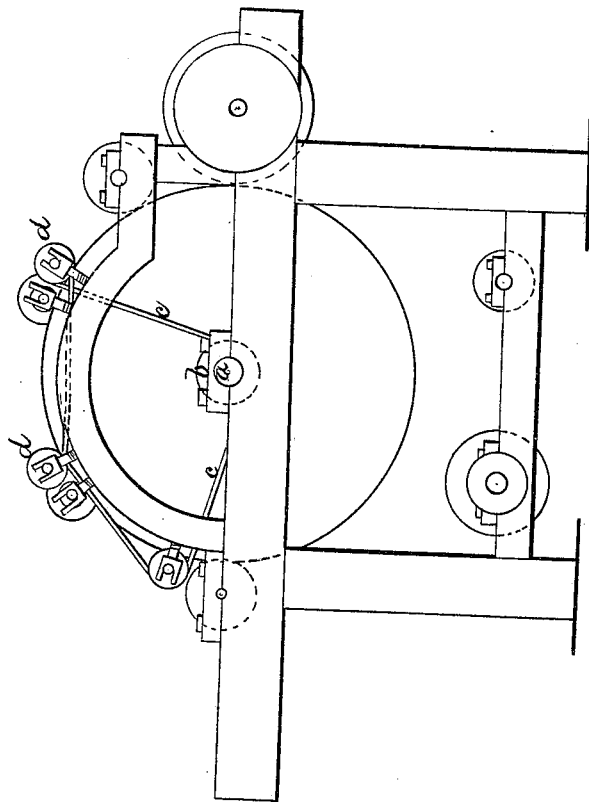


*J. McCarty,*  
*Carding Machine.*  
*N<sup>o</sup> 6,539.                      Patented June 19, 1849.*



# UNITED STATES PATENT OFFICE.

JOHN McCARTY, OF SOMERSET, PENNSYLVANIA.

## IMPROVEMENT IN CARDING-MACHINES.

Specification forming part of Letters Patent No. 6,539, dated June 19, 1849.

*To all whom it may concern:*

Be it known that I, JOHN McCARTY, of Somerset, in the county of Somerset and State of Pennsylvania, have invented certain new and useful Improvements in Carding-Machines; and I do declare that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known, and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawing, which forms a part of the same, in which a side elevation of the machine is represented, the improvements being colored and the rest of the machine in outline.

The nature of my improvement consists in the manner of banding the top rollers, thereby increasing their speed and regulating their motion, by which I economize power and greatly increase the working effect of the carding-machine.

Heretofore all the carding-machines in use have had their top rollers or workers banded to the doffer or else to a complicated and expensive gearing, which was liable to derangement, and as far as my knowledge extends is going out of use. Chain bands, when used to drive the top rollers, give to them an unsteady motion and injure the fiber more or less in carding.

The motion of the top rollers in all carding-machines has been very slow, not exceeding about sixteen turns to one hundred and eighty of the main cylinder, while by my arrangement I cause the top rollers to move at least forty turns in the same time. In the practical operation of these machines the effect is very striking, for in the ordinary machine, when the feed is put on, the power is

instantly and perceptibly checked, while in my machine the difference between the machine running light and with feed is hardly to be noticed.

The arrangement and changes by which my improvement is effected are as follows: On the shaft *a* of the main cylinder I put a small pulley *b*, about three or three and a half inches in diameter. A band *c* is brought around this pulley and thence up around pulleys *d d* on the end of the top rollers or workers, by which means I effect the desired speed. The main cylinder, being very heavy and having a great deal of iron in its rim or outer periphery, serves as a balance-wheel, and the force required to draw out the fiber between the card on the main cylinder and the workers is in some measure caused to react onto the shaft of the main cylinder in the direction of its motion, so that no power is expended except what is absolutely required to work the fiber which is being carded, and all inequalities in the working are overcome and regulated by the heavy main cylinder in the manner above named. By this mode of banding I am enabled to do at least a third more in the same time and with the same power than could be accomplished by the ordinary carding-machine, and no other change in the ordinary card is required for the purpose.

Having thus described fully my improved machine, what I claim therein as new, and for which I desire to secure Letters Patent, is—

Banding the top rollers or workers to the main carding-cylinder, substantially in the manner and for the purposes set forth.

JOHN McCARTY.

Witnesses:

J. J. GREENOUGH,  
B. K. MORSELL.