A. STEINER.

Bronzing-Machine.

No. 218,077. Patented July 29, 1879

Fig. 1.

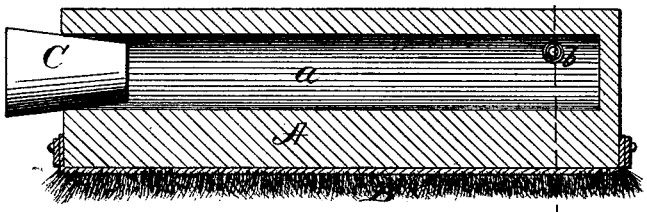


Fig. 3.

Fig. 2.

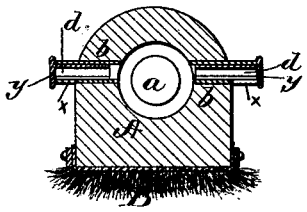
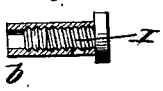


Fig. 4.



WITNESSES

F. L. Ouraud

J. J. McCarthy.

INVENTOR

Albert Steiner

Alexander Mason

ATTORNEYS

UNITED STATES PATENT OFFICE.

ALBERT STEINER, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN BRONZING-MACHINES.

Specification forming part of Letters Patent No. **218,077**, dated July 29, 1879; application filed April 28, 1879.

To all whom it may concern:

Be it known that I, ALBERT STEINER, of Chicago, in the county of Cook, and in the State of Illinois, have invented certain new and useful Improvements in Bronzing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of a bronzing-machine for printers' use, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a longitudinal section of my bronzer. Fig. 2 is a cross-section of the same. Fig. 3 is a detailed view of the valve or regulator, and Fig. 4 is a different form thereof.

A represents a block of wood of any suitable size to serve as a handle or form the body of the bronzer. The bottom of this block or head is first covered or padded with soft thick cloth or felt glued on to make a soft, pliable surface. It is then covered over with fine soft fur B.

In the handle or block A is made a hole, *a*, from one end to within an inch of the other end, to form a receptacle for holding the bronze-powder.

On each side of the handle, at or near the end, is a small hole with a metal regulator connecting with the chamber *a*, with which the supply can be regulated or shut off entirely.

In each of the small holes is inserted a tube, *b*, which projects beyond the handle, and has an opening or slit, *x*, in the bottom, large enough to give a good supply of bronze. Inside of this tube is a movable tube, *d*, with a corresponding slit, *y*, and a head or button on the outer end. By turning this tube *d* so that the two openings will coincide the regulator is opened, and the bronze will pass out.

The bronzer thus constructed is a self-feeder, the bronze being put into the chamber *a*, and said chamber closed by a stopper, C, and the regulator set, when it supplies itself, while the operator brushes the sheet, thus saving time and bronze, as there need be no waste. It raises no dust, the fur gathering up all the bronze that does not stick to the print, thus rendering it unnecessary to brush the sheet a second time to get the loose bronze off.

The bronzer is simple, handy, and not liable to get out of order. Access can be had easily to the inside to clean out or to change bronze, if necessary.

In Fig. 4 I have shown a modification of the valve or regulator, in which the tube *b* is formed with a hole instead of a slit, and a screw, I, is used to open and close said hole, which will answer the same purpose as the slits above described.

I am aware that a bronzer has been made with a yielding or spring pad, so that by a blow or pressure of the pad in the hand of the workman the bronze will pass out along the sides of the pad; and I do not claim such as my invention.

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

1. In a bronzer having a chamber or receptacle, *a*, for the bronze, the regulator, consisting of the stationary tube *b*, with slit *x*, and the movable headed tube *d*, with slit *y*, or their equivalents, substantially as and for the purposes herein set forth.

2. The combination of the head A, having chamber *a*, the fur-pad B, stationary tubes *b*, with slits *x*, and the movable tubes *d*, with slits *y*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of April, 1879.

ALBERT STEINER,

Witnesses:
LEWIS K. STEVENS,
THOS. S. BROWN.