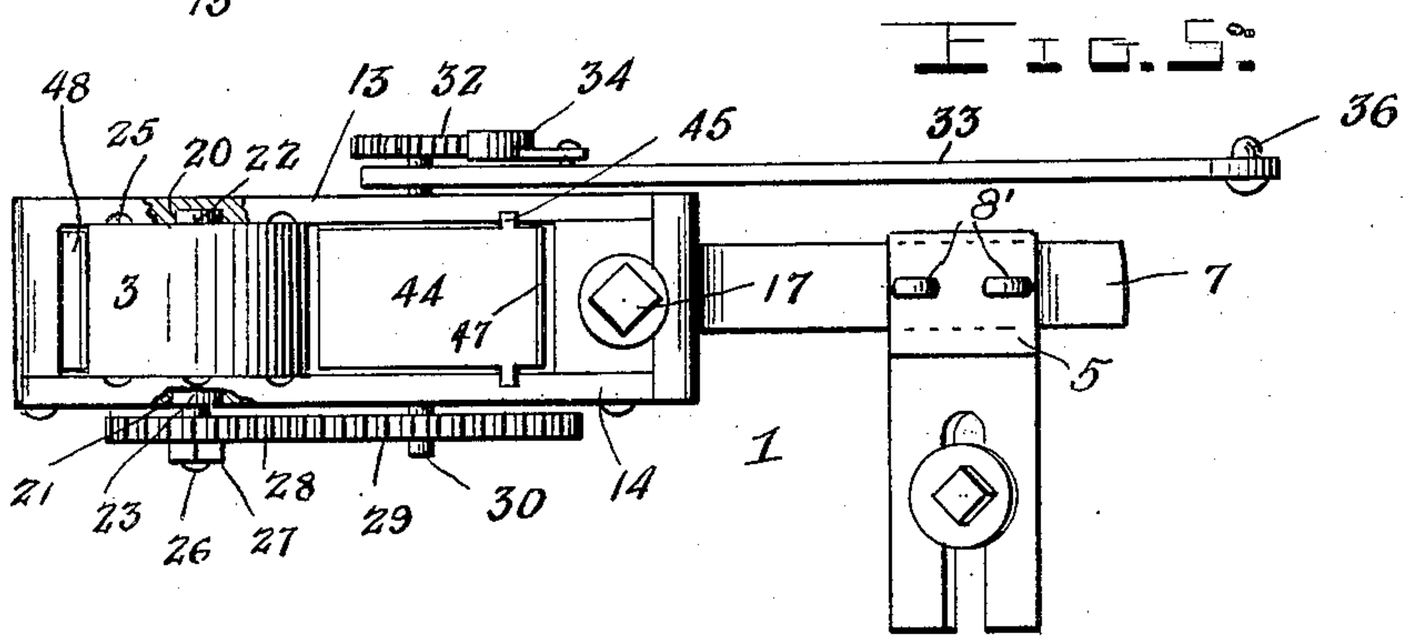


FIG. 5.



Witnesses

Chas. L. Griesbauer.

C. N. Griesbauer.

Inventor

John C. Padgett.

By H. B. Wilkinson & Co.

Attorneys

UNITED STATES PATENT OFFICE.

JOHN C. PADGETT, OF JUNCTION CITY, KANSAS.

INK-FOUNTAIN.

No. 917,117. Specification of Letters Patent. Patented April 6, 1909.

Application filed May 14, 1908. Serial No. 432,920.

To all whom it may concern:

Be it known that I, JOHN C. PADGETT, a citizen of the United States, residing at Junction City, in the county of Geary and State of Kansas, have invented certain new and useful Improvements in Ink-Fountains; and I do 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 ink fountains and has for its object to provide a fountain which is self contained and which can be readily adjusted and secured to the ordinary printing press now on the market.

It has also for its object to provide an ink fountain, which after having been adjusted to the press may be easily removed without disturbing the adjustment of the supporting parts or the operating mechanism thereof.

Another object is to provide a device of this kind which may be readily taken apart so that the parts may be cleaned. This is a very important feature, if the press is to be used for color work.

Another object is to provide a device of this kind which may be economically manufactured and operated and which will not get out of repair with ordinary use.

For these and other objects, as will appear as the nature of my invention is ascertained, my invention consists of certain novel combinations and arrangements of parts of which the herein described fountain is an embodiment, it being understood that I do not limit myself to the specific details of construction described as the same may be greatly varied without departing from the spirit and scope of the invention.

In the annexed drawings forming a part of this specification and in which like reference characters refer to like parts throughout the several views, Figure 1 is a side elevation of my ink fountain applied to a printing press, only the parts of the press being shown that are necessary for a proper understanding of the invention. Fig. 2 is a side elevation of the fountain, the same as Fig. 1, but enlarged and removed from the press. Fig. 3 is a side elevation of the fountain showing the side opposite to that shown in Figs. 1 and 2. Fig. 4 is a longitudinal sectional view. Fig. 5 is a top plan view; and, Fig. 6 is a perspective view of the ink receptacle.

As shown in the drawings in which the size and proportions are for illustrative purposes only and not drawn to any particular scale, the embodiment of my invention comprises a bracket 1, an ink receptacle 2, an ink cylinder 3, operating mechanism therefor generally indicated by reference numeral 4, and means, as the arm 5 for holding the fountain in adjusted position on the printing press, preferably on the bracket which supports the ink disk 6.

The bracket 1 is provided with a reduced extension 7 which is provided with notches 7′. The arm 5 is provided with downwardly projecting spaced ears adapted to ride over the extension 7. The lower ends of these ears are connected by a rivet 8 adapted to engage in one of said notches 7′ when the set screws 8′ in the top part of the arm 5 are screwed tightly against the extension 7. By this means, the bracket 1 may be adjusted on the arm 5. Thumb screws and adjustments are also used to raise and lower the fountain to bring the cylinder in heavier or lighter contact with the rollers. This serves as an additional means of regulating the supply of ink, giving a more even distribution.

The ink receptacle 2 has one slanting wall 11, a cylindrical end wall 12, a flat side wall 13 integral with the above named walls and a side plate 14 forming the fourth wall, the slanting wall merging into the cylindrical end wall, whereby is formed the bottom of the ink receptacle. The slanting wall is provided with an extension 15 having an open ended slot 16 by which the receptacle may be clamped in position by the bolt 17 having screw threaded engagement with the bracket 1. The bracket 1 is stepped as at 18 to receive the extension 15 and extends downwardly under the slanting wall 11 between two lugs 19 depending from the side wall 13 and the side plate 14 by which the receptacle is held against sidewise movement. This arrangement allows the ink receptacle to be removed or clamped in position by only about a half turn of the bolt 17.

The side wall 13 is provided with a socket 20, and the side plate 14 with a perforation 21 which serve as bearings for the journals 22 and 23 on the ink cylinder 3 having its surface projecting a slight distance above the side walls. Grooves 24 are provided by which oil may be introduced to said bearings. The walls are also slightly recessed as shown at 25 to prevent the ink

which may accumulate on the ends of the cylinder 3 from being deposited on top of the side walls.

The journal 23 is provided with a screw threaded extension 26 on which is screwed the pinion 28 provided with wrench receiving surfaces 27 and engaged by the gear 29 rigidly secured to the shaft 30 passing through suitable bearings 31 in the slanting portion of the bracket 1. At the opposite end of the shaft 30 is rigidly secured the ratchet 32. Between said ratchet and the side wall 13 is loosely mounted on said shaft a lever 33 to which is pivotally mounted the pawl 34 adapted to engage the ratchet 32.

The lower end of the propelling rod 36 is pivoted to a clamp 37 in the roller frame 38 of the press. As the roller frame oscillates motion is transmitted to the pawl 34 and to the ratchet 32 intermittently rotated.

The ink receptacle is provided with a cover 44 pivotally supported by means of lugs 45 which fit loosely in recesses 46 in the side walls of the ink receptacle. The free end of the cover is adapted to rest upon the ink adjacent the ink cylinder 3 and thereby to protect the ink and gradually force the same against the cylinder. The pivoted end of the cover 44 is provided with an upwardly projecting thumb piece 47 by means of which the free end of the cover may be raised, as for filling the receptacle.

A scraper 48 consisting of a curved sheet of spring metal is clamped against the curved wall 12 of the receptacle by means of a bolt and nut 50 and 49 respectively. An adjusting screw 51 is used to adjust the free end of the scraper to regulate the distance between said free end and the ink cylinder 3.

The operation of my ink fountain is as follows: The rollers 52 in reciprocating back and forth over the cylinder 3 contact the same on a different part of its surface each time, on account of the cylinder being moved each time by the mechanism 4. The ink taken by the roller from the cylinder by this contact, will be distributed by the disk and rollers as is well known. To regulate the flow of ink from the cylinder 3 the scraper 48 is adjusted by means of the adjusting screw 51.

Particular attention is called to the ease with which the ink receptacle and cylinder may be removed from the bracket without removing the bracket from the press or in any way disturbing the adjustment of the bracket or the operating mechanism.

Attention is also directed to the manner in which the ink scraper 48 is removably secured in place. This manner of mounting the scraper is desirable because it permits the ready removal of the scraper from the ink receptacle. The cylinder may be separated from the side plate 14 by unscrewing the nut 26.

It is thought that the operation and advantages of my device will be understood without further explanation.

Having thus fully described my invention, what I claim as new and desire to secure by Letters-Patent is:—

1. In an ink fountain for printing presses, a receptacle, a cylinder journaled therein, the side walls of the receptacle being recessed at the periphery of said cylinder and also from the upper edge to the bearing for the cylinder, and means for rotating the cylinder.

2. In an ink fountain, a supporting bracket provided with a plurality of longitudinally spaced transverse notches, an ink receptacle attached to said bracket, a supporting arm provided with a pair of downwardly projecting laterally spaced ears adapted to straddle the notched portion of the bracket, a rivet extending between the lower ends of said ears and adapted to engage with either of the notches of the bracket, set screws for adjusting said ears vertically and means for attaching the supporting arm to the press.

3. In an ink fountain for printing presses, a supporting bracket comprising an inclined body and a straight longitudinal extension provided on its under surface with a longitudinal series of transverse notches, a lateral projecting supporting arm for supporting the bracket upon the press, means for engaging the inner end of said arm with either of the notches of said extension, an ink receptacle having an inclined wall mounted upon the inclined body of the bracket, and a cylinder rotatably mounted in the ink receptacle.

4. In an ink fountain for printing presses, a supporting bracket comprising a body having an inclined upper surface and a flattened portion at the upper end of said surface, an ink receptacle having a slanting wall adapted to fit upon the inclined surface of said bracket, and a slotted extension adapted to bear upon the flattened portion thereof, a fastening bolt extending through the slotted portion of said extension and screwing into the flattened portion of the bracket for detachably supporting the receptacle upon the bracket, a cylinder revolubly mounted in the ink receptacle, ratchet mechanism for actuating the cylinder and means for supporting the bracket upon the press.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN C. PADGETT.

Witnesses:
ROBERT QUILLING,
L. M. GREENO.