C. M. MULLER.

BRONZING MACHINE.

APPLICATION FILED DEC. 8, 1914.

1,171,627.

Patented Feb. 15, 1916.

2 SHEETS—SHEET 1.

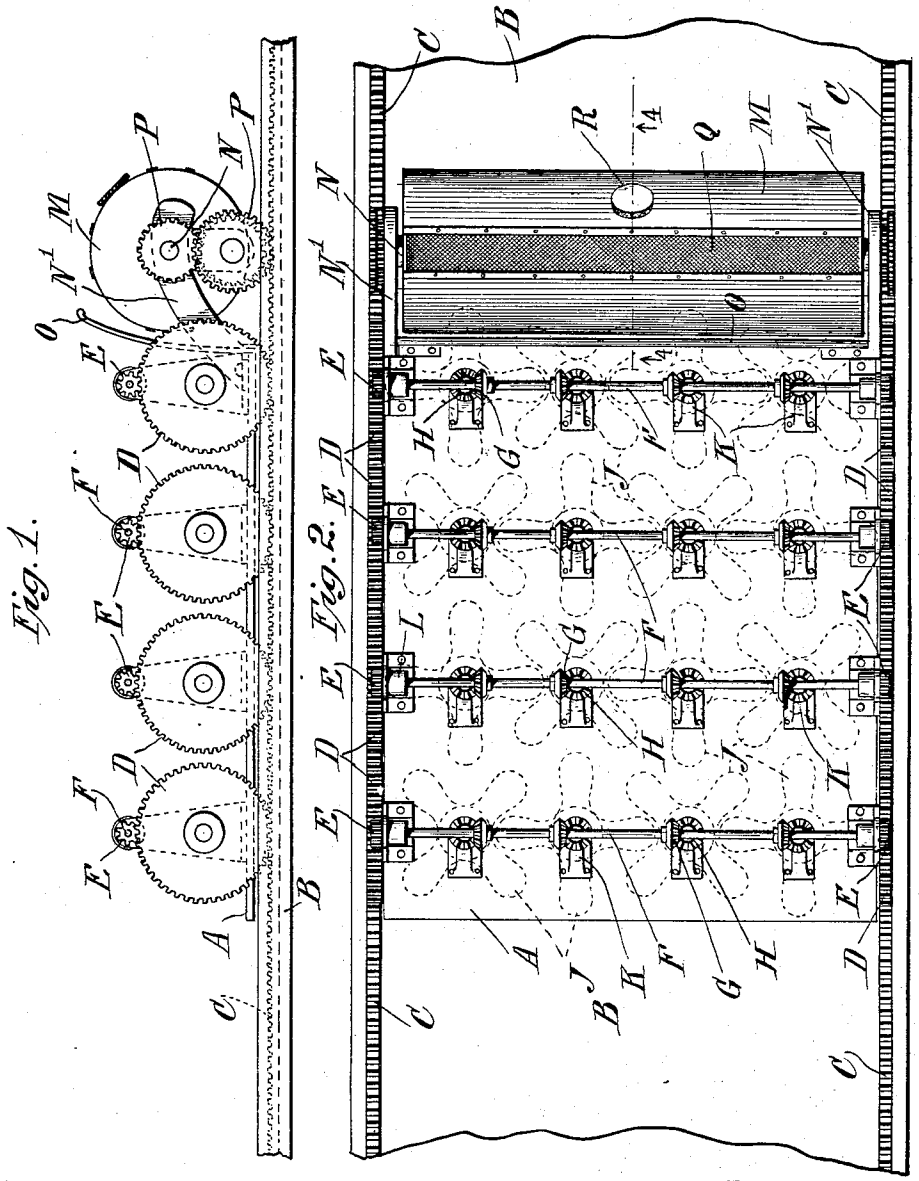


Fig. 1.

Fig. 2.

Attest:

Edward Rempe

Inventor:

Charles M. Muller

by Thurman Bond his Atty

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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2 SHEETS—SHEET 2.

Fig. 3.

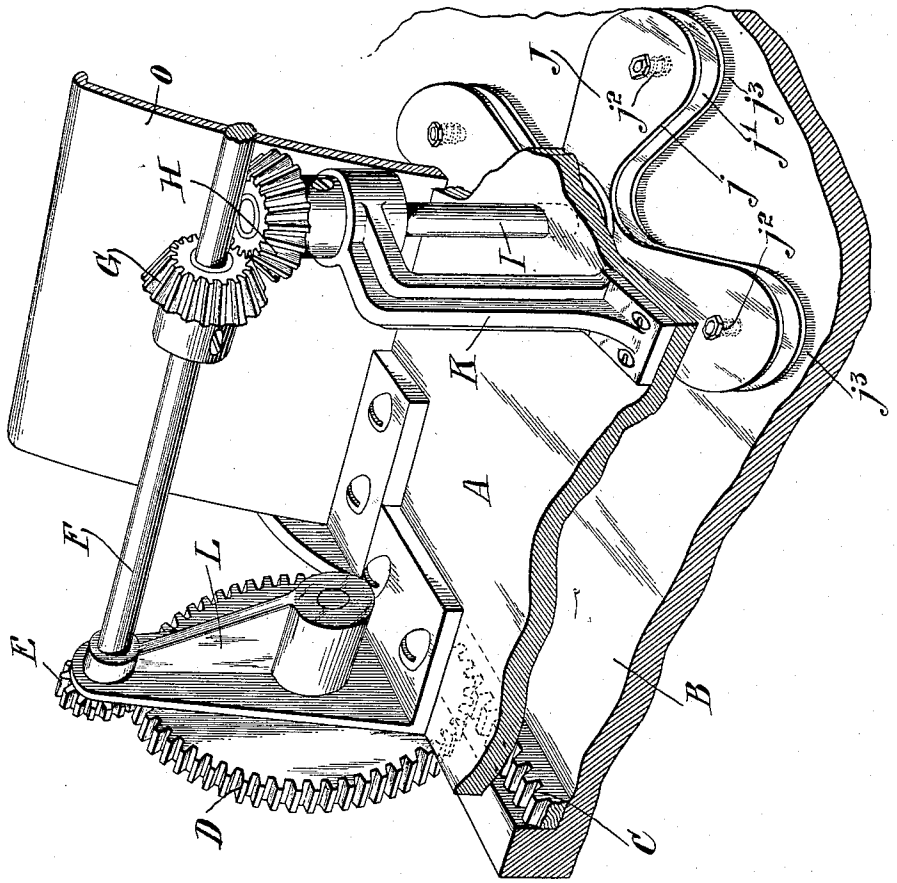
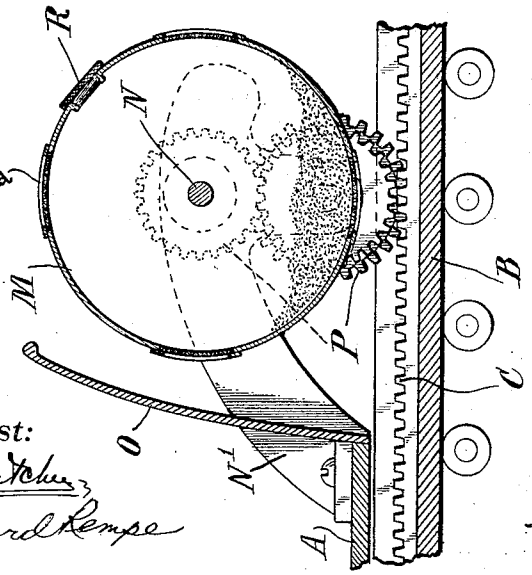


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES M. MULLER, OF NEW YORK, N. Y.

BRONZING-MACHINE.

1,171,627. Specification of Letters Patent. Patented Feb. 15, 1916.

Application filed December 8, 1914. Serial No. 876,019.

To all whom it may concern:

Be it known that I, CHARLES M. MULLER, a citizen of the United States, and resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bronzing-Machines, of which the following is a specification.

The present invention relates to machines for distributing or spreading bronze or gold dust on paper or other fabric on which pictures or other designs have been first printed or otherwise impressed.

For simplicity I will confine the description of my invention to the bronzing of prints on paper. Heretofore this has been accomplished by blowing the gold dust on the print or by machines with revolving disks, both of which are wasteful of the gold dust.

The object of the present invention is to effect an even distribution of the gold dust and in an economical manner. And with this and other objects in view, which will more fully appear as the nature of the invention is better understood, the same consists in the combination, arrangement and construction of parts hereinafter fully described, pointed out in the appended claims and illustrated in the accompanying drawings, it being understood that many changes may be made in the size, proportion and number of the several parts and minor details of construction within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings Figure 1 is a side elevation. Fig. 2 is a plan view of the same. Fig. 3 is a detail perspective view of one of the wipers and actuating mechanism. Fig. 4 is a cross-section on the line 4—4 of Fig. 2.

A represents a platform supporting the mechanism. B a platen on which is laid the paper with the print to be bronzed. C driving racks, secured to the platen, cooperating with cog wheel D of the train of gears D, E for driving the mechanism. Cog E is mounted on the end of horizontal shaft F carrying beveled cogs G meshing with similar cogs H mounted on the vertical shafts I supported by bracket K, the shafts I in turn revolving the brushes or wipers J. These brushes consist of two parts an upper j and lower j' held apart and made adjustable to various thicknesses of the material operated on by springs j^2. The bottom of the lower part j' is covered with felt j^3 or other suitable material for spreading the gold dust and properly rubbing it in. The cog D and shaft F are journaled in bracket L. At the forward end of the machine is located a drum M which contains the gold dust. This drum is mounted on shaft N journaled in brackets N′ secured to platform A. A shield O prevents gold dust being perchance thrown on the platform A instead of onto the paper on the platen. The drum M is revolved by the train of gears P. P. actuated by the rack C. Longitudinally of the drum M are a plurality of screened openings Q through which the gold dust is sprinkled. These openings are constructed so that one or more may be covered when it is desirable to use less gold dust than would be deposited if all were operating. Any one of a number of simple devices may be employed, such as slots on either side of the opening for holding a slide inserted therein. The drum is provided with a port R for filling.

The device may be operated in two ways—either the machine may be moved forward and back, or the platen with the paper may move and the machine remain stationary. It is therefore particularly adapted for use in connection with printing presses for treating paper as it comes off the tail of the press.

As the mechanism is operated in either of the ways mentioned, it will be seen that gold dust is sprinkled thoroughly on the paper rubbed in by the first rows of wipers and any surplus brushed off by the following rows of wipers.

I consider the form of the wipers an important feature of the invention. A wiper consists, as shown, of a plurality of wings and they are so located one to its neighbor in the same line that the wings of one interfit with those of its neighbor on each side. By this interfitting construction, the entire surface is thoroughly covered by each row of wipers, and the gold dust evenly distributed over the subject under treatment by one row after another until the operation of bronzing is complete and the final row of wipers will brush off any surplus dust.

It is quite clear that I am not restricted

to the application of gold dust or bronze, but any powder may be thus distributed.

I claim—

1. In an organization for applying bronze to fabrics, a movable platform having mounted thereon a revoluble dust drum provided with screened discharge ports, and a plurality of revoluble wipers in series, a platen with racks and gears in mesh with said racks actuating said drum and wipers, and means for causing said platform and platen to move back and forth with respect to each other.

2. In an organization for applying bronze to fabrics, a movable platform having mounted thereon a revoluble dust drum provided with screened openings for sprinkling the bronze onto the fabric, and one or more series of revoluble interfitting adjustable wipers, and a platen for holding the fabric under treatment, the same being provided with racks meshing with gears to actuate the dust drum and wipers when the platform is moved along the platen, or vice versa.

CHARLES M. MULLER.

Witnesses:
HARRY FRANK,
ARMAND BOFFA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."