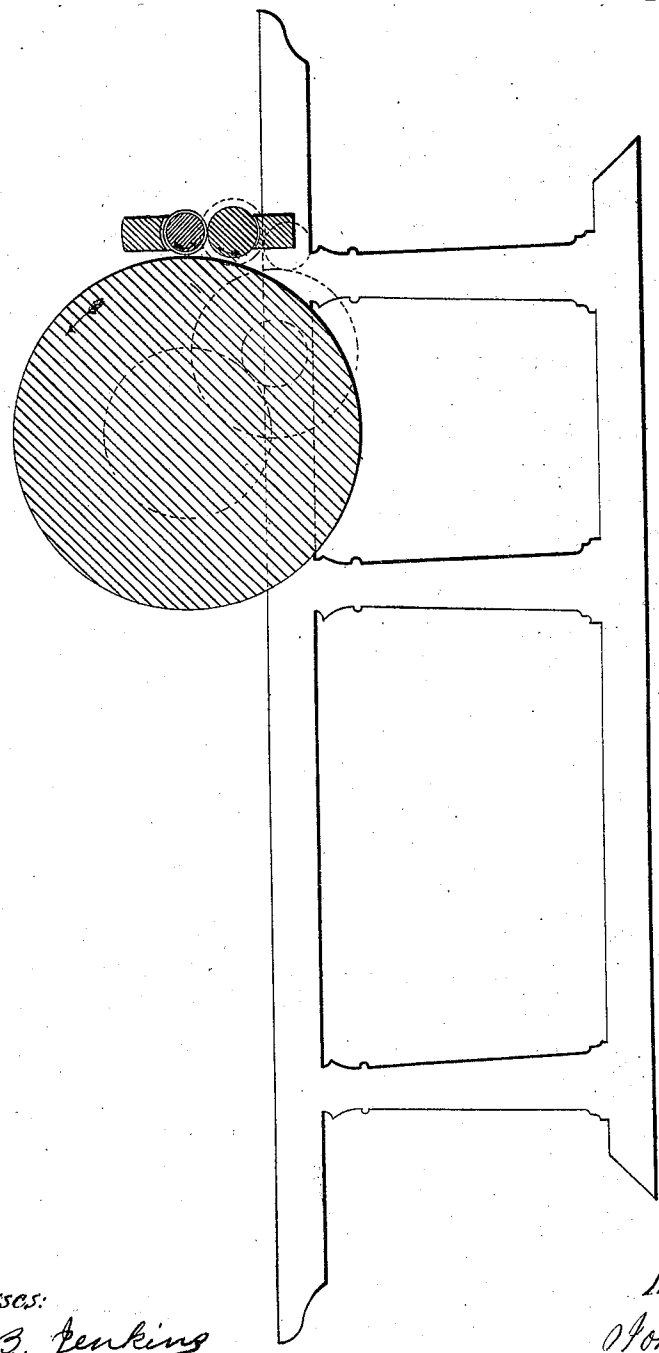
J. Boyd.

Carding Engine.

No. 24,092. Patented May 24, 1859.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN BOYD, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CARDING-ENGINES.

Specification forming part of Letters Patent No. **24,092**, dated May 24, 1859.

To all whom it may concern:

Be it known that I, JOHN BOYD, of the city of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Carding Machinery for Carding Cotton or other Fibrous Substances; and I do hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawing, making a part of this specification, which represents a side view of a frame of a part of a carding-engine with my improvement attached.

The object of my improvement is the clearing of the doffer-cylinder; and it consists in a novel arrangement and combination of rollers for removing the fiber, instead of a comb.

A represents the doffing-cylinder of any carding-engine, which is generally about twenty (20) to twenty-four (24) inches in diameter, revolving as shown by the arrows. I place at B and C two rollers so geared as just to come in contact with the fibrous material as it is carried around by the doffing-cylinder. The roller B is about one and one-fourth (1¼) of an inch diameter, and is composed of an iron roller wrapped with flannel or felt and outside of this with thin leather. The lower roller B is made of iron, and is of the same diameter. These two rollers, as already stated, just touch the fibrous material on the doffing-cylinder as it revolves. These rollers B and C revolve in the directions shown by their arrows. D and E are wooden scrapers, which are curved to fit the curve of the rolls, and are lined with flannel or felt. The object of these is to remove from and to clear the doffing-cylinder of the fibrous matter that is carried by it. It is intended as a substitute for the ordinary comb.

The operation of my covered roller B and the roller C, in connection with the scrapers D and E, when combined with the doffer-cylinder of a carding-engine, is to strip off all the fibrous material and discharge it from the machine. It has the advantage over the comb of regularity of movement, increased efficiency, greater durability, and economy.

Having thus described my improvement, what I desire to claim as my invention is—

The combination of the rollers B and C and scrapers D and E, for stripping the ordinary doffing-cylinder of a carding-engine, the whole being constructed and arranged substantially as above described.

JOHN BOYD.

Witnesses:

J. H. B. JENKINS,

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