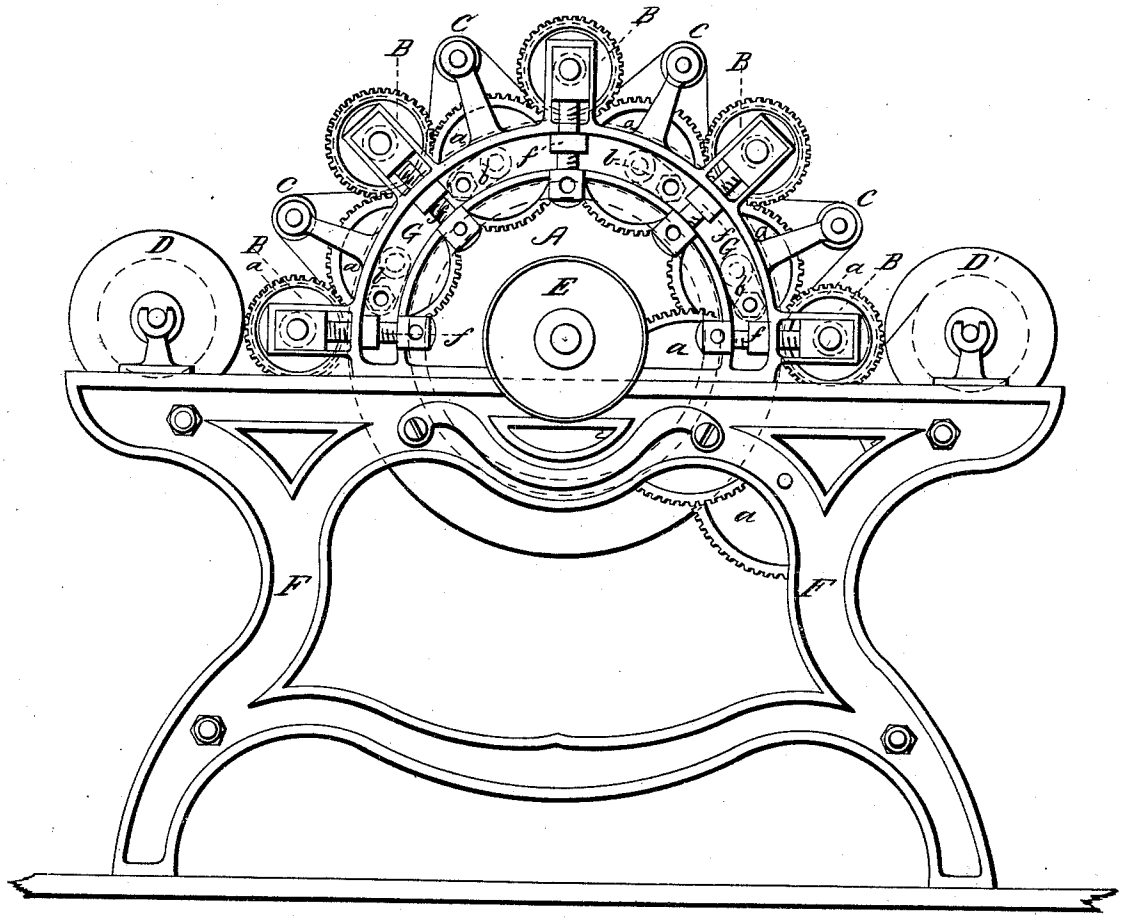
T. Christy Sheet 1, 3 Sheets.

Calendering & Polishing.

No. 86,058. Patented Jan. 19, 1869.

Fig. 1.



Witnesses:

John G. McNary

Samuel S. Constant

Inventor:

Thomas Christy

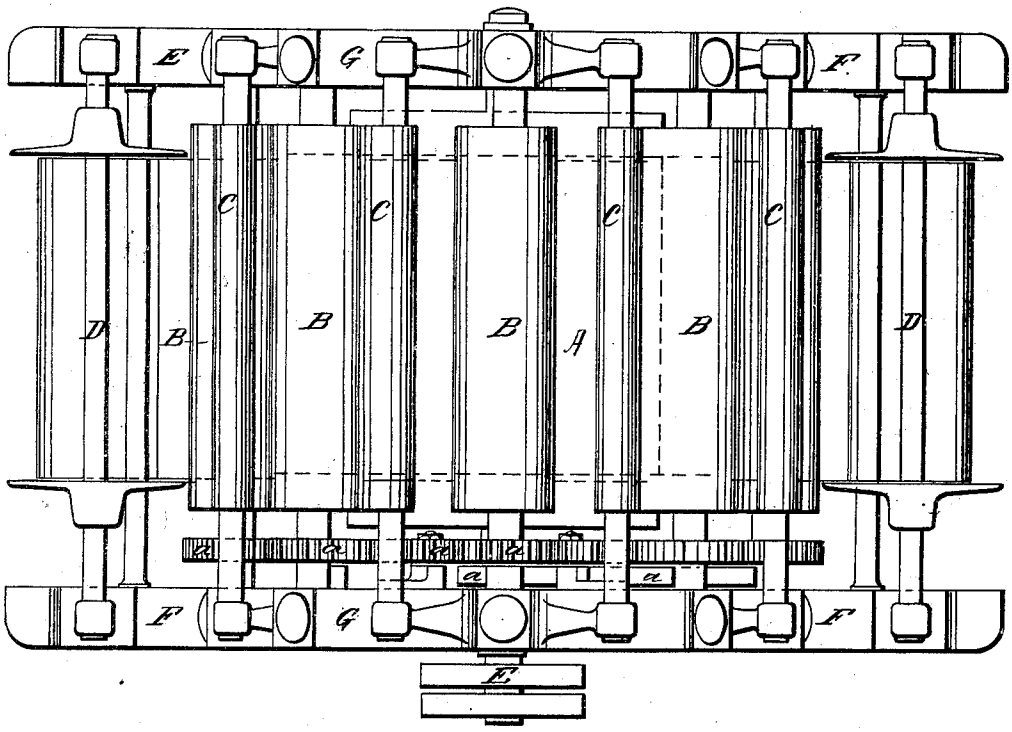
N. PETERS. PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

T. Christy. Sheet 3, 3 Sheets.

Calendering & Polishing.

No. 86,058. Patented Jan. 19, 1869.

Fig. 3.



Witnesses:
John G. McNary.
Samuel S. Constant

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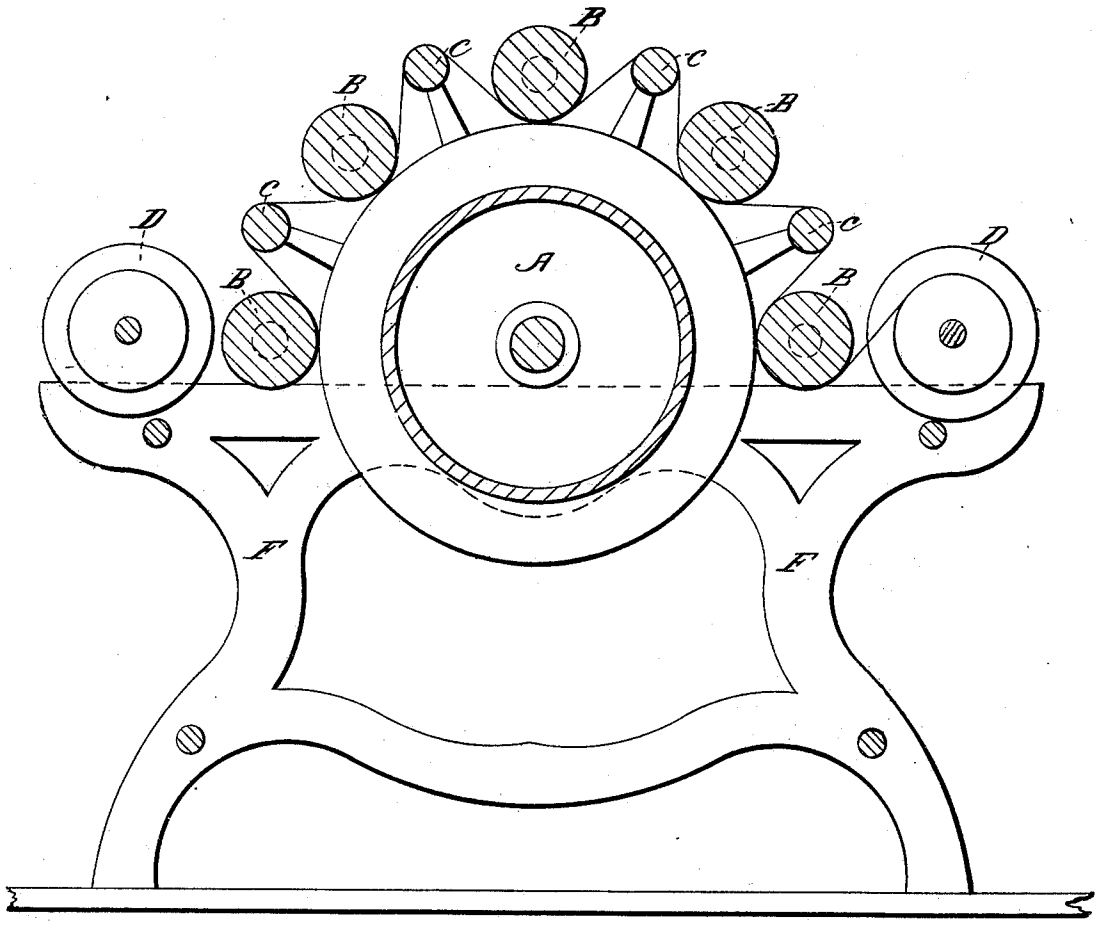
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T. Christy. Sheet 2, 3 Sheets.

Calendering & Polishing.

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Fig. 2.



Witnesses

John G. McNary

Samuel S. Constant

Inventor

Thomas Christy

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United States Patent Office.

THOMAS CHRISTY, OF NEW YORK, N. Y.

Letters Patent No. 86,058, *dated January* 19, 1869.

IMPROVED PAPER-"SATINING" MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS CHRISTY, of the city, county, and State of New York, have invented a new and useful Improvement on "Paper-Satining" Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of this improvement.

Figure 2 is a transverse section of the same.

Figure 3, a plan or top view of the same.

Similar letters of reference indicate like parts.

This improvement relates to a class of machines used for imparting a polish or finish to paper, by means of rotary brushes, and commonly known as "paper-satining machines."

The machine in common use for the purpose, consists of a large central rotating drum, of wood or metal, around which the paper passes. Supported in bearings at intervals, around its upper circumference, are placed several rapidly-revolving brushes, of small diameter, which, being brought to bear upon the paper passing over the central roller, smooth and finish the surface of the same.

My machine effects the operation with greater perfection and speed, and with the expenditure of less power. I employ but one rotating brush, of large diameter.

F and G represent the framing of my machine, which supports the various working-parts thereof.

The paper wound upon the spindle D is passed alternately under and over the rollers B and C, after which t is wound up upon the roller D'.

The rollers B are of polished metal, and serve to press the paper in its onward movement through the machine, against the rotary brush A, which is put into rapid motion by means of a belt on pulley, E, or in any way most convenient.

The rollers B are moved, or held back, by gears *a*, which receive their motion from a small gear-wheel on the shaft of brush A. These rollers move in the same direction as the brush A, but at a less speed, thus retarding the passage of the paper, retaining it longer in contact with the brush A.

The rollers C are loose in their bearings, and are for the purpose of raising the paper from the brush A, after passing under the rollers B.

The spindle D', upon which the paper is wound, after passing through the machine, may be revolved by hand, or by means of pulleys and a belt from the shaft of brush A, in which latter case the tension of the paper may be regulated as desired by a friction-clutch.

The set-screws *f* are for the purpose of adjusting the position of rollers B, thus compensating for the wearing down of the brush A consequent upon use. The intermediate gears between the rollers B are also adjusted by means of the arms B, upon which they are carried.

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

The single central revolving brush A, and the series of pressure-rollers B, which may be loose on their axes, or driven by gears or belts from the central shaft, and the rollers C, arranged and operating substantially as and for the purposes described.

The above specification of my invention signed by me, this 8th day of May, 1868.

THOMAS CHRISTY.

Witnesses:

JOHN G. MCNARY,

SAMUEL S. CONSTANT.