E. E. Barrett

Hand Stamp.

No. 17824. Patented Jul. 21. 1857.

Fig. 2.

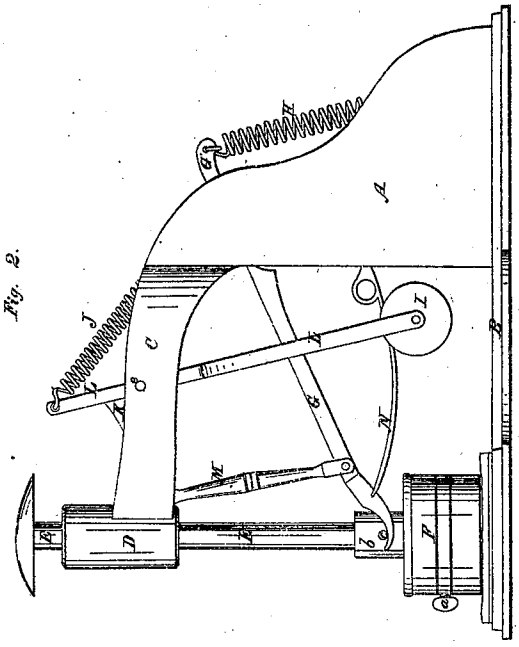


Fig. 3.

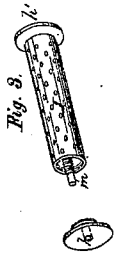
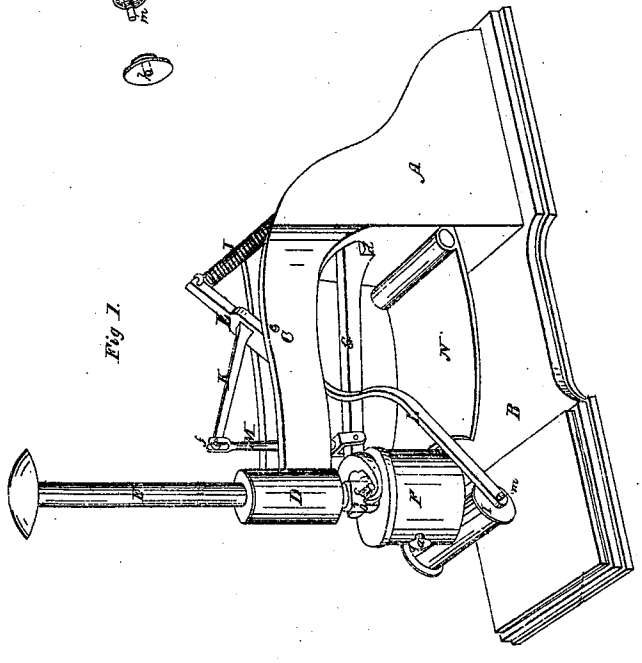


Fig 1.



UNITED STATES PATENT OFFICE.

E. E. BARRETT, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN INKING-ROLLERS FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. **17,824**, dated July 21, 1857.

To all whom it may concern:

Be it known that I, E. E. BARRETT, late of Milwaukee, in the State of Wisconsin, now of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Printing-Presses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a view in perspective of a hand-stamp having my improvement applied thereto, showing the roller in position to ink the type. Fig. 2 represents a side elevation of the same, but representing the type-holder or platen depressed to make an impression and the position of the roller at that time. Fig. 3 represents a view of the roller detached to exhibit its construction.

My improvement relates to printing-presses generally; and it consists in the use of a hollow inking-roller or its equivalent, to be hereinafter described, perforated with a number of holes, through which the ink oozes, saturating the material with which it is cased for the purpose of inking the type, thus constituting a fountain or self-feeding inking-roll.

To enable others skilled in the art to make, construct, and use my invention, I will now proceed to describe its parts in detail.

The improvement in this instance is shown as applied to a hand-stamp press, in which—

A represents the frame-standards that support the operative parts of the machine, cast upon or otherwise secured to a bed-plate B. From the side of these standards project arms C, having a collar D secured or formed upon their outer extremity. Through this collar a vertical cylindrical mortise is made, in which the rod E, to which the type-box F is secured, fits and slides. The type-box F is provided with blank dies for holding the type, which may be adjusted as required and properly secured by means of the thumb-screw *a*. On the top of the type-box F a collar *b* is secured or otherwise formed, in the cavity of which a female screw is cut, into which the male screw of the rod E takes, by which means the two are firmly secured together, and yet capable of being easily detached from each other. Through this collar, immediately beneath the end of the rod E, is passed a pin *c*, by which the type-box is raised through the forked end of a lever G, which embraces the collar and bears on the under side of the pin. This lever has its fulcrum *d* on the upper edge of the front or connecting plate of the standards A and is operated by a spiral spring H, attached to its rear end and the bed-plate B, which by its tractive power, when the pressure is removed from the head of the rod E, raises the type-box by depressing the rear end of the lever G. In order to prevent end-play of the lever, its under side is notched, so as to embrace the edge of the plate forming its fulcrum.

Immediately upon the raising of the type-box F, as before described, the inking-roller I is passed over the type by means of the spring J, attached to the rear end of the frame L, upon which it is mounted. This frame is pivoted to the arms C of the standard A by means of a pin *e*, upon which it turns. Upon the end of this frame immediately above this pivot is secured a standard K, to the end of which is attached a connecting-rod M by means of a hinged joint *f*, whose lower end is similarly attached to the lever G in rear of its bifurcated end, so that as the rod E is depressed to make an impression the pin *c* carries the lever G down with it, in this way causing the frame L of the ink-roll I to turn on its axis, thus withdrawing it from under the type-box. The spring J, on the pressure being removed from the rod, forces the roll I back over the type-box to ink the type simultaneously with the raising of the platen by the spring H and lever G, after which the type-box is again ready to be depressed to make another impression.

The inking-roller I is formed of a hollow cylinder perforated with a number of small holes and provided with two caps *h* and *h'*, on which are formed journals which fit in bearings of the frame L; or instead of the caps having journals formed on them a shaft *m* may be passed through the center of the hollow cylinder and secured to the cap formed on the cylinder, the end of the shaft being projected through the cap a sufficient distance to form a journal. Upon the other end of this shaft a screw-thread is cut, by means of which the removable cap *h* is secured to the cylinder. Upon the outside of this cylinder

is wrapped the cloth or other material intended to be used as the vehicle for the ink, which becomes saturated by the ink placed in the inside of the cylinder oozing through the perforations formed in its surface, by which means the roll is kept constantly charged with ink ready for immediate use. The roller I in passing from under the type-box is brought into contact with a diffusing-plate N, which spreads the ink evenly over its surface, and which for this purpose is made of a breadth equal to the length of the roll.

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

Saturating or coating the inking-roller of a printing-press with ink in the manner substantially as and for the purposes set forth.

In testimony whereof I hereunto set my hand.

E. E. BARRETT.

Witnesses:
P. HANNAY,
W. SESKI.