G. E. JONES.

Inking Apparatus.

No. 150,762. Patented May 12, 1874.

Fig. 1

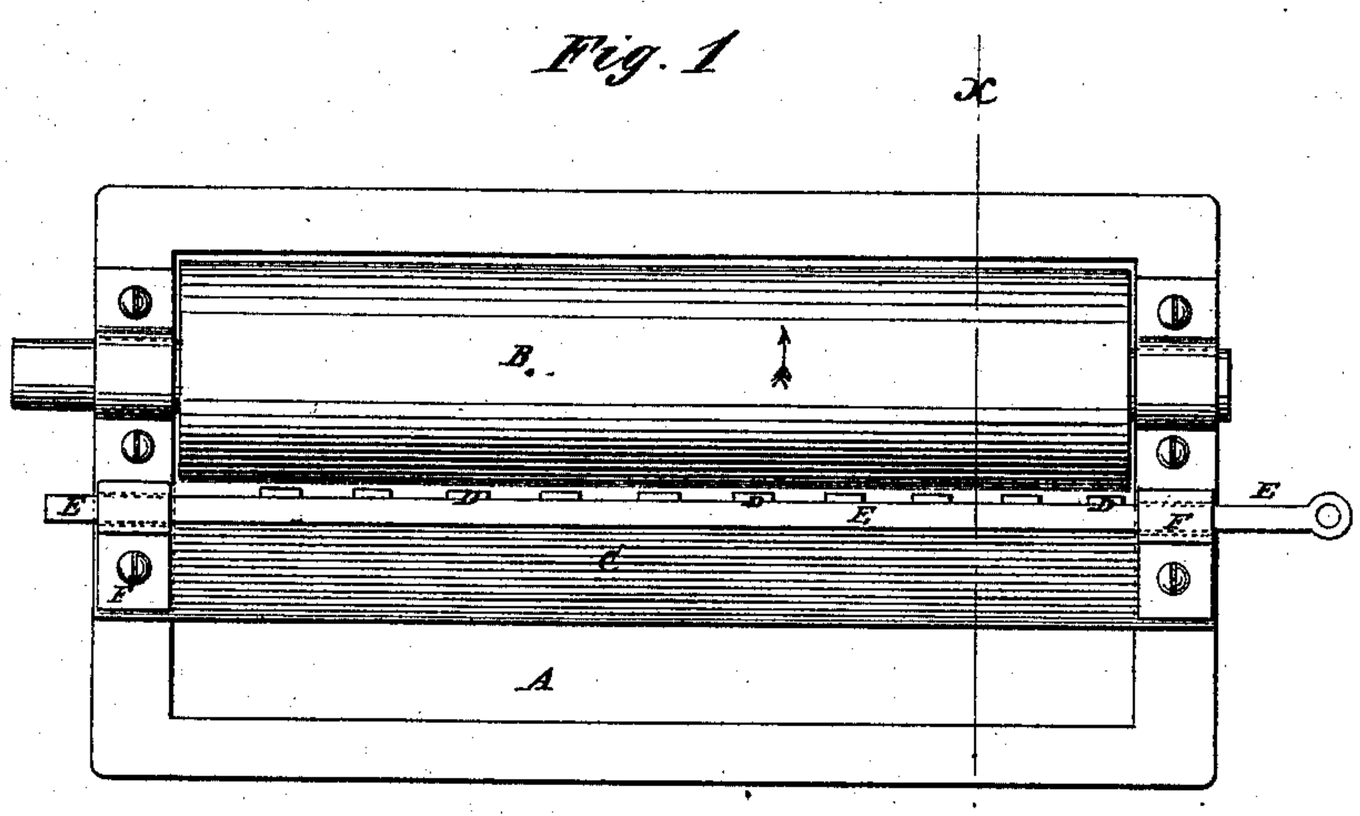


Fig. 2

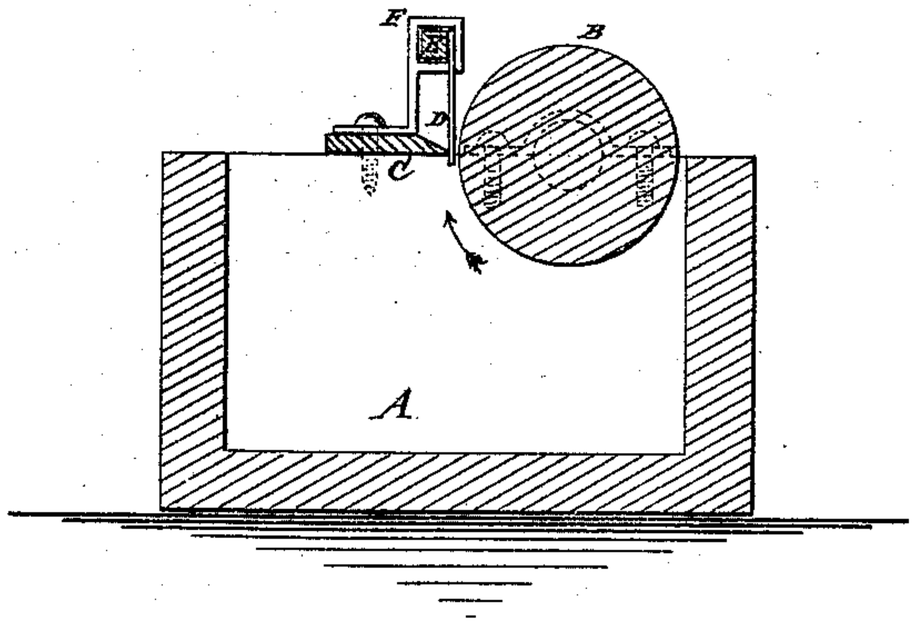
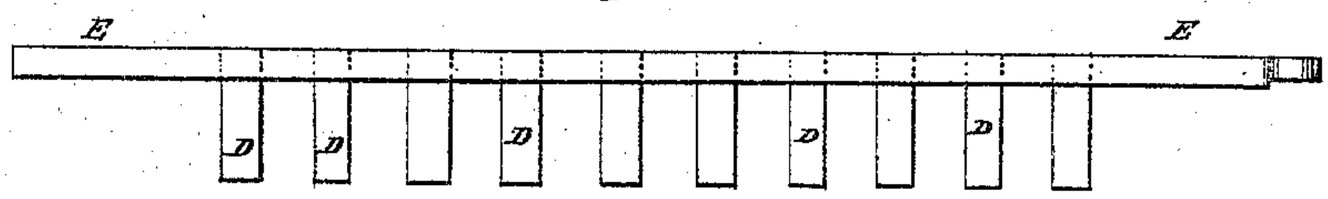


Fig. 3



WITNESSES.

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UNITED STATES PATENT OFFICE.

GILBERT E. JONES, OF NEW YORK, N. Y.

IMPROVEMENT IN INKING APPARATUS.

Specification forming part of Letters Patent No. **150,762**, dated May 12, 1874; application filed March 14, 1874.

To all whom it may concern:

Be it known that I, GILBERT E. JONES, of the city, county, and State of New York, have invented a new and useful Improvement in the Inking Apparatus of Printing-Presses, of which the following is a specification:

This invention relates to an improvement in ink-fountains of printing-presses; and its object is to promote the even supply of ink to the surface of the duck-roller, thereby improving the quality of the printing, as hereinafter explained. My improvement consists in the combination of one or more movable blades with the duck-roller, substantially as hereinafter shown and described.

Referring to the drawing, Figure 1 is a plan view of an ink-fountain of an ordinary newspaper-printing press, having my improvement attached. Fig. 2 is a cross-sectional elevation through the line *x x* of Fig. 1. Fig. 3 is a side elevation of the movable blades and their carrying-bar, pertaining to my improvement.

Similar letters of reference indicate corresponding parts.

A is the ordinary box ink-fountain, intended to contain the printing-ink; B, the ordinary duck-roller, mounted and rotating upon said fountain A, the lower portion of roller B dipping into the ink, in the usual manner. C is the ordinary bar or knife for regulating the supply of ink to be carried by the roller B.

The above parts are to be constructed and arranged to operate in the ordinary manner, the roller B revolving in the direction of the arrow.

In the progress of this operation the lower surface of roller B becomes heavily charged with ink; but all surplus ink is continually scraped off and falls back into the fountain by contact of such surplus ink with the under side of the cleaning-knife C, which only permits the adhesion to the surface of the roller B of a thin film of ink, the thickness of which is governed by the space allowed between the edge of the knife C and the periphery of the roller B. The roller B delivers this film of ink from its upper surface to the surfaces of the distributing-rollers of the press, one or more of which are in the usual manner brought into contact with the roller B. The quantity of ink delivered by roller B is regulated by setting and adjusting the knife C nearer to or farther from the surface of the roller B.

It is found in ordinary practice that dirt, fibrous matter, and other foreign substances, which find their way into the ink-fountain, are apt to collect on the under side of the knife C, and by aggregation and adhesion they form pads or rubbers, which press against the surface of the roller B and wipe off the film of ink from the surface thereof, so that the upper surface of said roller, instead of being supplied with an even film of ink, is unevenly supplied, a streak where the ink film is lacking being produced wherever the said dirt or foreign matter collects, as before mentioned. The result of this uneven or streaked supply of ink is a corresponding unevenness of delivery to the distributing-rollers of the press, and the types are consequently unevenly inked, and the printed impressions from the types show this unevenness in light streaks where the ink has been insufficiently supplied to the types by the rollers. The object of my improvement is to overcome this defect, and I accomplish the same by interposing one or more movable blades, D, between the roller B and knife C, the said blades being attached to a bar, E, the extremities of which are mounted in bearings F in such manner that the bar E may move back and forth longitudinally. This motion is to be imparted to the bar E by a connecting-rod or other device attached to one end of said bar, and communicating with some suitable moving part of the printing-press.

The effect of the movement of the blades D between the roller B and knife C is to dislodge or push away the pads of foreign matter, before mentioned, and prevent them from wiping or pressing the surface of the roller B, thus insuring the supply of an even film of ink to the upper surface of roller B, and the transfer of an even supply of ink to the distributing-rollers. The types will consequently be evenly inked, and good impressions, free from streaks, will be produced.

My improvement is not intended to be limited to the precise form or construction of the parts herein shown, as they may be varied in many ways by the construction, as the form of the press or ink-fountain may require.

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

The combination of one or more movable blades with the doctor-blade and duck-roller of a printing-press ink-fountain, substantially as herein shown and described.

GILBERT E. JONES.

Witnesses:
T. B. MOSHER,
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