

A. A. Hawley
Cleaning Card Cylinders.
N^o 49,679. Patented Aug. 29, 1865.

Fig: 1.

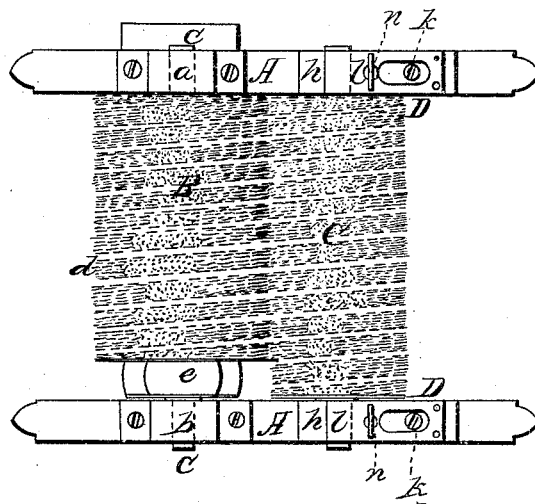
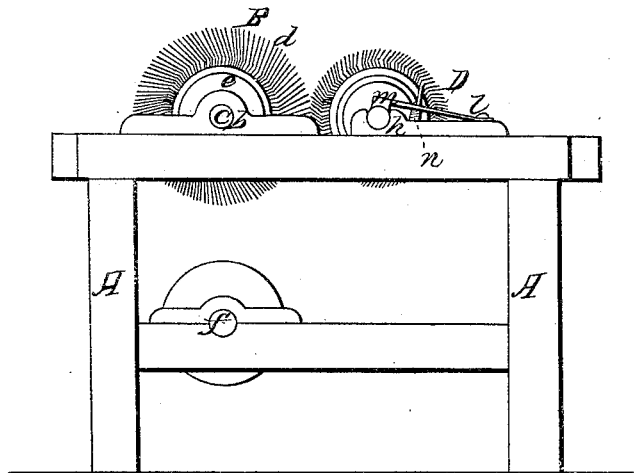


Fig: 2.



Witnesses:

A. D. Hale Jr
L. H. Washburn

Inventor:
Alfred A. Hawley

by his attorney
R. H. Eddy

UNITED STATES PATENT OFFICE.

ALFRED A. HAWLEY, OF METHUEN, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND ROBT. B. HAWLEY, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR CLEANING CARDING-CYLINDERS.

Specification forming part of Letters Patent No. 49,679, dated August 29, 1865.

To all whom it may concern:

Be it known that I, ALFRED A. HAWLEY, of Methuen, in the county of Essex and State of Massachusetts, have invented a new and useful Machine for Cleaning Card-Cylinders; and I 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 top view, and Fig. 2 a side elevation, of it.

In the said drawings, A denotes the frame of the machine, in which are two stationary boxes, *a b*, for supporting the journals *c c* of a rotary cylindrical clearer or brush, B, which consists mainly of a cylinder or drum covered on its external curved surface with card-clothing *d*, the teeth of which are made of a length about double that of those of the cylinders to be cleaned.

There is a pulley, *e*, on the shaft of the brush B. Around the said pulley and another on a driving-shaft, *f*, an endless belt passes, the same being to put the brush in revolution when the said shaft *f* is in rotation.

Two adjustable boxes, *h h*, are arranged on the top of the frame in positions as shown in Fig. 1, each of the said boxes *h h* being movable either toward or away from the next adjacent stationary box *a* or *b*, and being provided with a set-screw, *k*, by which it may be fixed in position. Furthermore, there is applied to either or to each of the said boxes a friction-brake, D, consisting of a spring, *l*, a rubber, *m*, and a screw, *n*, the said screw going down through the spring and being screwed into the box. One end of the spring is fastened to the box, the rubber at the other end of the spring resting on one of the journals of the cylinder *c* to be cleansed, such cylinder,

preparatory to being cleansed, having its journals placed in the adjustable boxes, and they being adjusted so as to bring its teeth into proper contact with those of the cleansing-brush. While the said cleansing-brush B is in rapid revolution its teeth will engage with those of the cylinder C and put it in revolution. By means of friction applied to either or both of the journals of the cylinder C, through the friction brake or brakes thereof, the velocity of the curved surface of the cylinder C may be more or less retarded relatively to that of the brush. Thus the rotary brush, while revolving the cylinder to be cleansed, will move from its card-clothing nearly, if not quite, all the extraneous matters contained therein, whether they be fibers of wool or other material or materials.

I am aware that it is not new in carding-machines to run two cylinders at different speeds and so that one may strip or remove a fibrous material from the other, in which case one is not revolved by the action of its teeth against those of the other, but by separate means.

In my machine or invention the brush-cylinder not only revolves the card-cylinder to be cleansed, but at the same time cleanses it, the speed of the said card-cylinder being diminished by the action of the friction-brake. Therefore

What I claim as my invention for cleansing card-cylinders is—

The machine constructed substantially in manner and so as to operate as hereinbefore described.

ALFRED A. HAWLEY.

Witnesses:

WM. C. BINNEY,
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