L. G. CHAPUT.

Improvement in Bronzing-Machines.

No. 130,475. Patented Aug. 13, 1872.

Fig. 1.

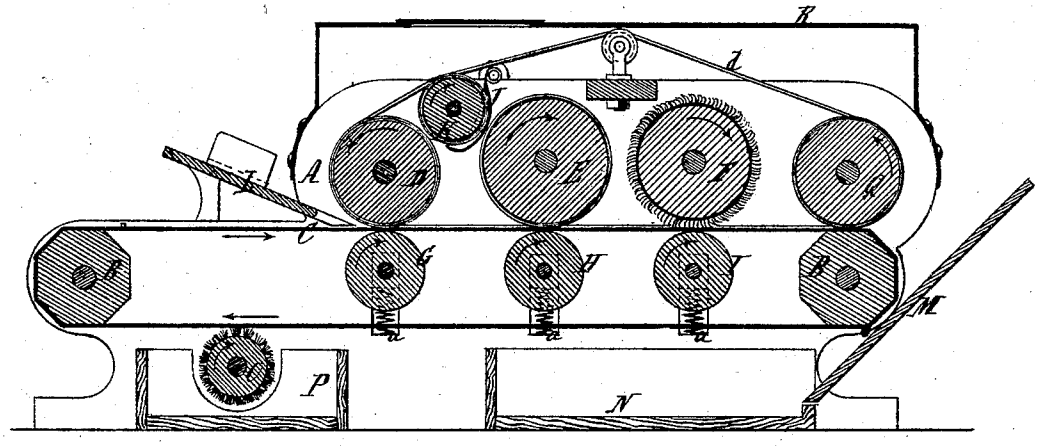
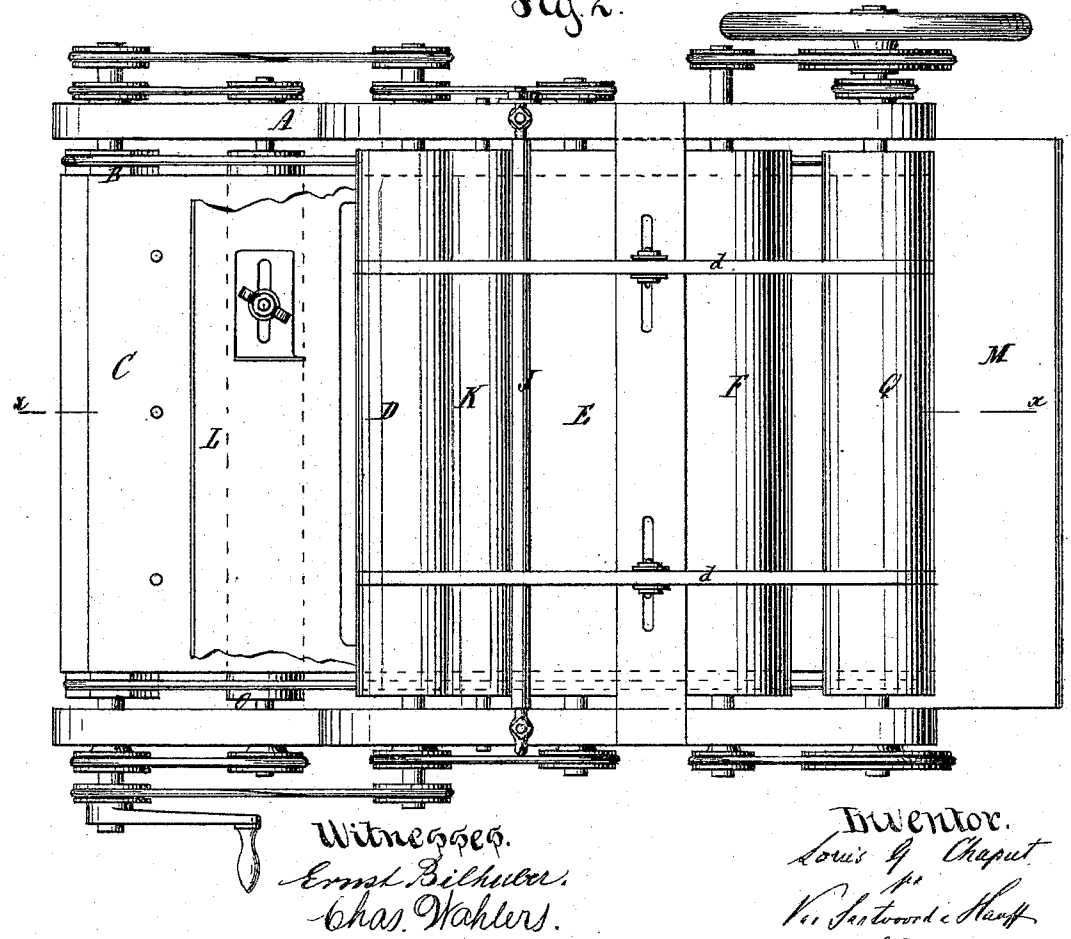


Fig. 2.



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LOUIS GEORGE CHAPUT, OF NEW YORK, N. Y.

IMPROVEMENT IN BRONZING-MACHINES.

Specification forming part of Letters Patent No. 130,475, dated August 13, 1872.

To all whom it may concern:

Be it known that I, LOUIS GEORGE CHAPUT, of the city, county, and State of New York, have invented a new and Improved Bronzing-Machine; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of my invention, the line *x x*, Fig. 2, indicating the plane of section. Fig. 2 is a plan or top view of the same.

Similar letters indicate corresponding parts.

This invention consists in combining with an endless carrying-apron a bronze-reservoir, a bronze-supply, and a bronze-distributing roller, and also a polishing-roller and a cleaning-brush in such a manner that a sheet of paper or other material placed on the apron is brought in successive contact with the bronze-distributing roller, then with the polishing-roller, and, finally, with the cleaning-brush; and by these means the bronze applied to the paper by the distributing-roller is polished, and then the surplus bronze is removed. With said endless carrying-apron is also combined a secondary cleaning-brush to free said apron from any particles of bronze which may have adhered to it.

In the drawing, the letter A designates a frame, which may be made of cast-iron or any other suitable material, and which forms the bearings for the working parts of my machine. In this frame are secured two rollers or drums, B B, round which is stretched an endless apron, C. Above this apron are three rollers, D E F, the upper surface of said apron being held in contact with said rollers by three supporting-rollers, G H I, situated beneath the upper portion of the apron, and forced upward by means of springs *a*, which act on their bearings, (see Fig. 1,) and which also render the supporting-rollers yielding, so that articles of different thickness can be passed through my machine. The roller D is the bronze-distributing roller. It is supplied with bronze from a reservoir, J, by means of a roller, K, which extends into the reservoir and runs in contact with the distributing-roller. The reservoir J may be made adjustable toward or from the supply-roller K, so that this roller will take up more or less bronze, as may be required for different kinds of work. E is the polishing-roller, which revolves in a direction opposite to the distributing-roller and opposite to the motion of the carrying-apron, and the roller F is the cleaning-brush. All these rollers, D, E, and F, are covered with such material that is best adapted for the purpose. The rollers D and E are by preference covered with fur, and the roller F with bristles of wool, hair, or other material.

If a sheet of paper is placed on the apron, which may be provided with stops to bear against the edge of the sheet and compel it to travel forward with the apron, a certain quantity of bronze is transferred to the paper by means of the distributing-roller; those parts of the paper to which the bronze is to adhere being previously moistened with ink, size, or other suitable liquids. As the paper advances the bronze spread on its surface is exposed to the action of the polishing-roller E, and, finally, the brush F removes the surplus bronze, leaving those parts of the paper which have been previously moistened covered with a coat of polished bronze.

When I use my bronzing-machine for cards or other small articles I apply a feed-table, L, at the receiving end, and an inclined board, M, at the discharge end, the latter serving to conduct the bronzed cards into the drawer N. I also use tapes, *d d*, stretched over the roller D and an additional roller, Q, to prevent the paper or cards from adhering to the roller or brush F.

Beneath the apron C is situated a secondary cleaning-brush, O, which serves to remove from said apron such particles of bronze that may adhere to the same, and the bronze scraped off by this brush is received in a drawer, P, whence it can be returned to the bronze-reservoir J.

My machine can be run independent of a printing-press; or, if desired, it may be connected with a printing-press, so that the cards or other articles after having passed through the printing-press are immediately and automatically transferred to my machine.

A hood, R, covers the rollers D, E, F, and Q and prevents the bronze from being scattered about and from being wasted.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with an endless carrying-apron, C, of a bronze-reservoir, J, a supply-roller, K, a distributing-roller, E, and a cleaning-roller, F, substantially as shown and described.

2. The secondary cleaning-brush O in combination with the endless carrying-apron C, reservoir J, and rollers K, D, E, and F, substantially as set forth.

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