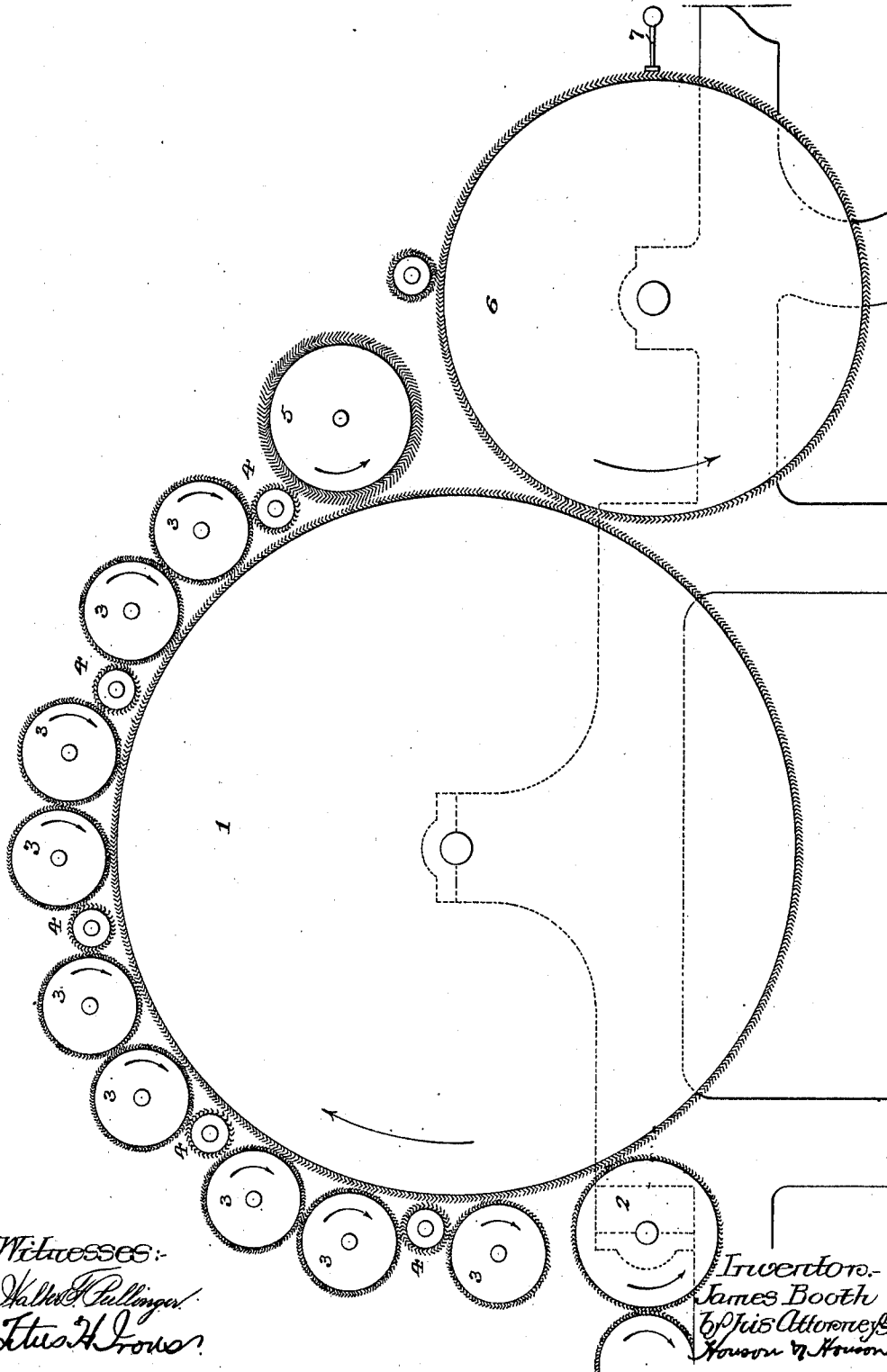


J. BOOTH.
CARDING MACHINE.
APPLICATION FILED SEPT. 29, 1906.

988,856.

Patented Apr. 4, 1911.



Witnesses:
Walker Pullinger
Elias H. Jones

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UNITED STATES PATENT OFFICE.

JAMES BOOTH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO SMITH AND FURBUSH MACHINE COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CARDING-MACHINE.

988,856.

Specification of Letters Patent.

Patented Apr. 4, 1911.

Continuation of application Serial No. 287,085, filed November 13, 1905. This application filed September 29, 1906. Serial No. 336,729.

To all whom it may concern:

Be it known that I, JAMES BOOTH, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Carding-Machines, of which the following is a specification.

The object of my invention is to so dispose the workers and strippers in respect to the main cylinder of a carding machine as to effect a more thorough carding of the fiber than is possible when said strippers and workers are disposed in respect to the main cylinder as heretofore practiced. This object I attain in the manner hereinafter set forth, reference being had to the accompanying drawing, which represents in diagrammatic form sufficient of the elements of a carding machine to illustrate my present invention.

The present application is a continuation of an application filed by me on the 13th day of November, 1905, Serial No. 287,085, which I abandoned in favor of this application.

In the drawing, 1 represents the main cylinder of the machine, 2 the lick-in, 3 the workers, 4 the strippers, 5 the fancy roll, 6 the doffer cylinder, and 7 part of the doffer comb, all of the rotating members being driven as indicated by the respective arrows, and all being covered with card clothing having teeth of the character indicated.

The essential features of novelty in the machine are the disposition of the workers in pairs disposed in such relation to each other that their teeth are in operative relation with each other as well as in operative relation with the teeth of the main cylinder, and the location of the stripper for the fancy roll above instead of below the same as usual, the stripper in this case also stripping the last of the series of workers. This involves rotation of all of the workers in such manner that, at the meeting point of each pair of workers, the teeth of one will be traveling in an opposite direction from that in which the teeth of the other are moving, thus providing for the proper working or carding of the fiber at this point, in the same manner as it is carded between the cylinder and worker, thereby, without any increase in the number of workers em-

ployed, effecting a material increase in the carding capacity of the machine.

By the arrangement above described I am enabled to not only card between the workers and the cylinder and between each pair of workers, but by arranging the workers in the manner described I have more space to place a greater number of workers around the main cylinder than heretofore, and as the essential feature of a carding machine is to card the material over and over again so as to produce an even web, a machine equipped with my improvements will increase the production about 50%.

Strippers 4 are disposed between successive pairs of workers and perform, in connection with the workers of each pair, the usual function of a stripper, that is to say, the removal of the fiber from the teeth of the worker and its reapplication to the teeth of the main cylinder.

By utilizing the stripper for the last worker as a stripper for the fancy roll the said stripper is on top of the fancy roll and does not interfere with the stock upon the main cylinder after the same has been raised upon the cylinder by the action of the fancy roll for removal by the doffer. Heretofore the stripper for the fancy roll was usually placed on the under side of the roll instead of the upper side as shown.

I claim:—

1. The combination of the main cylinder of a carding machine, workers disposed in pairs around a portion of said cylinder, means for driving the main cylinder and the workers in the same direction, so that the contacting surfaces will move in opposite directions to card the material, the teeth of the workers of each pair having the same relative positions in respect to each other as they have to the teeth of the cylinder.

2. The combination of the main cylinder of a carding machine, workers disposed in pairs around a portion of said cylinder, means for driving the main cylinder and the workers in the same direction, so that the contacting surfaces will move in opposite directions to card the material, the teeth of the workers of each pair having the same relative positions in respect to each other as they have to the teeth of the

cylinder, and a stripper roll mounted between each two pair of workers and between the first worker and the first pair of workers, each stripper between the pairs of rolls stripping the last worker of one pair and the first worker of the successive pair.

3. The combination of a main cylinder, the last worker, fancy roll and doffer of a carding machine, a stripper for the fancy roll and said last worker located above the fancy roll and so arranged as to strip the last worker and the fancy roll, thus not interfering with the stock raised upon the main cylinder by the action of the fancy roll.

4. The combination of a main cylinder

of a carding machine, workers disposed in pairs around a portion of said cylinder, said workers all turning in the same direction, a stripper mounted between each pair of workers, a fancy roll at the end of the series of workers, a stripper mounted between the last worker and the fancy roll and arranged to strip the last worker and the fancy roll.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JAMES BOOTH.

Witnesses:

WILL. A. BARR,
JOS. H. KLEIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
