M. ENGLAND.

Inking Apparatus for Printing-Presses.

No. 145,341. Patented Dec. 9, 1873.

Fig. 1.

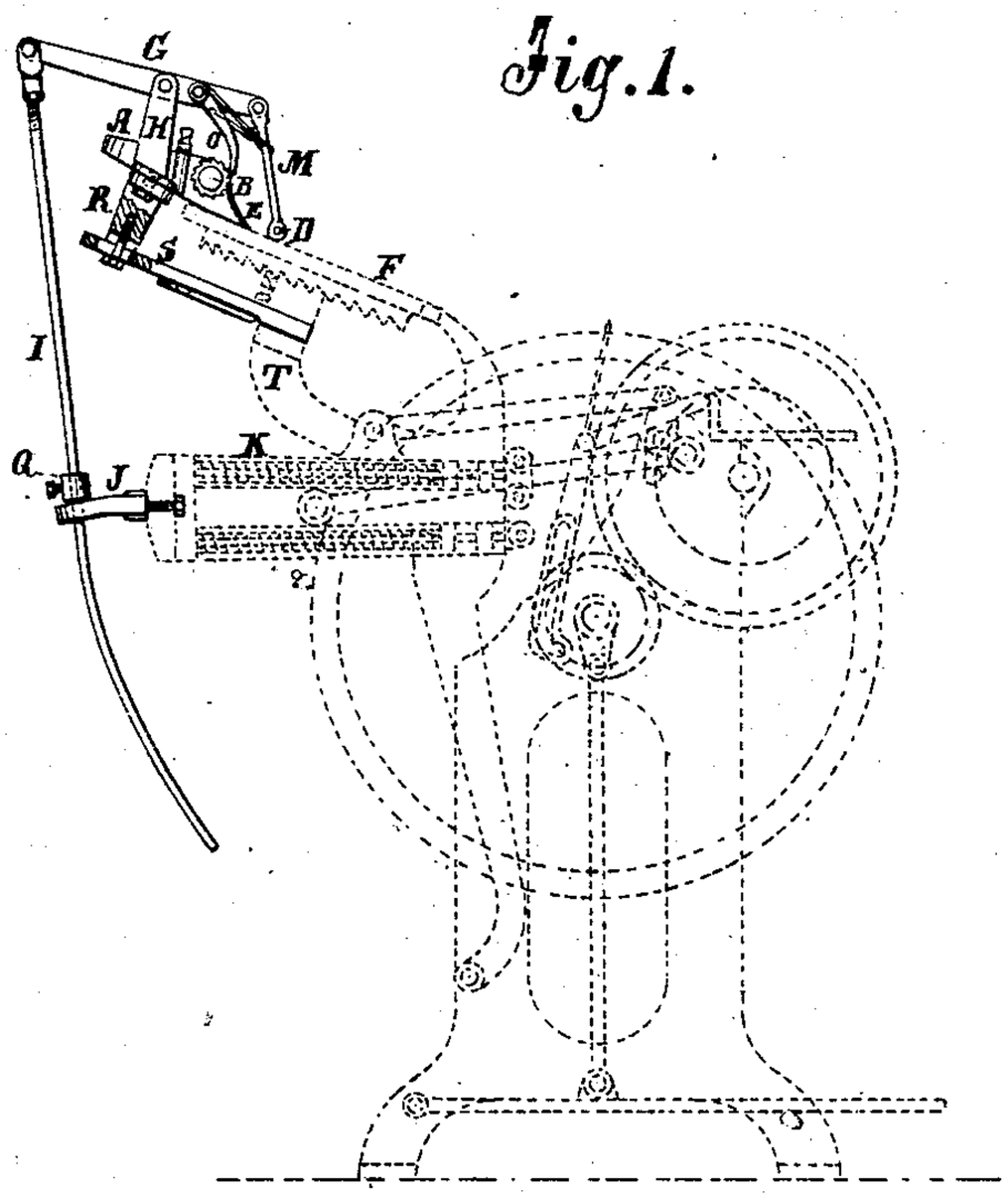


Fig. 4.

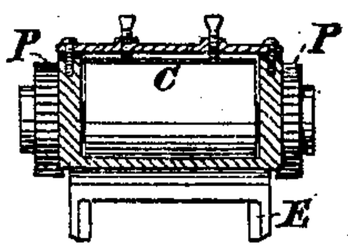


Fig. 2.

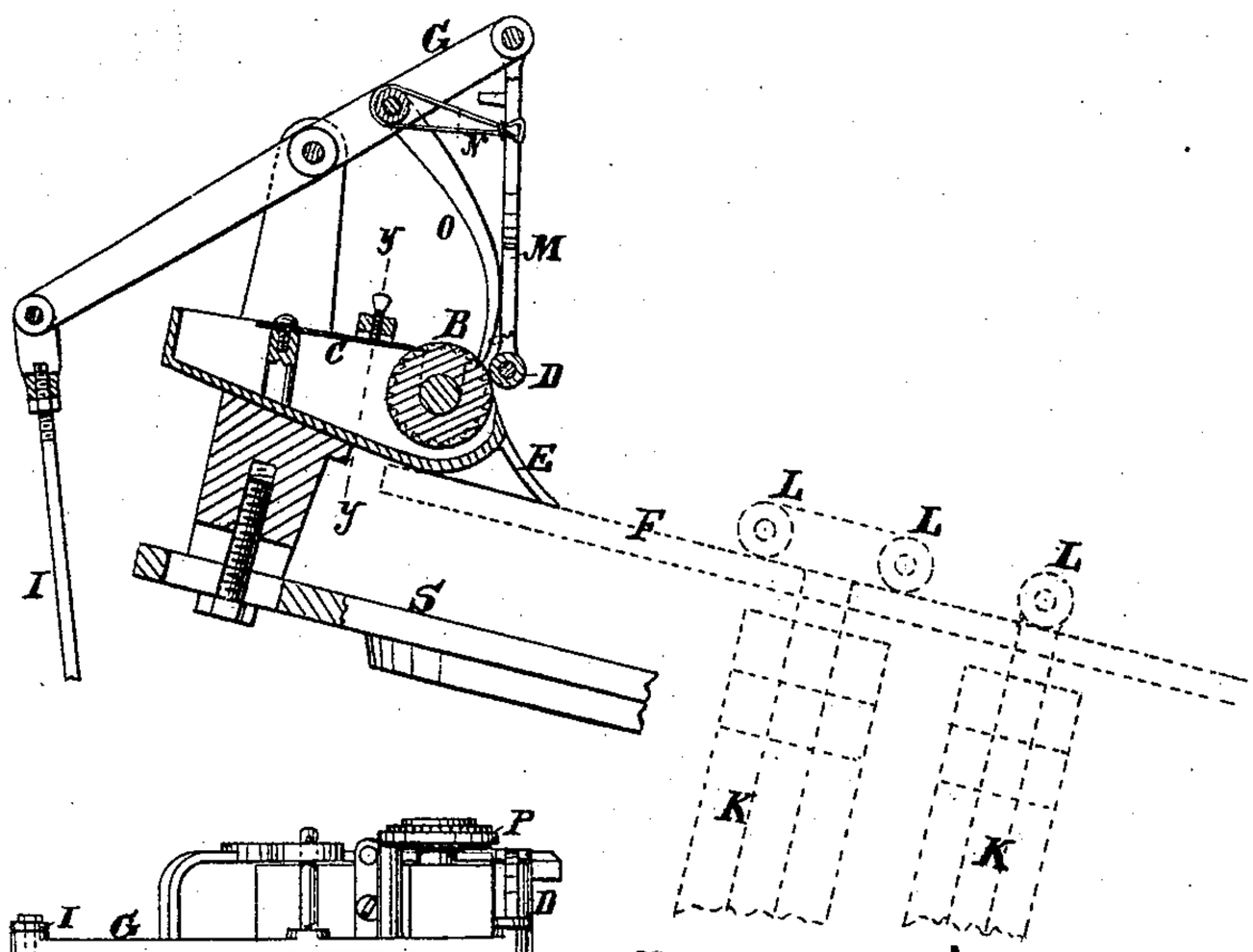
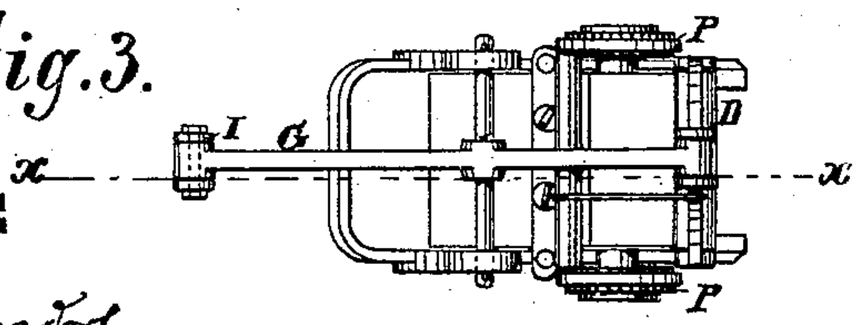


Fig. 3.



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UNITED STATES PATENT OFFICE.

MARTIN ENGLAND, OF NEW YORK, N. Y.

IMPROVEMENT IN INKING APPARATUS FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. **145,341**, dated December 9, 1873; application filed August 30, 1873.

To all whom it may concern:

Be it known that I, MARTIN ENGLAND, of the city, county, and State of New York, have invented a new and Improved Inking Apparatus for Printing-Presses, of which the following is a specification:

My invention consists of a "brayer" for the "Gordon" press, of which the ink-box is mounted on a stand, which is adjustably attached to the arm, or bar which is bolted onto the arm, which supports the table of the printing-press, and the roller for carrying the ink from the ink-roller to the ink-table is connected to a rock-lever mounted on a stand of the said attachment, and so connected by a rod with the vibratory ink-roller frame of the printing-press that when said ink-roller frame is swung down off from the ink-table to carry the rollers down onto the type-bed the carrier-roller of the brayer is automatically caused, by said frame, to roll down onto the table to deliver the ink, and, as the motion of the ink-roller frame is reversed, the carrier-roller of the brayer is moved back up to the ink-roller by a spring. The rod connecting the rock-lever with the frame of the ink-rollers of the press is contrived so that the carrier-roller of the brayer can be caused to roll onto the ink-table to a greater or lesser extent, just according to whether it is desired to deliver the ink near the edges or middle of the table; and the adjustable standard, by which the ink-box is attached to the supporting-arm, allows of shifting the brayer toward or from the center of the ink-table, so that the range of adjustment and the capacity to vary the application of the ink that any modification wanted in the distribution of the ink for any kind of work can be readily made. This feature of the attachment is very important in doing job-work, such as handbills and the like, which demand large quantities of ink for some parts and smaller quantities for others.

Figure 1 is a side elevation of the attachment with a part sectioned. It is also a side elevation of a Gordon press in dotted lines, showing the mode of attaching the brayer and connecting the rock-lever with the ink-roller frame of the press. Fig. 2 is a sectional elevation of the attachment, and a side elevation of some portions of the printing-press in dotted lines, the section being taken on the line *x* of Fig. 3. Fig. 3 is a plan view of the attachment, and Fig. 4 is a cross-section taken on the line *y y* of Fig. 2.

Similar letters of reference indicate corresponding parts.

A represents the ink-box of the attachment; B, the ink-roller; C, an adjustable scraper for regulating the quantity of ink taken up. D is the ink-carrying roller; E, the ways on which said carrier travels between the ink-roller and the ink-table F of the printing-press. G is the rock-lever which works said roller; H, the stand in which the rock-lever is mounted; I, the rod, and J an eye-plate connecting the lever with the ink-roller frame of the press. The rod M, connecting roller D with rock-lever G, has a spring, N, for pulling roller D onto the ink-roller when it is pulled back from the ink-table, which is done by the weight of rod I and the long arm of the lever, or it may be done by a spring. The rock-lever carries a pawl, O, which acts on a ratchet-wheel, P, on the ink-roller B, and turns it a little each time the carrying-roller goes forward, to present fresh surface to it when it comes back. The rod I extends through the eye-plate J on the lower end of frame K, and is curved in the lower part to correspond with the curved path in which the eye-plate travels during the vibratory movement of the inking-roller frame while the rod is at rest. Motion is communicated from the ink-roller frame to the rod I through the medium of the stop Q, which is shifted up or down on the rod according to the extent it is desired to vibrate the rock-lever, which regulates the length of the movement of the carrier-roller on the ink-table. The ink-box is bolted on a standard, R, which is bolted on an arm, S, that is bolted to the support T of the printing-press table. This standard is bolted to the arm S, so as to be adjusted toward and from the table for delivering the ink near to the edge or the middle of the ink-table, and the box is fastened to the top of the standard, so as to be adjusted in the same direction for the same purpose. Thus the amplest range of adjustment that can be desired for varying the distribution of the ink is obtained.

It will be seen that the attachment can be readily fitted onto a Gordon press merely by bolting on the arm S and the eye-piece J.

By slight modifications of these parts it can also be attached to a "Degener" press.

The standard R and arm S may be cast in one piece, but the range of adjustment of the ink-box on the top of the standard will have to be extended; but, as the tables of different presses vary in their inclination to some extent, it is better to have the standard adjustable on the arm, and the box adjustable on the standard.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An automatic brayer for printing-presses, consisting essentially of the ink-box A, ink-roller B, carrier-roller D, rock-lever G, rod I, stop Q, eye-plate J, standard R, and arm S, the ink-box being adjustable upon the arm S, as and for the purpose specified.

2. The combination of the ink-box A, ink-roller B, with the rock-lever G, pawls O, ratchets P, arm M, spring N, and carrier-roller D, as and for the purpose specified.

3. The within-described means for communicating motion from the ink-roller frame of a Gordon press to the rock-lever G of the brayer, the same consisting of the rod I, stop Q, and eye-plate J, as set forth.

MARTIN ENGLAND.

Witnesses:
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