J. Brady,

Yarn-Brushing Machine,

No. 108,100, Patented Oct. 11, 1870

Fig. 5

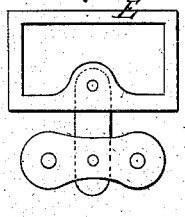


Fig. 1.

Fig. 2.

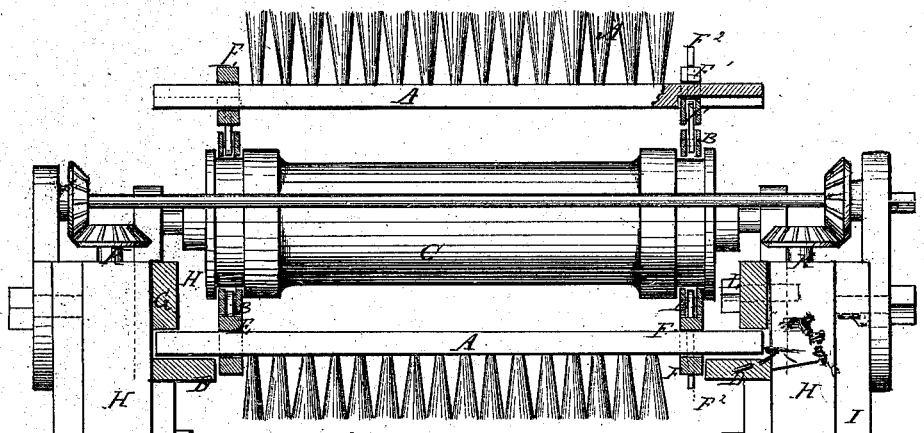


Fig. 3

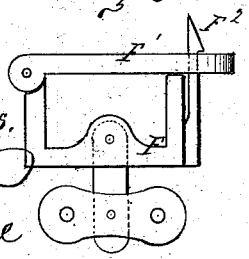
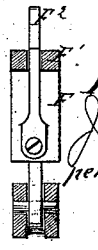


Fig. 4.



Witnesses.

Chas. Nida.

S. S. Mable

Inventor:

J. Brady

per

Attorneys.

United States Patent Office.

JOHN BRADY, OF FALL RIVER, MASSACHUSETTS.

Letters Patent No. 108,100, dated October 11, 1870.

IMPROVEMENT IN MACHINES FOR BRUSHING YARN.

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, JOHN BRADY, of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and improved Machine for Brushing Yarn; 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 drawing forming part of this specification.

Figure 1 is a side elevation of my improved machine as applied to a slasher, the latter being shown in dotted lines.

Figure 2 is a cross-section on the line $x\,x$ of fig. 1.

Figure 3 is a side view of the device used for attaching the brushes to the endless chain.

Figure 4 is a cross-section of fig. 3.

Figure 5 is a side view of the yoke used in connection with the device shown in figs. 3 and 4, for attaching the brush.

Similar letters of reference indicate corresponding parts.

I propose to employ two or more brushes, A, endless chains, B, and rollers, C, in connection with the slasher, dresser, or thread-polishing machine for brushing and polishing the yarn, instead of the rotary or reciprocating brushes now used; the object of this arrangement being mainly to avoid as much as possible the effects of the brushes as at present arranged in striking the yarn when coming down to it, and carrying it up when leaving it, by which it is broken or strained, and fibers are detached from it.

The said brushes are caused to move along the thread a considerable distance after coming in contact with it, and they may be arranged at the side where they move down to it, so as to approach it gradually, thereby avoiding the sudden shocks due to the rotary brushes, or the reciprocating ones.

The ends of the brushes are caused to run along supporting bars, D, which prevent them from pressing too hard on the yarn by the sagging of the chains.

For attaching the brushes and detaching them readily I propose to employ the yokes E, attached to the chain at one side, for inserting the end of the brush, and the yoke F on the other, having the hinged bar F^1 and spring catch F^2, into which yoke the bar may be forced, and from which it may be readily released by forcing the spring back and releasing the bar F^1.

I propose to mount the supports G of the endless belts and rollers on vertically-adjustable blocks H, supported on suitable standards, I, or other supports rising up from the frame of the slasher or other machine, and provided with screw-shafts, K, or other suitable means for raising or lowering them to adjust the brushes relatively to the yarn; also, to raise them laterally above the yarn when required.

I also propose to mount the supports of the endless chains so that they can be tilted to vary the pitch or inclination with the yarn; for instance, they may be placed on pivots, L, which, being unscrewed, will allow them to be adjusted, and will hold them when screwed up again.

Having thus described my invention,

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

1. The guiding bars D, combined with the brushes A A, traveling on endless chains B B, for the purpose of preventing undue pressure, as described.

2. The yokes E F, spring catch F^2, and bar F^1, combined, as described, for readily attaching and detaching the brushes.

3. The brush-carrying apparatus mounted on supports having vertical adjustment, substantially as specified.

4. The said brush-carrying apparatus, arranged substantially in the manner described, for tilting, to vary the pitch, substantially as specified.

The above specification of my invention signed by me this 19th day of July, 1870.

JOHN BRADY.

Witnesses:

GEO. W. MABEE,

T. B. MOSHER.