

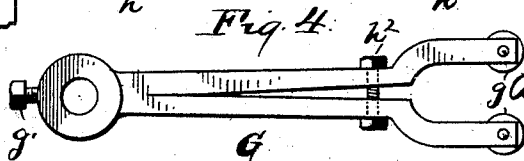
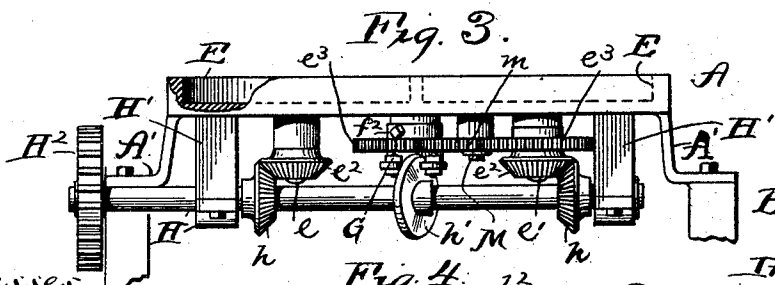
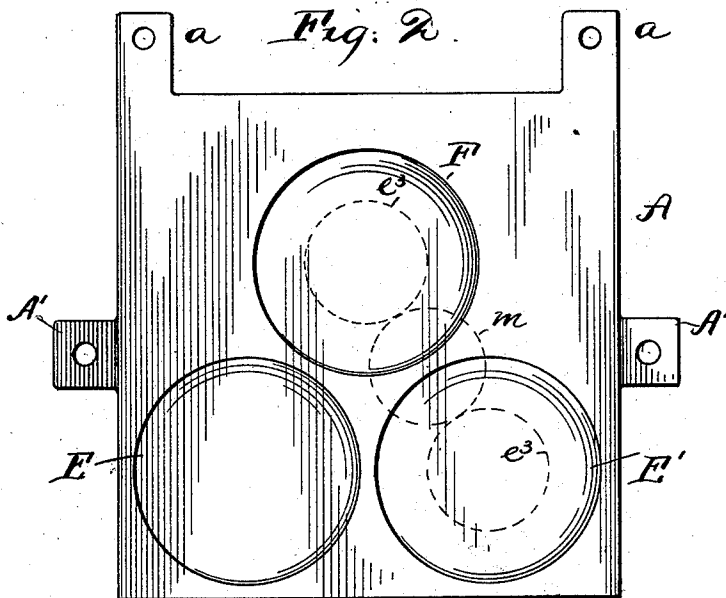
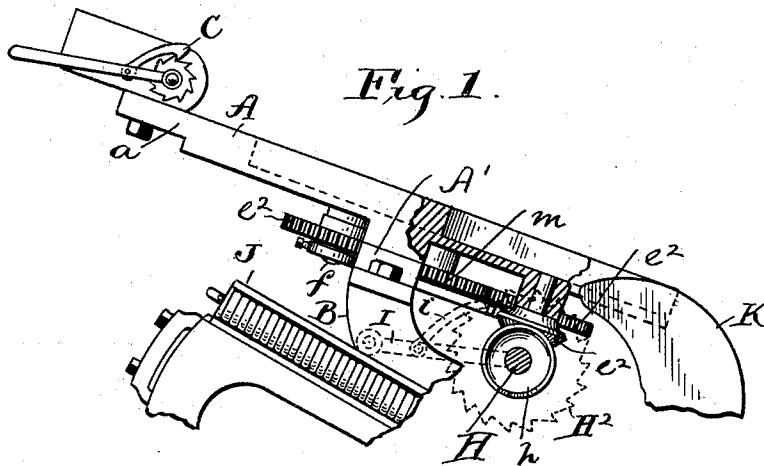
(No Model.)

W. H. PRICE, Jr.

INKING PLATE AND ATTACHMENT FOR PRINTING PRESSES.

No. 509,825.

Patented Nov. 28, 1893.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM H. PRICE, JR., OF CLEVELAND, OHIO, ASSIGNOR TO CHANDLER & PRICE, OF SAME PLACE.

INKING-PLATE AND ATTACHMENT FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 509,825, dated November 28, 1893.

Application filed March 20, 1893. Serial No. 466,777. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. PRICE, Jr., of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Inking-Plates and Attachments for Printing-Presses; and I do hereby 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 pertains to make and use the same.

My invention relates to an improved inking plate and attachments, for printing colors, the same being preferably interchangeable with the ordinary inking plate of a job platen printing press.

In the accompanying drawings, Figure 1, is a side elevation partly in section, and Fig. 2, is a plan of an inking plate embodying my invention. Fig. 3, is an end elevation of the same. Fig. 4, is an enlarged plan in detail of arm G.

A, represents the inking plate, the same having feet as at A', or suitable provisions for detachably securing the plate to the press and usually securing it to member B, the latter being a well known member, in the form of an irregular cross bar, adapted to support the inking plate ordinarily used where but one color is being printed. Where it is not practicable to attach plate A, to member B, provision may be made for attaching the plate to some other part of the press.

Plate A, is provided at the rear, with ears *a a*, for attaching the ink fountain C, the latter being of ordinary construction, and hence need not be described in detail.

E E', and F, are supplemental inking disks, countersunk in plate A, flush with the top surface of the latter. Each supplemental disk has an axial shaft projecting downward, respectively *e e'*, and *f*; plate A, being provided with depending bosses bored to fit these shafts, thus providing journal bearings for the same. Shafts *e e'*, at their lower extremities are provided with bevel gears *e² e²*, and shaft *f* is provided with a forked lever, or arm, G, the latter bearing, preferably, anti-friction rollers as at *g g*. See Fig. 4.

H, is a shaft that extends laterally under the centers of disks E E', this shaft being

journaled in hangers H', depending from plate A, and bearing bevel gears *h h*, these gears respectively engaging gears *e² e²*, aforesaid. Shaft H, is also provided with a cam ring *h'*, the latter having a lateral throw, that is to say a throw lengthwise shaft H, and this cam ring is embraced laterally by the prongs of lever G, aforesaid, by means of which, disk F, is oscillated on its axis. The prongs of lever G are long and elastic, and stand normally apart, with a bolt *h²* to draw them toward each other. Normally, the prongs would stand so far apart, leaving so much lost motion as between the prongs and cam ring *h'*, that the throw of the latter would move the lever but a trifle, but by tightening the bolt *h²* until the prongs closely embrace the cam ring, the full throw of the latter is imparted to the lever, and from thence to disk F. Hence by means of bolt *h²* the oscillation of disk F, may be regulated as required. Shaft H, on the overhanging end thereof, bears a ratchet wheel H², by means of which the shaft is intermittently rotated, say a notch or two at a time, with every stroke of the press. On the end of shaft H, next beside ratchet H², is mounted loosely a lever I, bearing a pawl *i*, for engaging member H². This lever I, is engaged by the ink roller frame J, on the upward movement of the latter, whereby the movement of shaft H, is timed, as required, to the movements of the inking rollers, not shown.

K, is the curved portion of the frame that guides the inking rollers on to the inking plate in the ordinary manner of platen printing presses.

Arm G, is usually secured to shaft *f*, by means of a set-screw *g'*. Spindles *e'*, and *f*, are provided with spur gears *e³*, and *f'*, and these mutually engage an intermediate gear *m*, the latter being journaled on stud M, that depends from plate F. Gear *f'*, is secured to spindle *f*, by means of a set-screw *f²*, and by first loosening lever G, and then tightening gear *f'*, disk F, is caused to revolve simultaneously with disks E E', or by loosening gear *f'*, and tightening arm G, disk F, is made to oscillate, while disks E E', are being rotated.

When two or three colors are being printed,

by oscillating disk F, more or less the different colors at their intersection can be nicely blended.

When disk F, is made to rotate with the other two disks, it is evident that one color would be distributed with facility, but when a job of any considerable size is to be printed in one color, the operator may remove plate A, and attachments, and substitute the ordinary inking plate.

What I claim is—

1. A stationary inking plate having three supplemental inking disks countersunk in, and flush with the face of the inking plate, combined with means substantially as indicated for rotating two of the disks and oscillating the third disk substantially as described.

2. In combination, a stationary inking plate bearing an ink-fountain, and bearing three supplemental inking disks countersunk in and flush with the face of the inking plate, means for rotating the two disks laterally opposite each other, and means substantially as indicated for oscillating the third disk on its axis, substantially as described.

3. In combination, a stationary inking plate bearing three supplemental inking disks countersunk in, and flush with the face of the inking plate, a lateral shaft located below the inking plate, such shaft being intergeared with the spindles of the two disks located laterally opposite each other, such shaft bearing a cam operatively connected with the

third disk for oscillating the latter disk on its axis, substantially as described.

4. In combination, a stationary inking plate bearing three supplemental inking disks arranged as described, a lateral shaft intergeared with the spindles of two of the disks, the spindle of the third disk bearing a forked lever, the prongs of which lever embrace a cam of the lateral shaft, a bolt for adjusting the prongs of the lever toward and from the cam as a means of regulating the oscillating movement of the third supplemental disk, substantially as described.

5. In combination, a stationary inking plate bearing three supplemental inking disks journaled therein and countersunk flush with the face of the plate, a lateral shaft intergeared with the spindles of two of the disks, and one such spindle being detachably intergeared with the spindle of the third disk, such third spindle bearing a forked arm for engaging a cam on the lateral shaft, such arm being detachably secured to its spindle whereby the third disk may be rotated or oscillated by tightening and loosening the different transmitting mechanisms substantially as described.

In testimony whereof I sign this specification, in the presence of two witnesses, this 17th day of March, 1893.

WILLIAM H. PRICE, JR.

Witnesses:

R. H. STONE,

W. A. MIDDLETON.