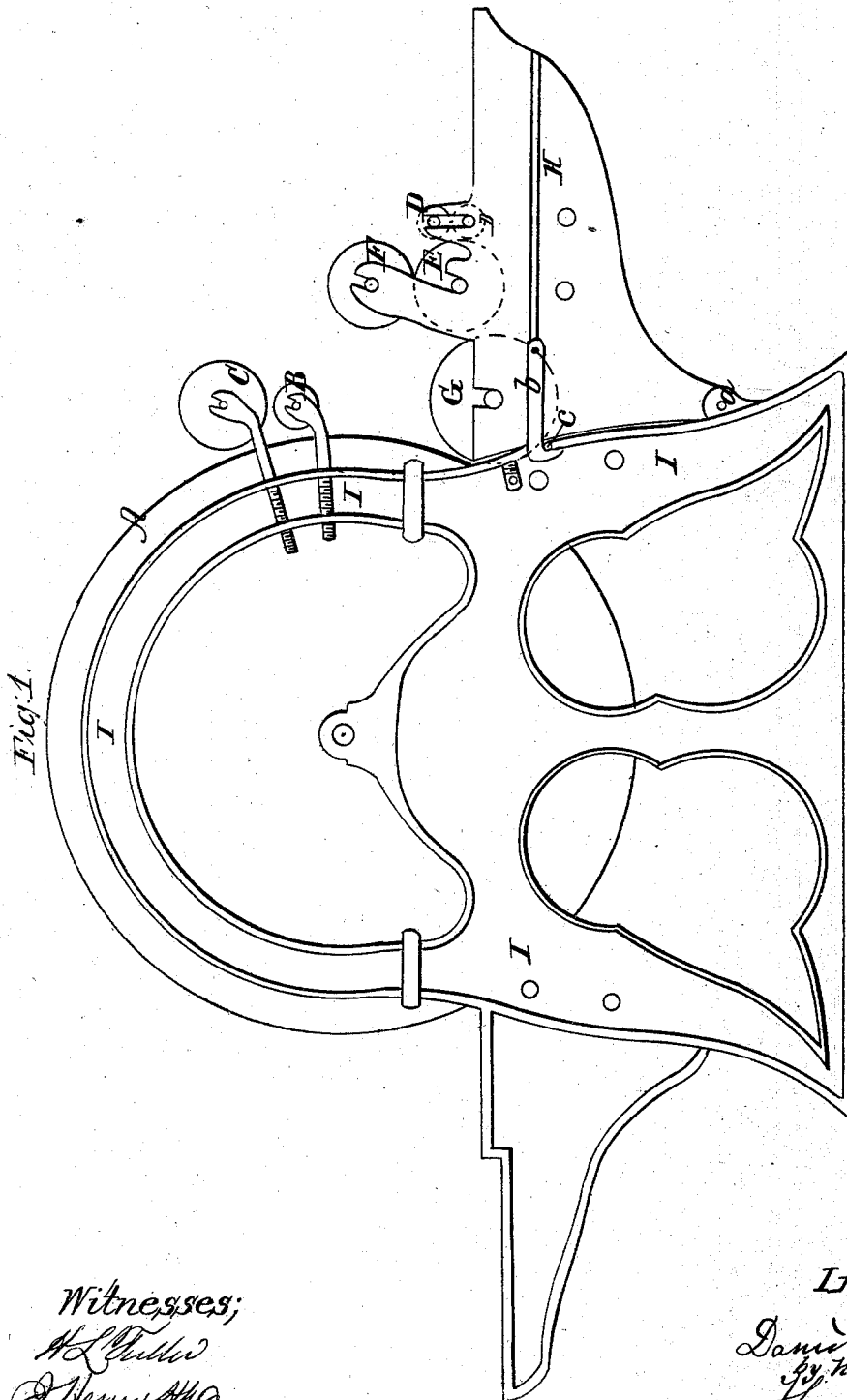


*D. Tainter,
Carding Machine.*

Nº 42,345

Patented Apr. 18, 1865.



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UNITED STATES PATENT OFFICE.

DANIEL TAINTER, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN CARDING-MACHINES.

Specification forming part of Letters Patent No. 47,345, dated April 18, 1865.

To all whom it may concern:

Be it known that I, DANIEL TAINTER, of the city and county of Worcester, and State of Massachusetts, have invented certain new and useful Improvements in Wool and Cotton Carding Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which the figure represents a side view of my said carding-machine.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the main cylinder; B, one of the strippers; C, one of the workers; D, the feed-rolls; E, the burr-cylinder; F, the burr-cylinder guard, and G the leading-in cylinder. The feed-rolls, burr-cylinder, its guard, and the leading-in cylinder are mounted upon a hinged frame, H, which is pivoted to the main frame I at *a*, can swing upon said pivot, and can be lowered so as to move all the cylinders which are supported upon said movable frame away from the main cylinder. By this arrangement many difficulties in the use of carding-machines are obviated, for the leading-in cylinder G can readily be removed without first removing the burr-cylinder E and its guard by simply letting down the hinged frame H.

The cylinder G has to be taken out from time to time to be cleaned, ground, or repaired, and as it is placed below the center of the main cylinder A, and in close proximity to the latter and to the burr-cylinder, it is impossible to remove it without first removing one of the former.

Another advantage which this arrangement affords in the use of wool-carding machines is, that working-cylinders can be used against the main cylinder and under the leading-in cylinder G, which has heretofore been attended with great difficulties, since there was no room or space to get at such working-cylinders, the leading-in cylinder being mounted on rigid bearings of the main frame, and consequently in putting in or removing them a number of cylinders had to be first removed, whereas by means of my hinged frame such working-cylinders can be used with the same

facility as those applied to the top of the main cylinder.

The hinged frame H is secured to the main frame by means of a hook, *b*, which is pivoted to the frame H and passes over a pin, *c*, of the main frame; but any suitable device may be employed for this purpose.

My invention can with the same facility be adapted to cotton as well as to wool carding machines. In the former no burr-cylinder is used, and in this respect the arrangement of the cylinders is somewhat modified; but the mounting of the feed roll and other cylinders which deliver the material to the main cylinder upon a movable frame in cotton-carding machines is of the same importance as in wool-carding machines, for the reasons above stated.

In the second breaker and finisher of woolen cards the burr-cylinder is not generally used; but the invention is equally applicable to them.

Having thus fully described the nature of my invention, what I claim herein as new, and desire to secure by Letters Patent, is—

1. The combination, with the main frame of a machine for carding wool or cotton, of a supplemental hinged or swinging frame for supporting the feed-rolls and burr and leading-in cylinders, substantially as and for the purposes described.

2. The combination, with the hinged frame H, of the pivoted hook *b*, or its equivalent, with the pin *c* on the main frame, substantially as and for the purposes specified.

3. Mounting the burr-cylinder and feed-rolls on a hinged frame, whereby said cylinders and frame can be lowered or removed from the main cylinder, substantially as and for the purposes described.

4. Mounting one or more of the small cylinders which assist in conveying the fibrous material to the main carding-cylinder of a wool or cotton carding machine upon a hinged or swinging frame, whereby the latter can be expeditiously lowered or removed from the main cylinder for the purpose of cleaning, grinding, or repairing said cylinders, or to make room for the easy removal of other cylinders, substantially as herein described.

Witnesses: DANIEL TAINTER.

THOS. H. DODGE,

H. L. FULLER.