M. H. WHITCOMB & J. BLISS.

Stripping Attachment to Carding-Machines.

No. 206,510. Patented July 30, 1878.

Fig. 1.

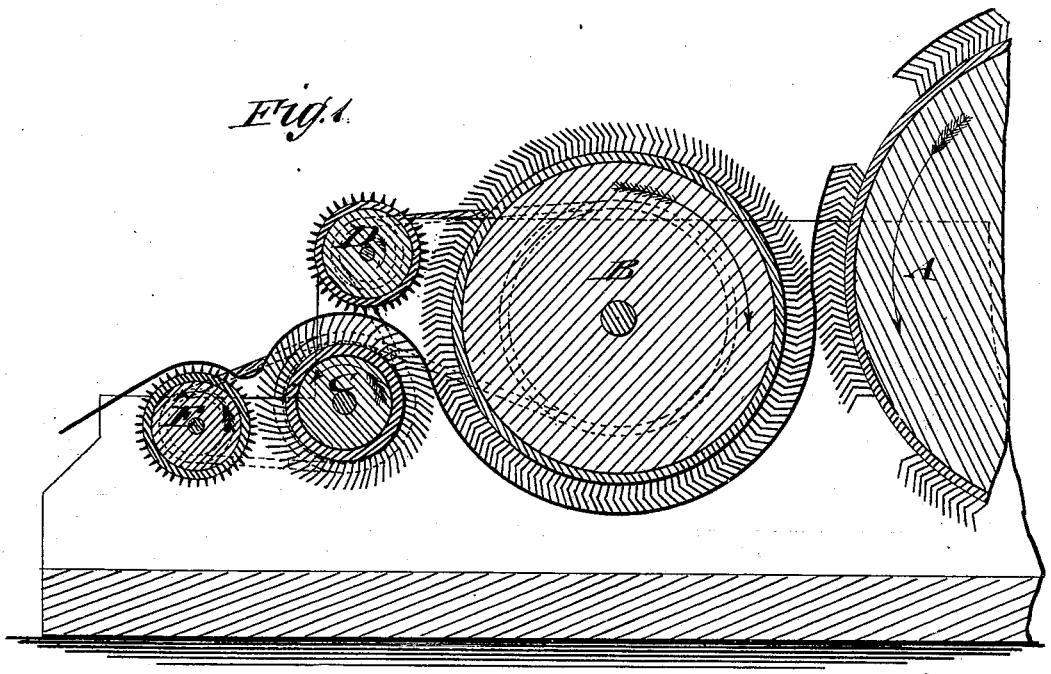
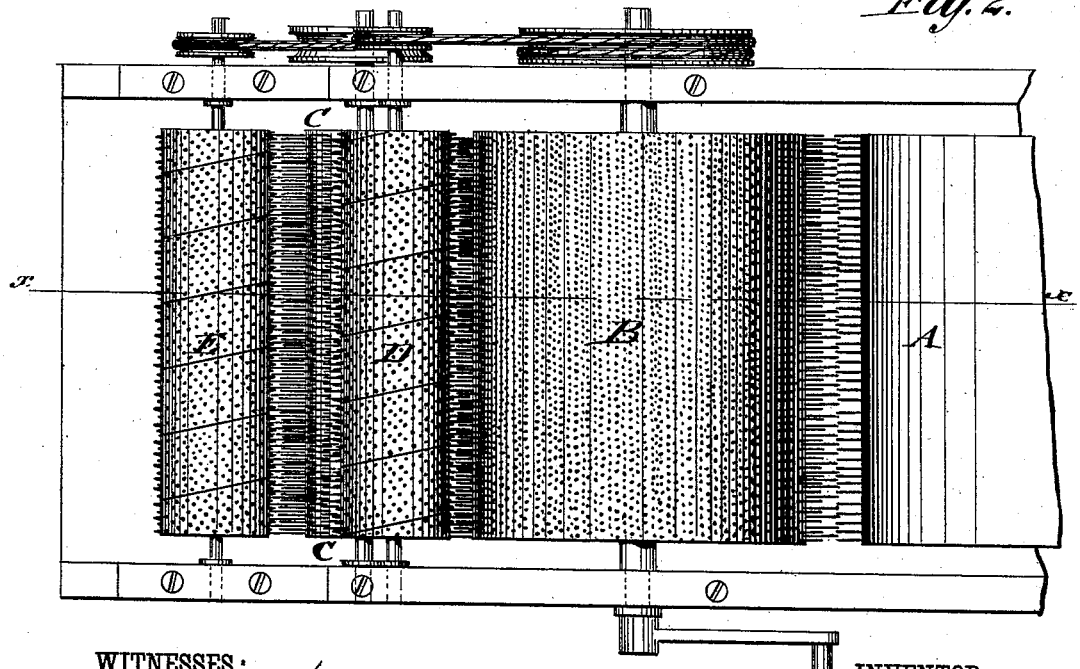


Fig. 2.



WITNESSES:

Francis. McArdle.

C. Sedgwick

INVENTOR:

M. H. Whitcomb

J. Bliss

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

MARCIENE H. WHITCOMB AND JOHN BLISS, OF HOLYOKE, MASSACHUSETTS.

IMPROVEMENT IN STRIPPING ATTACHMENTS TO CARDING-MACHINES.

Specification forming part of Letters Patent No. **206,510**, dated July 30, 1878; application filed March 2, 1878.

To all whom it may concern:

Be it known that we, MARCIENE H. WHITCOMB and JOHN BLISS, of Holyoke, in the county of Hampden and State of Massachusetts, have invented a new and Improved Stripping Attachment to Carding-Machines, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of our improved stripping attachment to carding-machines on line *x x*, Fig. 2; and Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved stripping attachment to wool-carding machines by which a positive and perfectly sure stripping of the sliver is obtained in such a manner that it does away with the rattling noisy combs, and the liability of damage which always attends their use.

The improved attachment accomplishes better work on account of its more positive and perfect action, produces less waste, and obviates reworking of the stock.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

Referring to the drawing, A represents a section of the main cylinder of a finisher carding-machine, and B the doffer working in connection therewith. The stripping attachment that serves for taking up the sliver from the doffer is composed of three rolls, C, D, and E, which take up the sliver from the doffer, in the manner shown in Fig. 1, in a continuous black line, the sliver passing instead of under the roll, as in the present carding-machine, over the top part of the roll C, and thence to the outer auxiliary roll E, and from the same to the condensing-rolls, and finally to the winding-frame. The roll C is the stripper proper, which takes the stock or sliver from the doffer B, the speed of this roll being slightly less than that of the doffer. The doffer and stripping-roll are set only about one sixty-fourth of an inch apart, so that the stock on the doffer must be left on the stripper, which runs in an opposite direction to the doffer, as indicated by the arrows in Fig. 1. Instead of being covered with short conical points, as the usual strippers, the roll C is clothed with the same long wire as the doffer itself. The rolls D and E are auxiliaries to the stripping-roll, the roll D being covered with points about one-half an inch in length, placed above the roll C and set lightly into the doffer. It serves to keep the wire of the same clear of stock or dirt. It also keeps the points of the doffer-roll clear and in working order, by never allowing them to fill, which would deprive them of the power to take the stock or wool from the carding-cylinder A. The auxiliary roll D also serves to keep the points of the doffer sharp and pointed. The second auxiliary roll, E, is arranged at that side of the stripping-roll opposite to the doffer, and covered with short points, which remove the stock or sliver from roll C, lifting it lightly from the stripper, so as to be easily taken therefrom and delivered to the condensing-rolls.

The stripping-roll C takes up the web at its upper part, so as to lift it from the doffer without the least strain upon it, instead of drawing the web from the doffer by the strength of the fiber, as in the old carding-machine. The web is thereby supported so lightly on the stripping-roll that a breath almost will remove it, which function is accomplished by the auxiliary roll F that takes up the web with the short teeth.

The advantages of our improved stripping attachment are that the operation is positive and cannot fail to do its work. It allows the doffer to be run at a very high rate of speed when working short stock, while, when a large sliver must be made, it allows the machine to work freer by removing the stock from the machine faster, while the stock is massed on the stripping-roll, so as to govern the size of the sliver to such an extent that much better carding and less strain on the card-clothing is exerted. No interruptions by causing the sliver to work in between the stripper and the doffer can occur, so as to give bad work and occasion delay. It does away with the rattling combs in both finisher and breaker cards, does not shake the machine and floor, and requires small power to drive it. It is easily adjusted and unfailing in operation, thereby doing better work than with the old devices.

Another advantage is that much shorter

stock can be used, as the same is worked upon without any strain on the fiber, taking up the web by the picking or lifting operation of the stripping-roll without the least strain or violent motion on the web, so that stock with very short fiber may be successfully handled by our improved attachment.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

In a finishing carding-machine, the combination of the doffer B and stripper C, the stripper clothed with long wire, and turning in an opposite direction from and moving at a slower speed than the doffer, thus carrying the sliver over the roll C, for the purposes described.

MARCIENE HAMILTON WHITCOMB.
JOHN BLISS.

Witnesses:
WM. A. CHASE,
A. E. HEMPHILL.