

J. CUMNOCK.
MACHINES FOR WARPING YARN.

No. 192,571.

Patented July 3, 1877.

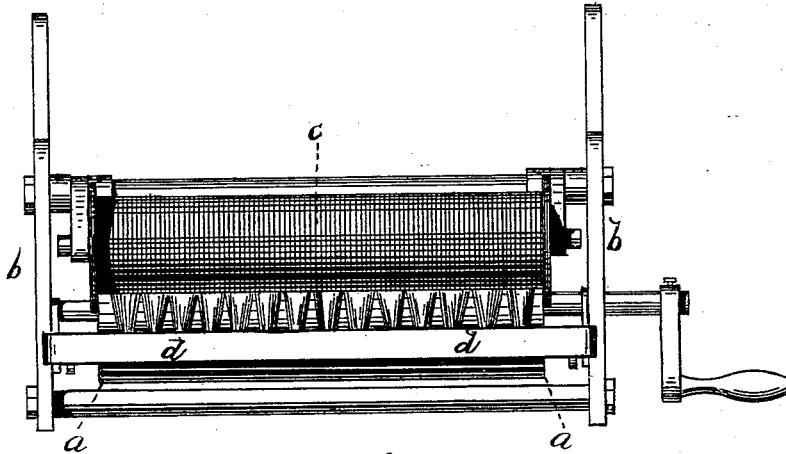


FIG. 1.

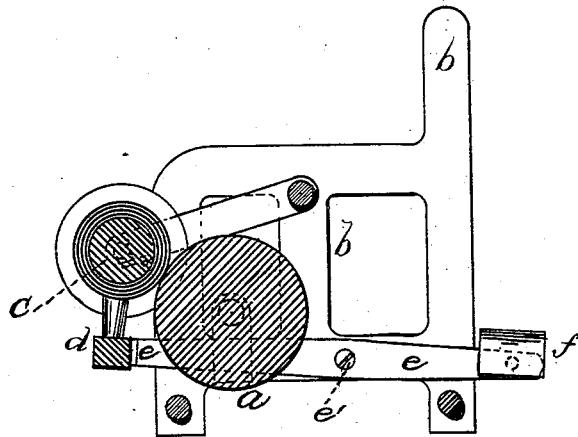


FIG. 2.

WITNESSES

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JOHN CUMNOCK, OF GREAT FALLS, NEW HAMPSHIRE.

IMPROVEMENT IN MACHINES FOR WARPING YARNS.

Specification forming part of Letters Patent No. **192,571**, dated July 3, 1877; application filed February 6, 1877.

To all whom it may concern:

Be it known that I, JOHN CUMNOCK, of Great Falls, in the county of Strafford and State of New Hampshire, have invented a new and useful Improvement in Machine for Warping Yarn, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a front elevation of a machine for warping yarn embodying my invention, and Fig. 2 is a vertical section of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish a device for cleaning the leaf, motes, &c., from the yarn while being wound onto or off from section-beams. The device might be applied to a slasher or similar machine, but it is particularly intended for a warper.

The invention consists in the application of a brush or similar article to the surface of the yarn upon the beam, as illustrated in the drawing. This brush is so applied as to press against the surface of the yarn upon the beam while the latter is in revolution. By this means each fresh layer of the yarn is subjected, as it is wound upon the beam, to the action of the brush.

a represents the cylinder, *b* a frame in bearings, in which its journals rest, and *c* the beam upon which the yarn is wound, all constructed as usual.

d represents the brush above mentioned, which presses upon the yarn on the beam *c*. Levers *e*, pivoted at *e'*, extend back from each end of said brush, and, being provided with weights *f* at their farther ends, keep the brush *d* continually pressed against the beam.

In practical operation the brush removes a large amount of objectionable matter from the yarn before sizing, which might by that process be made to adhere to it until woven into the cloth. These motes are, some of them, of such a character, that, when sized, they cause the yarn to break in weaving; hence, the importance of a device for removing them in season.

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

In a warping-machine, the combination of the frame *b*, weighted lever *e*, and brush *d*, or similar device connected thereto, the several parts being arranged as described, whereby the leaf, motes, &c., are removed from the yarn as it is being wound upon or unwound from the beam *c*, substantially as described.

JOHN CUMNOCK.

Witnesses:

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