

P. LAFLIN.

Bobbins for Spinning-Machines.

No. 142,245.

Patented August 26, 1873.

Fig. 2.



Fig. 3.

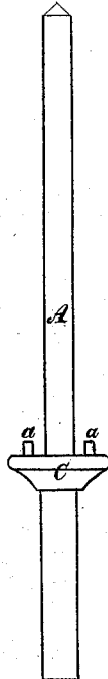


Fig. 1.

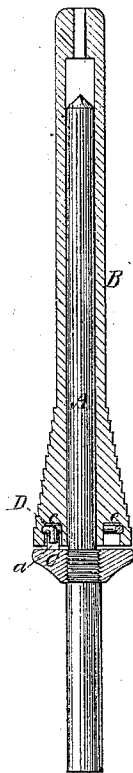


Fig. 4.

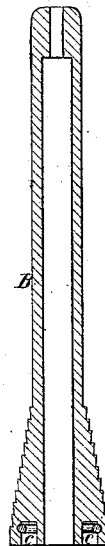


Fig. 5.

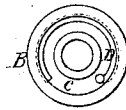


Fig. 6.



Fig. 7.



Witnesses.

S. W. Piper.
L. N. Hooper.

Perley Laflin

by his attorney.

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UNITED STATES PATENT OFFICE.

PERLEY LAFLIN, OF WARREN, ASSIGNOR TO GEORGE DRAPER, OF HOPE-DALE, MASSACHUSETTS.

IMPROVEMENT IN BOBBINS FOR SPINNING-MACHINES.

Specification forming part of Letters Patent No. 142,245, dated August 26, 1873; application filed June 2, 1873.

To all whom it may concern:

Be it known that I, PERLEY LAFLIN, of Warren, of the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in the Bobbins and Spindles of Spinning-Machines; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a vertical section of a bobbin and spindle provided with my invention. Fig. 2 is a top view, and Fig. 3 a side elevation, of the spindle. Fig. 4 is a vertical section of the bobbin. Fig. 5 is a view of the lower end of the bobbin. Fig. 6 is a perspective representation of one form of the yielding stop arranged in the circular groove of the base of the bobbin. Fig. 7 is another such representation of another form of it.

In the drawings, A denotes the spindle, and B the bobbin, C being the part on which the bobbin usually rests. Such part, C, has usually been provided with one or more studs, *a a*, to enter a circular groove made in the base of the bobbin, such groove being furnished with one or more similar studs to co-operate with those of the part C. In consequence of such studs being rigidly fixed in the bobbin and extended up into it, the blows to which they are subjected by their fellow studs, especially in stopping or starting the spinning-machine, are very liable to cause the bobbin to be split or broken at or in the head. Other injurious consequences are liable to result, especially the throwing up or rising of the bobbin on the spindle.

In carrying out my invention or improvement, I employ with the bobbin a yielding stud, substantially as herein described, such as will hold the bobbin sufficiently to the spindle for the latter to revolve the bobbin for tak-

ing up the yarn, and still yield or give away under any sudden or undue strain, so as to allow the bobbin to turn on the spindle. To this end, and as one mode of carrying out my invention, I arrange in the groove *c*, in the base of the bobbin, a circularly-curved wire or elastic spring, D, which, at either or each end, may be bent outward at a right angle, as shown, so as to constitute a shoulder or stud. This wire, which I term a yielding stop, has its outer periphery sprung into close contact with the periphery of the groove, which may be channeled to receive it. The spindle or the bobbin seat C thereof I furnish, as usual, with one or two studs, *a a*, rigidly fixed to it.

It will readily be seen that, under sudden starting or stopping of the spinning-machine, and under strain on the elastic spring or curved wire D, the latter will give way or yield, and in so doing not split or break the bobbin.

Instead of the groove, with the yielding stop D, being arranged in the bobbin-base, a rigid stop may be projected therefrom to co-operate with a yielding stop, such as above described, applied to the spindle or the seat C thereof, which, for such purpose, may be grooved and the stop be arranged in the groove, in manner similar to the bobbin shown in Figs. 1 and 4.

I claim—

The yielding stop D, substantially as described, applied to the bobbin B, or to the stationary bobbin-seat C fixed to the spindle, all being and operating essentially as specified.

PERLEY ^{his} X LAFLIN.
mark.

Witnesses:

GEO. T. HILL, Jr.,
G. H. CONEX.