

S. St. J. St. & R. A. Semple,

Polishing Thread.

No. 112,386.

Patented Mar. 7, 1871.

Fig. 1.

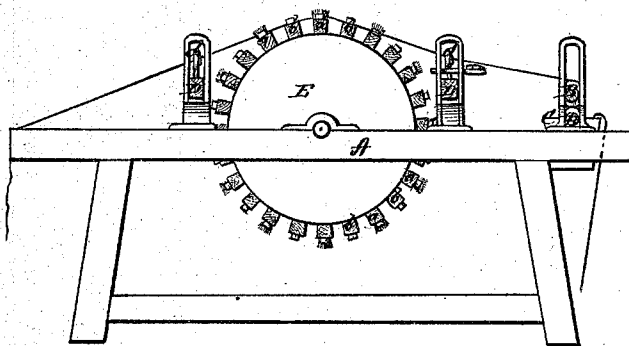


Fig. 2.

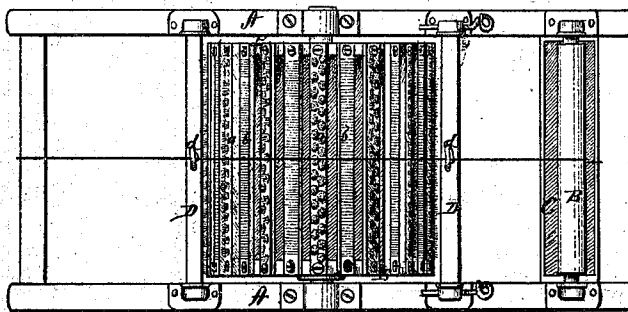
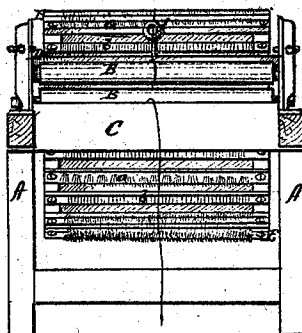


Fig. 3.



Witnesses.

C. A. Levent.
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Inventor

Samuel Semple Sr.; John Semple
Samuel Semple Jr.; Robert A. Semple
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Attys.

United States Patent Office.

SAMUEL SEMPLE, SR., JOHN SEMPLE, SAMUEL SEMPLE, JR., AND ROBERT A. SEMPLE, OF MOUNT HOLLY, NEW JERSEY.

Letters Patent No. 112,386, dated March 7, 1871.

IMPROVEMENT IN MACHINES FOR POLISHING THREAD.

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

To all whom it may concern:

Be it known that we, SAMUEL SEMPLE, Sr., JOHN SEMPLE, SAMUEL SEMPLE, Jr., and ROBERT A. SEMPLE, of Mount Holly, in the county of Burlington and in the State of New Jersey, have invented certain new and useful Improvements in Machines for Polishing Thread; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of our invention consists in the construction of a machine for polishing thread, as will be hereinafter fully set forth.

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

Figure 1 is a side view;

Figure 2, a plan view; and

Figure 3, an end view of our machine.

A represents the frame of our machine, in which the large drying and polishing-cylinder has its bearings and revolves.

At the rear end of the frame A are a pair of rollers, B B, revolving in a sizing-trough, C, and through which the thread passes on its way over the drying and polishing-cylinder.

On each side of this cylinder is placed a cross-bar, D, with guide-wires *d*, the one in front of the cylinder being for the purpose of guiding the thread onto the bobbins, after being dried and polished, by means of friction imparted by the cylinder.

The drying and polishing-cylinder is composed of

two heads, E E, placed a suitable distance apart on a central shaft, which has its bearings in the frame A.

The two heads E E are connected by a series of bars *a a*, placed a suitable distance apart, and secured to the outer periphery of the heads.

These bars are provided with bristles, in any suitable manner, forming regular brushes, extending on the outside from head to head, as shown.

Between the brushes *a a* are, in like manner, secured grooved stationary rollers, or sections of rollers *b b*, made of any suitable material.

The thread is taken from large bobbins at the back of the frame A, where they revolve in a creel holding eighty-four bobbins. The threads are then passed through the sizing-box C, through guide-wires, and over the brush-cylinder, then through the other guide-wires onto a set of bobbins revolving in a frame, taking up the thread as it is delivered.

We do not claim broadly the combination of brushes with grooved rollers, for such we are aware is not new; but

What we do claim, and desire to secure by Letters Patent of the United States, is—

The combination, in a drying and polishing-cylinder, of the brushes *a a* and the grooved rollers or sections of rollers *b b*, constructed as shown, substantially as and for the purpose specified

In testimony that we claim the foregoing we have hereunto set our hands this 12th day of April, 1870.

SAMUEL SEMPLE, Sr.

JOHN SEMPLE.

SAMUEL SEMPLE, Jr.

R. A. SEMPLE.

Witnesses:

PHILIP F. SLACK,

ARTHUR JONES.