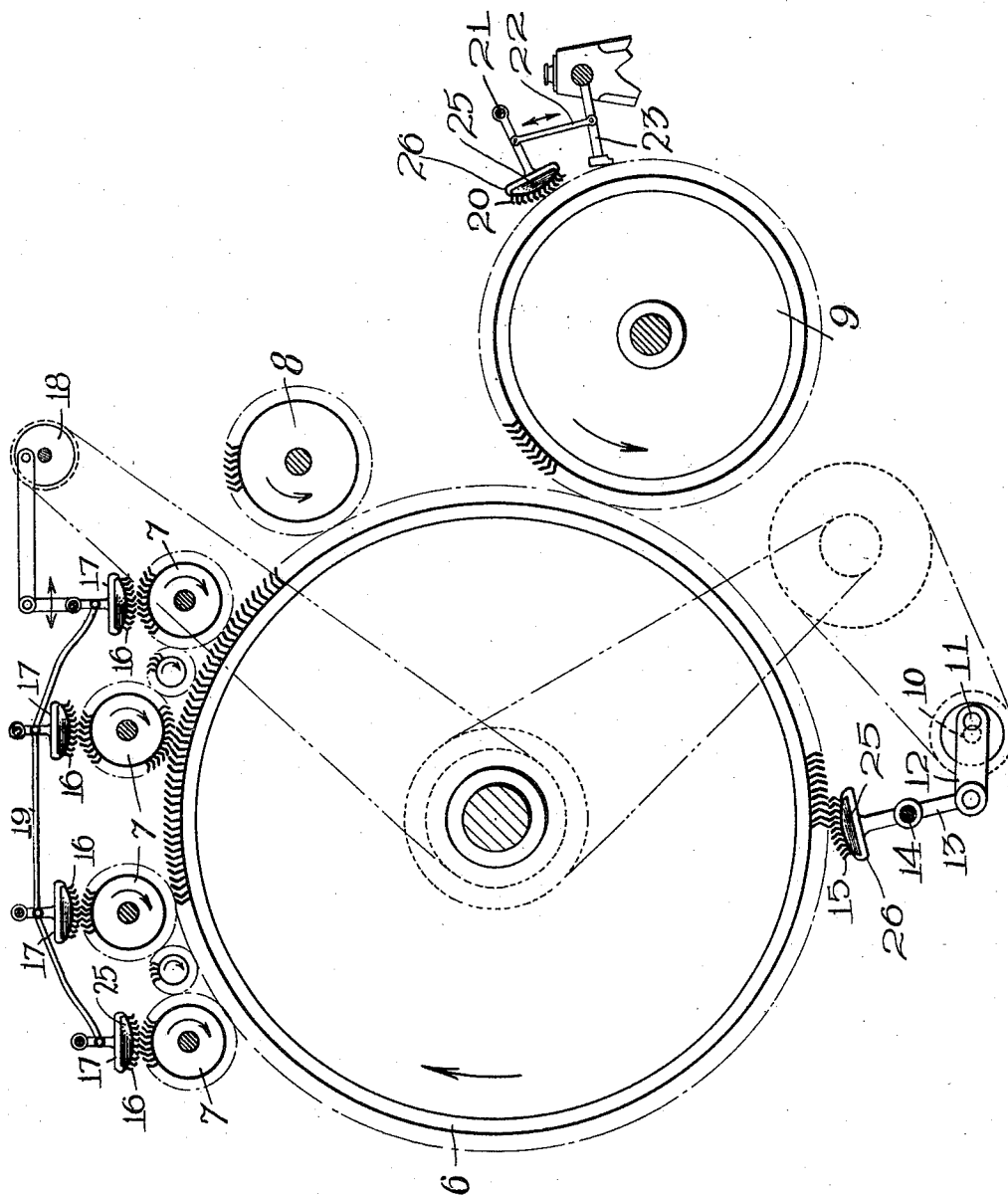


A. F. POIRIER.
 LOOSENER FOR CARDING MACHINES.
 APPLICATION FILED MAR. 20, 1911.

1,019,355.

Patented Mar. 5, 1912.



Witnesses:

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UNITED STATES PATENT OFFICE.

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LOOSENER FOR CARDING-MACHINES.

1,019,355.

Specification of Letters Patent.

Patented Mar. 5, 1912.

Application filed March 20, 1911. Serial No. 615,467.

To all whom it may concern:

Be it known that I, ARTHUR F. POIRIER, a subject of the King of Great Britain, residing at East Douglass, in the county of Worcester and State of Massachusetts, have invented a new and useful Loosener for Carding-Machines, of which the following is a specification.

This invention relates to a carding machine and the principal objects thereof are to provide a device therefor of a simple and efficient character of such a nature that the stock is turned up on the various cylinders and rolls toward the ends of the teeth so that it can be more efficiently operated upon by the fancy and doffers and yet no stock is removed therefrom.

Reference is to be had to the accompanying drawings in which the figure is a side view of a part of a carding machine, with the frame removed, showing a preferred form of my invention applied thereto.

The machine is shown as provided with the usual carding cylinder 6, workers 7, fancy 8, and doffers 9. Operated from the same source of power as the carding cylinder is a shaft 10 having an eccentric 11 thereon which operates a link 12 to oscillate a lever 13 as the shaft rotates. This lever is mounted to swing on a stud 14 and at its upper end it is provided with a member 15 having card clothing thereon with the teeth bent the same direction as that of the adjacent teeth of the card.

It will be observed that the shaft 13 is located at a distance from the surface of the carding cylinder and that the lever 14 which swings on this shaft or stud extends from it toward the center of the carding cylinder so that the member 15 swings on an arc substantially tangent to the card cylinder 6. In this way the above described operation is permitted to take place in such a way that the teeth of the member 15 will never leave the teeth of the card. This brings the material out toward the ends of the teeth of the card so that it can be more efficiently operated upon by the doffer 9 and the fancy 8, but no material is removed from the card. In this way the card is prevented from getting clogged up with material and it does not have to be stripped in ordinary practice; at least, not until it has been used for a

comparatively long time. These results are secured by very simple mechanism without the employment of any connections which are likely to get out of order in use and which has been found to be a very efficient device. In a similar way the workers 7 are all provided with fiber loosening devices 16 each one mounted on a frame 17 oscillating about the worker shaft as a center, and one of them connected with an arrangement 18 like that illustrated for operating the member 15 and operated from the carding cylinder shaft. These several devices are connected with each other by links 19, so that all of them will operate together. In like manner the doffer 9 is shown as provided with a loosener 20 mounted to swing on a shaft 21 and connected by a link 22 with the oscillating comb 23 which is operated in the usual manner. In each case the loosener swings on a small arc substantially tangent to that of the cylinder or roll on which it works, and oscillates among the teeth thereof without leaving them.

Each loosener preferably comprises a plate or board 25 on which the card clothing is mounted and which slips endwise between side holders 26.

While I have illustrated and described a preferred form of the invention, and shown a particular way of operating the stripper, I am aware that many modifications of the same can be made without departing from the scope of the invention as expressed in the claims. Therefore, I do not wish to be limited to all the details of construction herein shown, but

What I do claim is:—

1. The combination with a card cylinder, of a loosener therefor arranged at the bottom of the cylinder, means for oscillating the same to swing on an arc tangent to the card without removing the loosener from the carding teeth, workers at the opposite side of the cylinder, and oscillatable looseners for said workers.

2. In a carding machine, the combination with a carding cylinder having card clothing thereon, and the doffers, of a convex fiber loosener located in position to operate on the stock left on the cylinder just after it leaves the doffers and having card clothing teeth thereon projecting backward in a di-

rection the same as that of the teeth of the
card, and means for oscillating said loos-
ener about an axis below the cylinder and
substantially at the axis of its convex sur-
5 face so as to keep the ends of some of the
teeth thereof among the teeth of the carding
cylinder at all times.

In testimony whereof I have hereunto set
my hand, in the presence of two subscribing
witnesses.

ARTHUR F. POIRIER.

Witnesses:

FRANK V. HIPPERT,
WM. J. TAFT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
