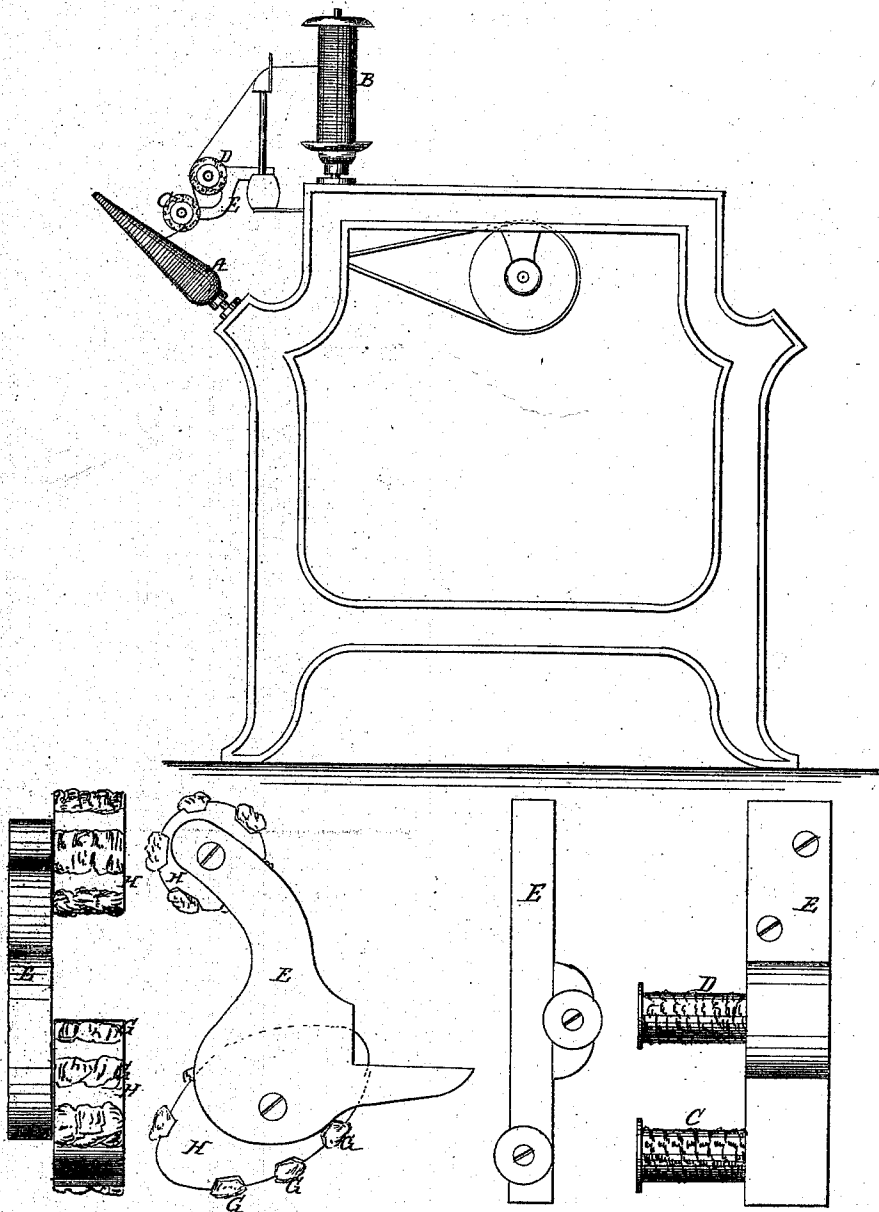


*G. Jaquith,
Yarn Dresser.*

No. 112,600.

Patented Mar. 14, 1871.



Witnesses:

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GILMAN JAQUITH, OF WEST CONCORD, MASSACHUSETTS.

Letters Patent No. 112,600, dated March 14, 1871.

IMPROVEMENT IN MACHINES FOR DRESSING YARN OR 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 I, GILMAN JAQUITH, of West Concord, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Machines for Dressing Yarn or Thread; 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.

This invention relates to an improved means of dressing yarn to remove the foul matter incorporated with it in working it up from the cotton, and consists in the application, preferably to the spooler, when the yarn is all handled by separate threads, of corn-cobs in a way to cause the threads to be drawn over the roughened surface to separate the foul matter. I propose to use the cobs also in all other applications in which it may be useful in dressing yarn.

Figure 1 represents some of the parts of a spooler in elevation, showing one application of the corn-cobs.

Figures 2 and 3 are front and side elevations of a bracket having cobs applied to it, and adapted to be attached to the traversing guide-rail; and

Figures 4 and 5 show modifications of the manner of attaching the cobs.

Similar letters of reference indicate corresponding parts.

A is the bobbin;

B, the spool on which the yarn is to be wound; and

O D are the corn-cobs, over which the yarn is passed, so as to be scraped and dressed by them on all sides. Any other preferred or suitable arrangement of the cobs may be used, and they may be applied to any other machine used in the manufacture of or for dressing thread.

The cobs may be supported on a bracket, E, attached to the guide-rail, and arranged so that the thread passes over one and under the other.

The cobs may be split into small strips, G, and attached to holders, H, by glueing them into notches in the faces of said holders, from which they may be readily detached when worn out and replaced by fresh pieces. These holders may be large enough to hold many pieces of cob, and fitted so as to be adjusted on their supports from time to time, to bring new pieces into action as others become worn out.

When the cobs or sections thereof are used they may be arranged on center supports, which will admit them to be turned from time to time, as shown in figs. 4 and 5.

In the process of manufacturing cloth there has

always been experienced a difficulty arising from the foreign substances in the raw fibrous cotton.

To obviate the evil there have been various machines constructed, such as the cotton-gin, millows, pickers, dirt-boxes, &c., but, after all, there is a kind of light substance, which I am unable to describe, that passes through all of the processes and becomes partially incorporated with the thread. This incorporation is consummated on the spinning when the twist is first put into the yarn, and then wound onto the bobbin.

The next operation is to spool the yarn from the bobbin onto the spools, which hold about ten times as much yarn as the bobbins. During this spooling process there is considerable of this dirt rattles off. In this last process the yarn is all handled by separate threads, so that if one thread breaks there is but one thread stopped.

The next process is to warp it. Here there are all the way from one hundred and seventy to three hundred threads run onto one beam, so that if a thread breaks in this process it stops from one hundred and seventy to three hundred threads, as the case may be. The beams so formed on the warper, and which are called, after being fitted, section beams, are then put onto the dresser, and eight of these beams run into one, called the center beam, so that if a thread breaks here or a stoppage occurs, there are stopped from one thousand three hundred and sixty to two thousand four hundred threads.

It is during this dressing process that the yarn is sized by the application of a glutinous substance made mostly of starch. By this sizing process the yarn is made hard, and the small items of foreign substances attached to the thread become hard and somewhat sharp. The center beam thus sized is ready for the loom, after having been drawn into the harness and reed.

Here comes the great evil. Every time the harness is sprung one half of the threads are raised up and the other half down, so as to leave a space of about two and one-half or three inches for the shuttle to pass through with the filling. These threads, being in such close proximity to each other, frequently catch each other by means of these hard little bunches or blighted seeds on the yarn, and thus cause such a strain as to break the thread; or, if it does not break the thread, it causes a drawn or sort of cockled place in the cloth. I believe that if the breaks arising from this source could be obviated the production of the looms would be increased ten per cent.

The object of my invention is to take this foreign matter out on the spooler when the yarn is all handled by separate threads, and a single breakage-stop put

on the thread, and this I propose to accomplish by the use of the cobs herein described, which I have found by practical test to be far the best substance for the purpose yet discovered.

The tough, hard, and rough exterior of the cob resists the wearing or cutting of the thread when drawn over it, and retains its sharpness, by which it removes the lumps of dirt for a great length of time, much longer than any other substance.

Having thus described my invention,

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

The combination of corn-cobs with spooling or other machines used in the manufacture of thread for trimming and dressing it, substantially in the manner described.

GILMAN JAQUITH.

Witnesses:

JOSEPH REYNOLDS,
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