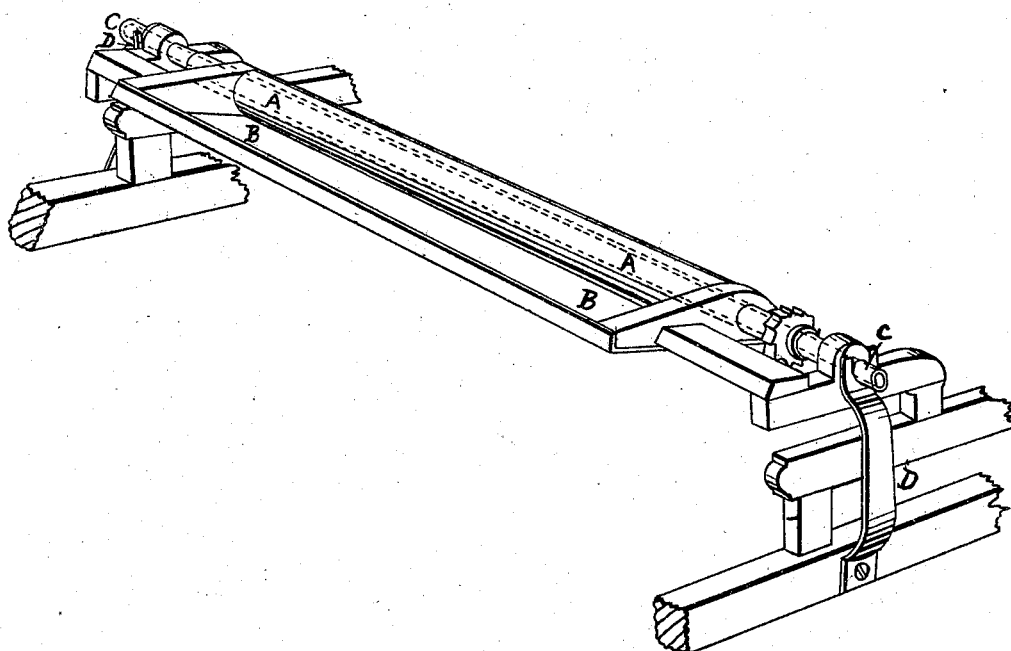


R. M. Hoe.

Inking Apparatus.

N^o 3550.

Patented Apr. 17. 1844



UNITED STATES PATENT OFFICE.

RICHD. M. HOE, OF NEW YORK, N. Y.

INKING-ROLLER.

Specification of Letters Patent No. 3,550, dated April 17, 1844.

To all whom it may concern:

Be it known that I, RICHARD M. HOE, of the city of New York, in the State of New York, civil engineer and machinist, have invented a new and useful Improvement in Apparatus Used for the Inking of Forms by Means of Rollers in Printing-Presses of Various Kinds; and I do hereby declare that the following is a full and exact description thereof.

It is a point of primary importance to be able to distribute the ink readily and evenly on the rollers used for the inking of type, and to transfer the same readily on to the form; and there is much difficulty in doing this with the better kinds of ink, on account of its imperfect fluidity at the ordinary temperature of the atmosphere; this difficulty may, however, be overcome by a moderate elevation of the temperature of the ink. To effect this, I construct the roller that is situated in the trough, or fountain, in such manner as that any desired portion of steam, or of heated air, may be made to pass through it, and thereby to warm the ink upon its surface; such warming being sufficient to give the ink the desired degree of fluidity, without being such as shall unduly heat the composition on that which is intended to distribute it upon the form. The ink may be rendered fluid by communicating heat to the trough containing it, which may be made hollow for that purpose, but I have found that the heating of the fountain roller produces a better effect.

In the accompanying drawing, A, A, is an inking roller, sustained by a suitable

frame in the fountain, or trough, B, B. This roller I make hollow, or tubular, from end to end, and its terminal openings I make conical, so as to fit the conical end of two tubes, C, C, steam-tight, while the roller is allowed to revolve freely. Against flanges, or shoulders, on the pieces, C, C, I allow springs, D, D, to press, which keep said tubes up to their bearings. Steam, or heated air, is to be admitted through one of these tubes, and allowed to escape at the other; the quantity supplied being governed by means of a stop-cock, or some device of a like character.

Having thus, fully described the nature of my improvement, I do hereby declare that I do not claim the forming of a roller hollow, for the purpose of passing steam, or heated air, through it in order to elevate its temperature, this having been frequently done, and for various purposes; but

What I do claim as new, and as constituting a real improvement in the inking apparatus of the printing press, is—

The combining of a hollow roller, to be heated by steam, or otherwise, with the fountain, or ink trough, of such inking apparatus; by means of which improvement, a quality of ink may be used which could not otherwise be employed, and a better kind of work performed than when such roller is allowed to remain at the ordinary temperature of the atmosphere.

RICHD. M. HOE.

Witnesses:

A. J. BOWEN,

THOS. S. HOLLINGSWORTH.