

(No Model.)

W. B. SHEFFIELD.

AUTOMATIC INK DISTRIBUTER FOR PRINTING PRESSES.

No. 434,957.

Patented Aug. 26, 1890.

Fig. 1.

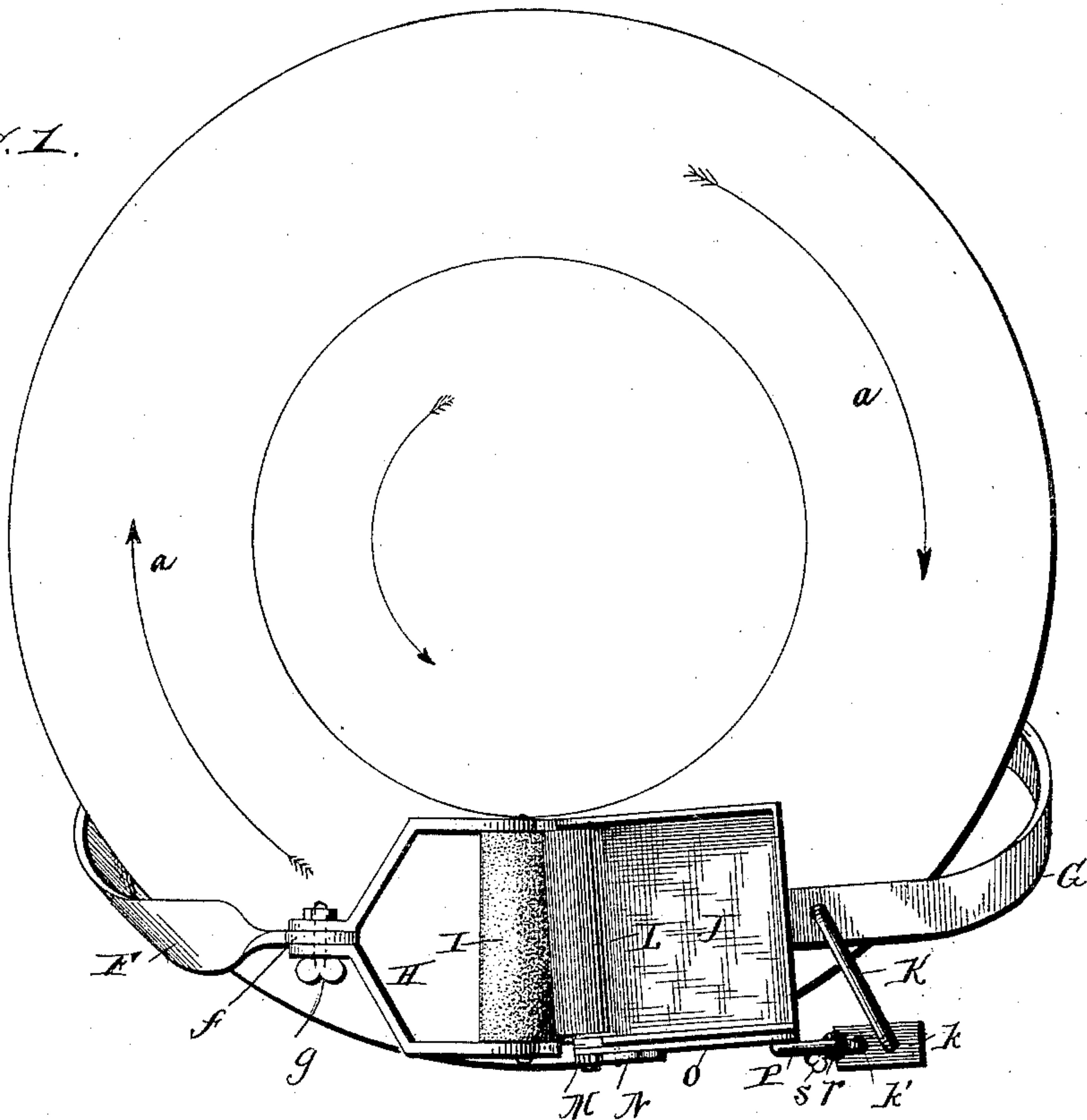


Fig. 2.

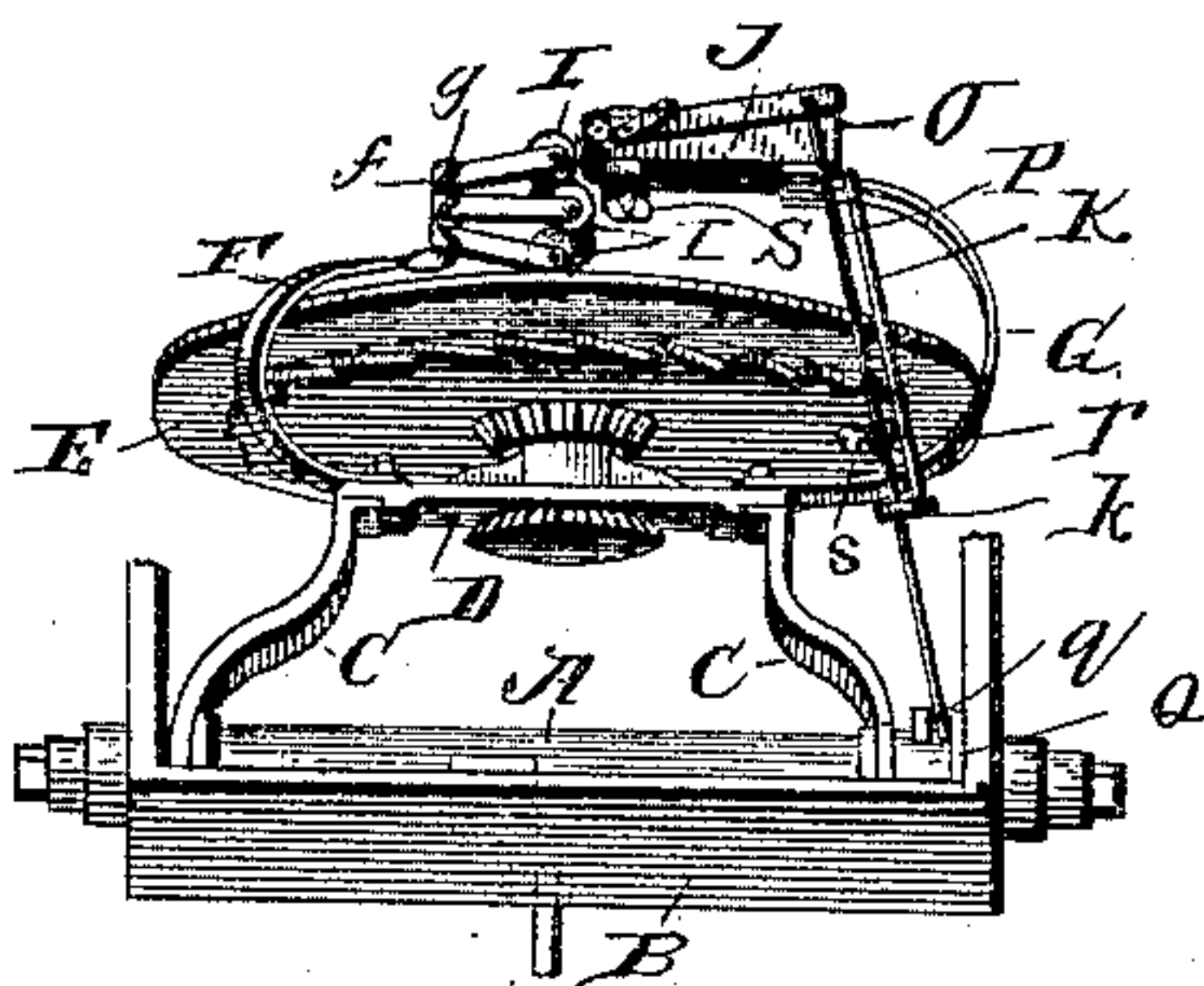
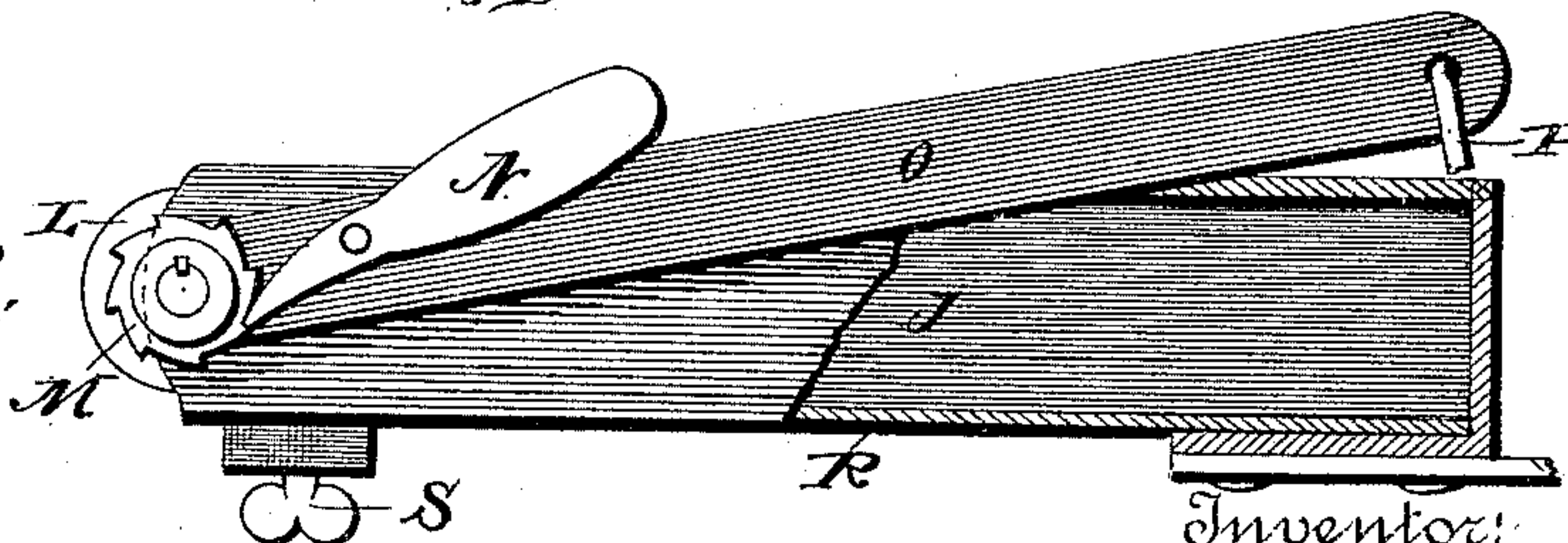


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM B. SHEFFIELD, OF KANSAS CITY, MISSOURI.

AUTOMATIC INK-DISTRIBUTER FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 434,957, dated August 26, 1890.

Application filed May 17, 1890. Serial No. 352,208. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. SHEFFIELD, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Automatic Ink-Distributers for Printing-Presses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improvement in automatic ink-distributers for printing-presses with revolving disks; and it consists in the novel construction and arrangement of devices, as will be hereinafter specified.

My object is to provide a means whereby the distribution of the ink may be equal, and this I effect by the arrangement fully specified and illustrated in the accompanying specification and drawings, in which—

Figure 1 is a plan view of my device applied in operative position to the revolving disk. Fig. 2 is a rear view of the same. Fig. 3 is a side elevation of the fountain.

A represents the shaft, on which oscillates the frame B. Secured to this shaft are the supporting-arms C C of the cross-bar D, in which the axle of the revolving disk E is journaled. Secured to this cross-bar D at each end are spring-bars F and G. The bar F is bent up and around the edge of the revolving disk E, the outer end *f* extending upward in a vertical position. Secured to this vertical portion *f* of the bar F by means of set-screws *g* is a series of pivotal arms H, between the outer ends of which are journaled the distributing-rollers I, which may be of any desired number, arrangement, and construction, but preferably as shown in the drawings, where three rollers are represented, the center roller being of metal and the upper and lower rollers being composed of ordinary composition used in making form-rollers. The lower one rests on the revolving disk E, from whence it derives its motion, thereby causing the other rollers to revolve from frictional contact.

Secured at the upper end of the bar G is the ink-fountain J, with the metal roller L journaled in the front end of the same. The base-plate or knife R of the fountain is so arranged that by means of the set-crews S, which impinge against the lower side of said

plate or knife, the distribution of the ink may be regulated.

On the outer end of the shaft or roller L is keyed a ratchet-wheel M, which is engaged by a gravity-pawl N, pivoted to the side of the lever O, which is journaled loosely at one end on the said shaft. To the outer end of said lever is secured the upper end of a connecting-rod P, the lower end of which is secured to a lug or projection *q* on the inner side of the bar Q, which is secured rigidly to the oscillating frame B. This rod has a collar *r* adjustably secured to the same by means of set-screws *s*, the object of which will be hereinafter specified.

Connected to the bar G, immediately in the rear of the ink-fountain J, is the upper end of the rod K, which has a plate *k* securely fastened to its lower end, which plate is provided with an opening *k'*, through which the rod P operates.

The operation of my invention is as follows: The oscillation of the frame B, having the bar Q secured to the same, has the effect of depressing the outer end of the lever O through the medium of the connecting-rod P, which causes the gravity-pawl to force the ratchet and revolve the roller L. The collar secured to the connecting-rod P a slight distance above the plate *k* of the rod K in its descent forces the said plate downward, thereby depressing the fountain, and thus causing the roller L to engage by frictional contact the upper distributing-roller I. The ink thus distributed passes round the several rollers described, thence to the disk and in the direction indicated by the arrows *a*, Fig. 1. The form-roller passing and repassing over the surface of the said disk thus receives an equal coating of ink, as will readily be understood.

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

1. In an ink-distributing apparatus, the bar F, provided with vertical extension *f*, the arms H, pivotally secured to the same, and rollers I, journaled in the front ends of said arms, substantially as set forth and described.

2. In an ink-distributer, an oscillating frame, in combination with an ink-fountain, a rod P, connecting said frame with the feed-

ing mechanism of said fountain, a rod K, secured to the fountain, and mechanism whereby said rod is actuated to depress the fountain, substantially as described.

5 3. In an ink-distributor, the combination of an oscillating frame of an ink-fountain, a rod P, connecting said frame with the feeding mechanism of said fountain, a rod K, secured to the fountain and carrying at its lower
10 end a plate having a perforation through which rod P passes, and a stop-collar on said rod, substantially as described.

4. In a distributor, the combination, with

an oscillating frame of an ink-fountain, a rod P, connecting said frame with the fountain, a rod K, secured to the fountain, and mechanism to actuate said rod, of a series of distributing-rollers adapted to receive the ink from the said fountain, substantially as described. 15 20

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM B. SHEFFIELD.

Witnesses:

H. E. PRICE,
A. A. HIGDON.