

(No Model.)

R. F. BARKER.
CARDING MACHINE.

No. 287,405.

Patented Oct. 30, 1883.

Fig. 2.

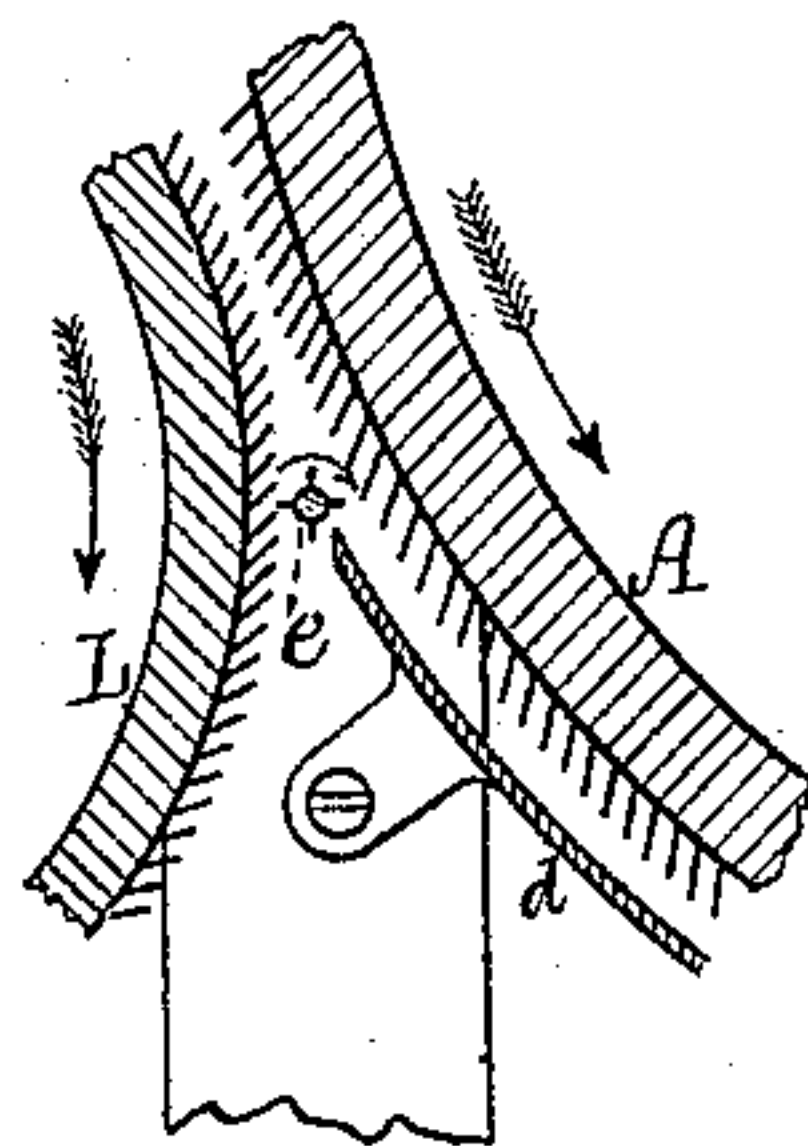
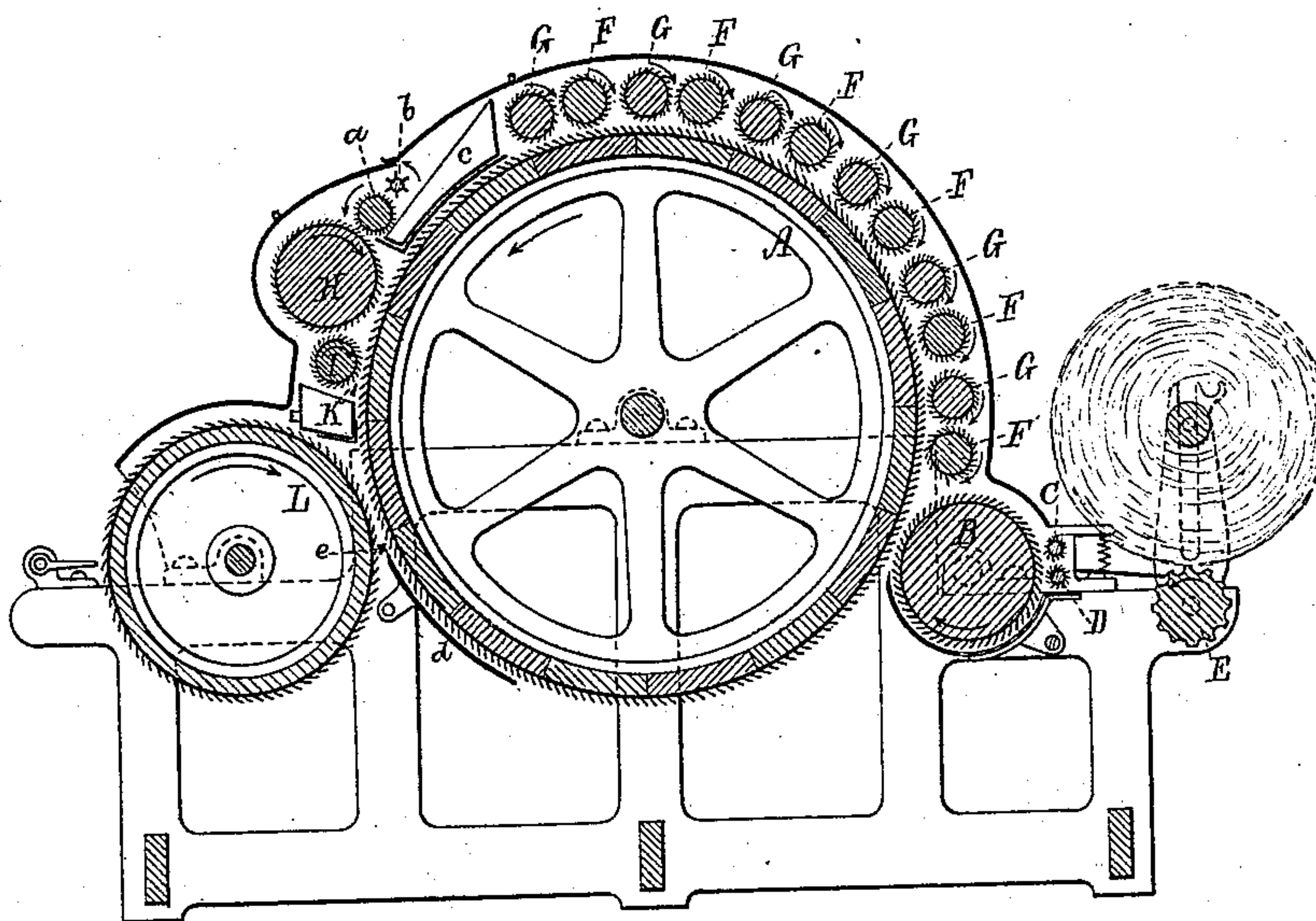


Fig. 1.



Witnesses.
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ROBERT F. BARKER, OF BOSTON, MASSACHUSETTS.

CARDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 287,405, dated October 30, 1883.

Application filed January 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, ROBERT FOSTER BARKER, a subject of the Queen of Great Britain, but a resident of Boston, of the county of Suffolk, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Carding-Machines; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a longitudinal section of a carding-engine provided with my invention, the nature of which is duly set forth in the claim hereinafter presented. Fig. 2 is a section, on a larger scale than they are represented in Fig. 1, of the lower rotary beater and the parts immediately adjacent thereto.

In the drawings the directions of revolution of the various rotary parts of the machine are indicated by arrows placed on them.

In carrying out my invention I employ with the main card-cylinder and the doffer, and the anti-suction plate of the former placed between them, a rotary beater arranged directly over the said plate and between the doffer and main card-cylinder. This auxiliary rotary beater is to remove from the doffer any extraneous matters that may have passed by the knife or blade over it and settled upon the doffer. In knocking these extraneous matters from the doffer the blades of the rotary beater discharge them between the anti-suction plate and the main card-cylinder, from whence they are driven down into the space below such main card-cylinder—that is, into the “fly” or “dust-box.”

In the drawings, A denotes the main cylinder; B, the “licker-in;” C and D, the feed-rolls; E, the lap-roll; F F, &c., the combing-rolls; G, the cleaning-rolls; H, the raising-cylinder; I, the cleaning-roll of the raising-cylinder; K, the knife or stationary blade, and L the doffer.

The rotary brush of the raising-cylinder is shown at *a*, its rotary beater at *b*, and the receiving-trough of the latter at *c*, they being arranged, as shown, between the series of combing and cleaning rolls and the raising-cylinder; and such brush and beater being constructed of the usual material and in the usual way in which analogous parts of carding-machines are made.

All the parts specifically stated above are constructed, arranged, and operated substantially as in various carding-engines already

known—such, for instance, as the one shown in Patent No. 261,016.

The anti-suction plate is arranged under the main card-cylinder and between it and the doffer, in the manner as represented at *d*. It is to prevent atmospheric suction induced by the movement of the main card-cylinder from disturbing the fibers on the doffer, such plate being stationary and secured to the frame of the machine. This plate *d* is of less length than a quarter of the circumference of the main cylinder A, so that such plate is wholly within a quadrant formed by the horizontal and vertical axes of this cylinder. Directly over the said anti-suction plate is the auxiliary beater *e*, which is a shaft provided with blades or wings set radially to it. This beater extends across the doffer, and is to be rapidly revolved in the direction of the arrow over it by suitable mechanism, its purpose having been hereinbefore described.

Prior to this invention a carding-machine has been devised which is provided with an anti-suction plate arranged below and near to the main cylinder, and a beater for the doffer has been located near such plate. In my device, the beater, being placed above the plate and rotated in the same direction with the doffer, carries all impurities inside of the anti-suction plate, where they are caught by the current of air and carried off; also a carding-machine has been provided with a concave plate which extends below the main cylinder, the latter revolving in such plate, and a beater is located at one end of such plate, such beater being adapted to revolve away from the main cylinder. In my device the cylinder does not turn in the plate; but the latter being located as stated, all dust and dirt can pass out of its lower end.

What I claim is—

In a carding-machine, the doffer, the main cylinder, and the anti-suction plate, the latter of less length than a quarter of the circumference of the main cylinder, and located as described, in combination with the beater for the doffer, such beater being placed above the anti-suction plate and revolved in the same direction with the doffer, as and for the purpose set forth.

ROBERT FOSTER BARKER.

Witnesses:

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