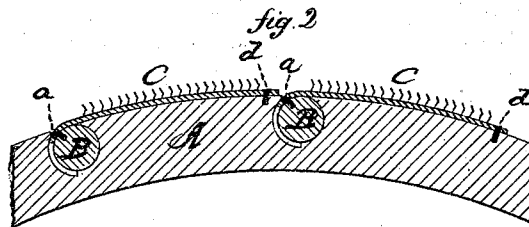
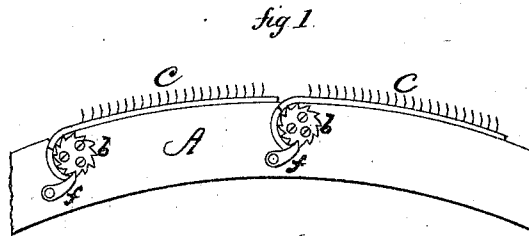


HARRISON BENNETT.

Improvement in Means for Securing the Clothing on Carding Machine Cylinders.

No. 120,615:

Patented Nov. 7, 1871.



Witnesses

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UNITED STATES PATENT OFFICE.

HARRISON BENNETT, OF WATERBURY, CONNECTICUT.

IMPROVEMENT IN MEANS FOR SECURING THE CLOTHING ON CARDING-MACHINE CYLINDERS.

Specification forming part of Letters Patent No. 120,615, dated November 7, 1871.

To all whom it may concern:

Be it known that I, HARRISON BENNETT, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Carding-Machines; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents in—

Figure 1 a side view of the segment of a cylinder, and in Fig. 2 a transverse section of the same.

This invention relates to an improvement in the manner of securing clothing to the cylinder. Heretofore where this has been done by nailing the edges of the clothing to the surface of the cylinder and straining the clothing there was great liability to injure the teeth by the slipping of the stretching-clamp or by accidental blows of the hammer or otherwise; and when, from use or other causes, the leather of the clothing became slackened the nails had to be loosened and the clothing stretched and renailed, which is a laborious and expensive process. To overcome these difficulties is the object of my invention, which consists in the arrangement of a shaft or shafts in a recess below or flush with the surface of the cylinder to which one edge of the clothing is attached, the other edge being secured by fixed hooks in the cylinder, and the said shaft or shafts provided with a ratchet, so that by the turning of the shaft or shafts the clothing may be drawn tight and the ratchet or equivalent device hold the clothing thus drawn, one of the said shafts being arranged for each sheet upon the cylinder.

A represents the segment of a cylinder of an ordinary carding-machine. Longitudinally in the surface of the said cylinder, and so as to be nearly flush with the surface, I arrange shafts B, distant from each other about the width of

each sheet, C representing the sheets. These shafts are fitted and supported in proper bearings in the cylinder, and provided with hooks *a*, represented in solid black. *d* are similar hooks fixed in the surface of the said cylinder.

On the said hooks *d* one edge of the sheet is placed by being previously perforated corresponding to the hooks *d*, and the other edge, perforated corresponding to the hooks on the shaft B, is in like manner attached to the shaft. Then by turning the said shaft to wind the sheet onto the shaft, (a recess being formed in the cylinder to allow the sheet to pass therein, as in Fig. 2,) the sheet is drawn tight and is held by a ratchet, *b*, and pawl, *f*, or by any equivalent device. Hence whenever, from any cause, it is desirable to tighten the sheet it is only necessary to turn the shaft B to which the sheet is attached, and when tightened to secure the shaft. The sheet is loosened by a reverse operation, and may be removed or replaced without the use of a hammer, and thus avoid all liability to injure the clothing. By preference I provide one of these shafts for every sheet, so that each sheet may be under the control of an independent straining device. It will be understood that these shafts, by preference extend through the length of the cylinder, and the mechanism for turning the shaft may be a wrench or any suitable device to give the required power.

I claim as my invention—

The combination, with the cylinder of a carding-machine, of the shafts B, arranged in recesses in said cylinder, and each provided with hooks *a* and with a holding-mechanism, so that by turning the said shafts the sheets attached thereto may be drawn and held tightly upon the cylinder, substantially as described.

HARRISON BENNETT.

Witnesses:

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(28)