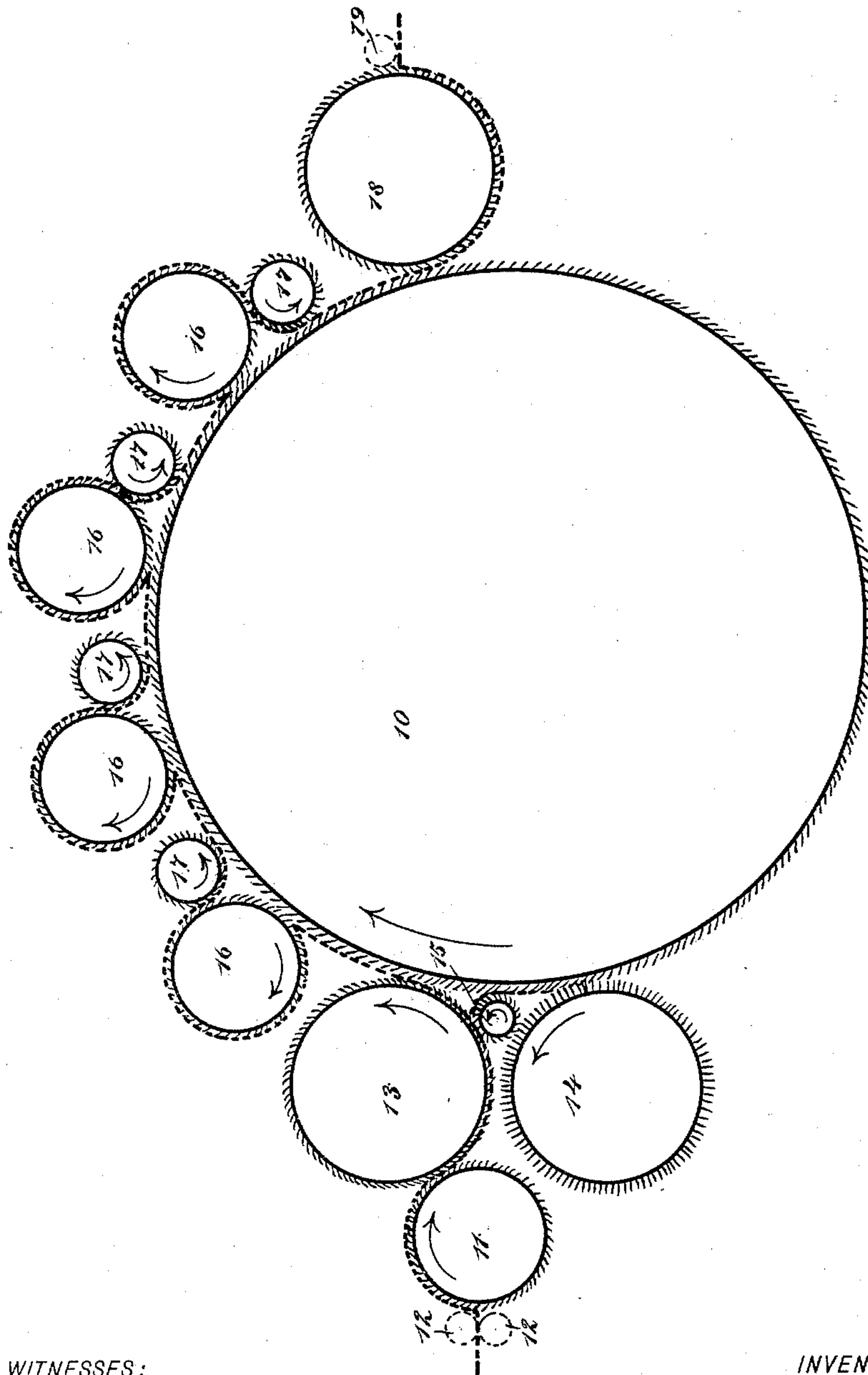


(No Model.)

D. LAMSON.
WOOL CARDING MACHINE.

No. 468,202.

Patented Feb. 2, 1892.



WITNESSES:
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UNITED STATES PATENT OFFICE.

DAVID LAMSON, OF ELMIRA, NEW YORK.

WOOL-CARDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 468,202, dated February 2, 1892.

Application filed June 13, 1891. Serial No. 396,150. (No model.)

To all whom it may concern:

Be it known that I, DAVID LAMSON, of Elmira, in the county of Chemung and State of New York, have invented a new and Improved Wool-Carding Machine, of which the following is a full, clear, and exact description.

My invention relates to improvements in wool-carding machines, and more especially to the disposition of the tumbler, fancy, and the workers and strippers around the main cylinders.

Carding-machines as generally constructed have the various parts disposed about the cylinder in such a manner that more or less unnecessary labor is performed upon the stock which is being carded, which labor is wasted, and the unnecessary work upon the stock injures its quality.

The object of my invention is to arrange the parts above named around the main cylinder in such a manner that the fibers of the stock will be rapidly and nicely straightened without any unnecessary work and so that each part will give a forward motion to the stock which is operated upon and deliver it in good condition to the doffer.

My invention consists in the combination, with the main cylinder, of a tumbler and fancy and a series of workers and strippers, arranged substantially as hereinafter described and claimed.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure is an outline or diagrammatic view showing the general arrangement and disposition of the various parts of the carding-machine.

In this specification it is not necessary to describe the detailed construction of any of the parts, as they are of the common form; and my invention consists in the arrangement of the parts.

The main cylinder 10 has a licker-in 11 and feed-rolls 12, placed in front of it in the usual manner, and between the licker-in and the cylinder are the tumbler 13 and fancy 14. The tumbler and fancy are placed in the same vertical plane, the tumbler being a little above the licker-in and the fancy a little below the same, and the tumbler has the teeth upon its face arranged so as to carry the stock

from the licker-in to the main cylinder. A small worker 15 extends between the tumbler, fancy, and main cylinder, this worker being intended to pick up the fibers raised by the fancy and deliver them to the cylinder. The workers 16 and strippers 17 are arranged in pairs around the upper portion of the cylinder 10 in the usual manner, except that the workers are placed in advance of the strippers and the strippers are rotated in a direction opposite to the rotation of the main cylinder and the worker. The doffer 18 is placed on the back side of the main cylinder in the usual way and is provided with the usual wipe-roll 19.

The course of the stock through the machine is indicated by dotted lines in the drawing, and is as follows: The stock is taken from the feed-rolls 12 by the licker-in 11 and is taken from the licker-in by the tumbler 13 and carried to the main cylinder. The escaping fibers are brushed up by the fancy 14 and are taken from the fancy by the small worker 15 and carried back to the cylinder, and the stock is then taken successively by the pairs of workers and strippers and is eventually delivered to the doffer 18, and taken from it by the wipe-roll 19 in the usual manner. As above described, the strippers 17 are rotated rapidly in an opposite direction to the workers and to the main cylinder, and consequently each stripper will take the stock from its worker and carry it forward to the main cylinder and to the next worker, each worker and stripper doing its proportional part of the work and carrying the stock forward with the fibers in parallel lines.

With the strippers arranged in advance of the workers, as in common forms of carding-machines, and with the fancy on the back side of the main cylinder, the fibers of the stock are doubled up after they have been once straightened and have to be straightened again, and the fancy does a good deal of unnecessary brushing before delivering the stock to the doffer; but with the arrangement above described it will be seen that the stock will not be unnecessarily brushed and will be rapidly forwarded and straightened.

Having thus fully described my invention, I

claim as new and desire to secure by Letters Patent—

1. The combination, with a main cylinder having a series of workers and strippers arranged around its upper side and a doffer upon its back side and the lick-in arranged in front of the cylinder, of the tumbler and fancy arranged one above the other between the lick-in and the main cylinder, substantially as described.

2. The combination, with the main cylinder and the lick-in arranged in front thereof, of the tumbler and fancy arranged between the lick-in and the main cylinder, and a worker placed between the tumbler, fancy, and the main cylinder, substantially as described.

3. A wool-carding machine comprising a main cylinder, a lick-in placed in advance of the cylinder, a doffer placed behind it, a

tumbler and fancy disposed one above the other between the lick-in and the main cylinder, a worker arranged between the tumbler, fancy, and main cylinder, and a series of workers and strippers arranged around the upper part of the main cylinder, the workers being placed in advance of the strippers, substantially as described.

4. The combination, with the main cylinder, of a series of workers and strippers arranged in pairs about its upper portion, the workers being placed in advance of the strippers and the strippers being adapted to rotate in a direction opposite to the rotation of the workers and the main cylinder, substantially as described.

DAVID LAMSON.

Witnesses:

JAMES H. HARDY,
SARAH J. LAMSON.