

G. Thresh, *Carding Mach.*

No. 107,204.

Patented Sept. 6, 1870.

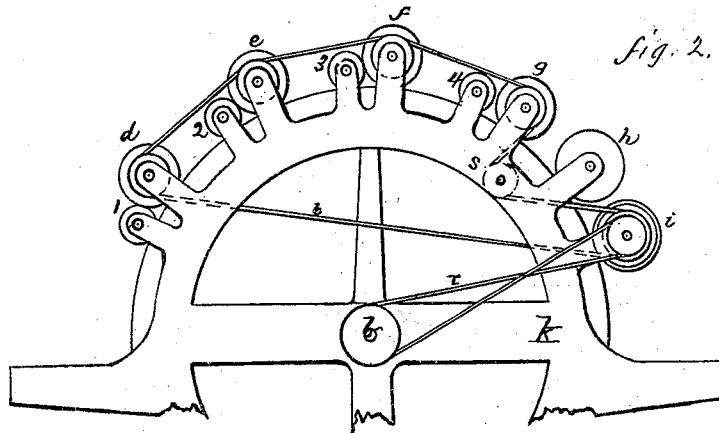


fig. 2.

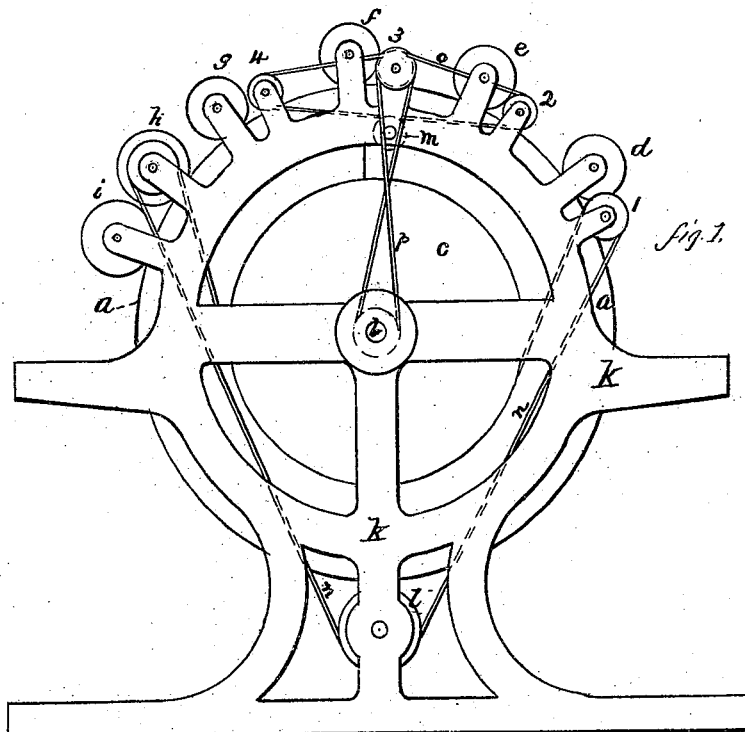


fig. 1.

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GEORGE THRESH, OF OXFORD, MAINE, ASSIGNOR TO HIMSELF AND JONATHAN ROBERTS, OF SAME PLACE.

Letters Patent No. 107,204, dated September 6, 1870.

IMPROVEMENT IN CARDING-MACHINES.

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, GEORGE THRESH, of Oxford, in the county of Oxford and State of Maine, have invented a new and useful improved Carding-Machine; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others to make and use my invention, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 shows a view of one end of my machine.

Figure 2 shows a view of the operating parts of the opposite end of the same.

My invention relates to such a regulation of the speed of revolution of the strippers in a carding-machine, as to effect an improvement in the wool, when spun into yarn, and, consequently, in the web of the cloth produced therefrom, thus avoiding certain objectionable features which are sometimes found in the yarn as at present carded, which features, it is thought, are the result of the method at present in common use; and

It consists in a certain arrangement of bands, to impart motion to the strippers and workers, and certain means of deriving the motion of the workers and strippers, by which means the different velocity thereof is obtained.

In the accompanying drawing—

a shows the drum;

b, the main shaft;

c, the drum-pulley;

1, 2, 3, and 4 show the strippers; and

d, *e*, *f*, *g*, *h*, and *i* the workers.

k, the frame that supports the drum-workers and strippers, as usual.

l and *m* are box-pulleys thereon.

The stripper 1, where the wool is first taken from the feeders, revolves at the ordinary speed, and is rotated by means of the band *n* passing over a pulley on one end of said stripper, around the box-pulley *l*, up over the pulley on the end of the roller *h*, and then half around and under the drum-pulley *c*.

The next stripper, 2, is the first in order that has the slower revolution, and this is moved by the band *o*, passing around the pulley on one end thereof, over a pulley on the end of the stripper 3, and around a pulley on the end of the stripper 4, thence over the box-pulley *m*, and back to stripper 2.

Motion is communicated to this band *o* by means

of a cross-band, *p*, passing around a small pulley on the shaft *b*, which motion, by means of the said band *o*, is communicated to the two strippers, 2 and 4, the said band *p* also passing over a pulley on one end of the stripper 3.

The opposite end of the machine is illustrated by fig. 2. Motion is first derived on this side by a cross-band, *r*, passing around a pulley on the end of the shaft *b*, and thence around a small pulley on the end of the roller *i*.

Another runs partially around the box-pulley *s*, inside of the frame of the machine, and then up over pulleys on the ends of the workers *g*, *f*, *e*, and *d*, and thence back around the pulley *i* on the end of the roller.

Thus motion is imparted to all of the workers except *h*, which has been previously described.

It will be observed, from the manner in which their revolution is produced, that the motion of 2, 3, and 4 (fig. 1) is slower than that of 1 or the worker *h*, and slower also than the other of the rollers, the method of producing the motion of which is shown in fig. 2.

The object of imparting the slower motion to the strippers 2, 3, and 4 is this:

With the old form, where they revolved with speed equal to that of the other rollers, the wool was pulled off and removed so hastily from the drum *a* that the fibers thereof were broken, the effect of which appeared in the form of lumps or knobs in the yarn and in the cloth.

With my arrangement that effect is avoided, and the difference is seen in the smooth and uniform appearance of the yarns, and a consequent improvement in the surface of the cloth.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination and arrangement of the strippers 2, 3, and 4, band *o*, box-pulley *m*, cross-band *p*, and pulley on the shaft *b*, with the drum *a*, as herein described.

2. The arrangement of the pulley on the shaft *b*, cross-band *r*, band *t*, box-pulley *s*, and workers *i g f e d*, with their pulleys, as described.

GEORGE THRESH.

Witnesses:

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