

(No Model.)

C. SCHREBLER.  
CARD GRINDING MACHINE.

No. 278,608.

Patented May 29, 1883.

FIG. 1.

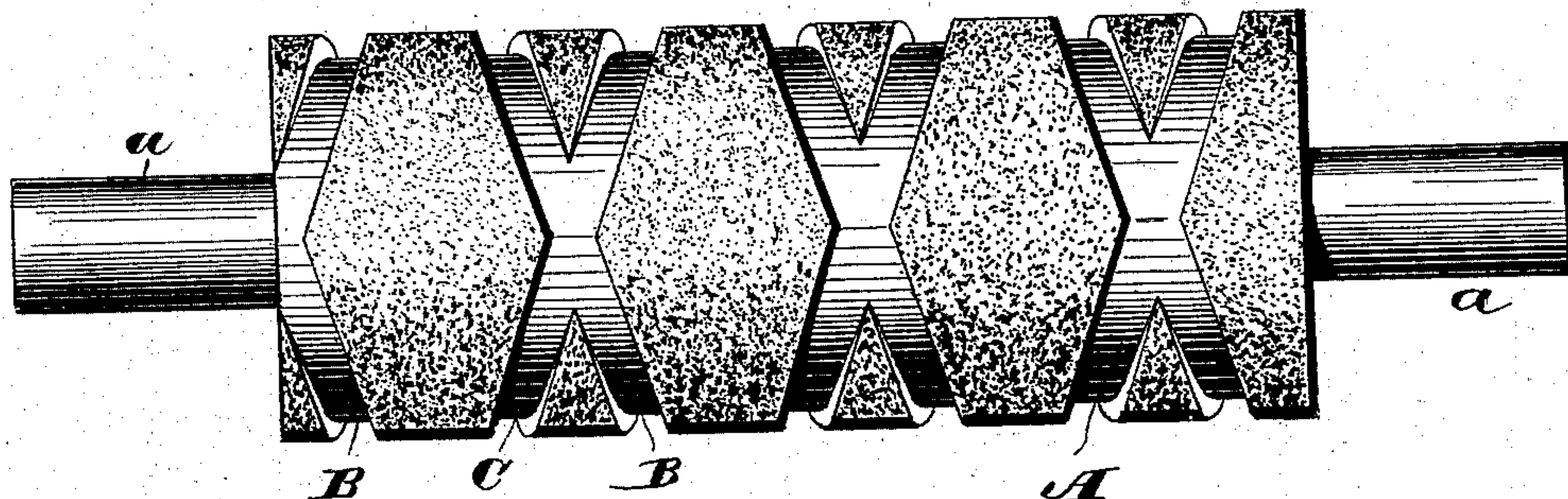
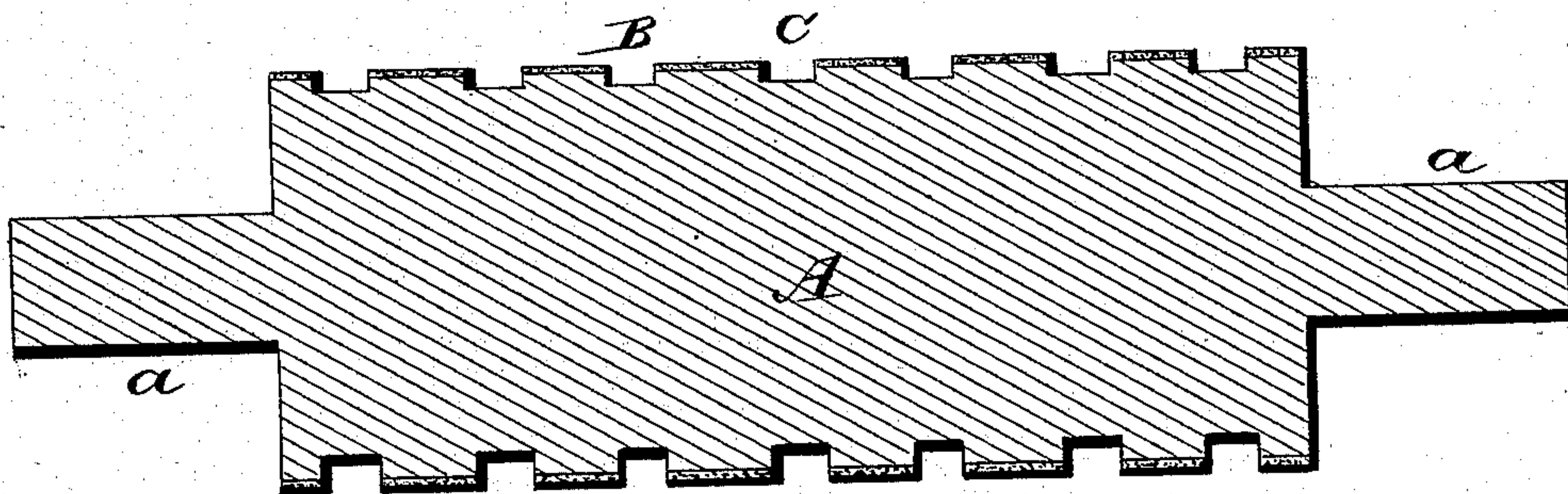


FIG. 2.



WITNESSES  
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CHARLES SCHREBLER, OF CHAMBERSBURG, PENNSYLVANIA.

## CARD-GRINDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 278,608, dated May 29, 1883.

Application filed April 23, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES SCHREBLER, of Chambersburg, in the county of Franklin and State of Pennsylvania, have invented certain  
5 new and useful Improvements in Card-Grinding Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to  
10 make and use the same.

My invention relates to an improvement in card-grinding machines, the object of the same being to provide a device whereby the card-teeth are ground to a needle-point without the  
15 necessity of moving the grinding-wheel longitudinally, or the carding-cylinders laterally; and with these ends in view my invention consists in a card-grinding cylinder coated with emery and provided with two or more intersect-  
20 ing spiral grooves.

In the accompanying drawings, Figure 1 is a perspective view of my improved cylinder, and Fig. 2 is a longitudinal sectional view of the same.

A represents a cylinder of any desired diameter and length, provided at opposite ends with the trunnions *a*. This cylinder can be made of metal or wood, and is provided with the spiral grooves B and C, running, respectively, in opposite directions around the cylinder. If desired, more than two grooves can be employed, my main object being to convert the  
30 periphery of the cylinder into a number of diamond or other angular shaped blocks, the outer surface and the sides thereof, if desired, being coated with emery pebbles, which latter can be applied directly to the surface of the cylinder; or emery-paper can be cut into the desired shapes and secured to the cylinder.  
40 The grooves B and C are of sufficient depth to allow a free circulation of air, which serves to keep the teeth cool and prevent the temper from being taken therefrom. Besides performing the functions above enumerated, the  
45 grooves also serve as dust-receptacles, into which the dust and dirt from the card-teeth falls and from which it is discharged by the rotation of the cylinder. The cylinder is adapted to be mounted in a suitable frame, and be  
50 surrounded by the workers, strippers, and licker-in, all of which, together with the cylinder, having rotary motion imparted thereto, the latter, however, moving much more rapidly than the carding-cylinder. The top-flats  
55 can, if desired, be secured in the same frame

with the carding-cylinder, and instead of having a rotary motion imparted thereto are reciprocated in guides tangential to the emery-cylinder, so as to bring all the teeth in contact therewith. The teeth of the carding-cylinder  
60 are adapted to bear against the periphery of the emery-cylinder, and as the latter is revolved (in a direction contrary to the revolution of the carding-cylinders) the points or ends of the diamond or other angular shaped  
65 blocks enter between the teeth and separate them slightly. This slight separation causes the teeth to incline sidewise, and consequently expose the side edges of the points of the teeth, as well as the back thereof, to the action  
70 of the emery pebbles, thereby performing the same function as the longitudinally-reciprocating wheel, only in a much shorter space of time.

It is not necessary that the cylinder proper  
75 should be grooved, as the result would be the same if leather or other suitable blocks coated with emery were secured to the cylinder, with spaces between the several blocks, which spaces would perform the same function as  
80 the grooves; and hence it is evident that I do not confine myself to the exact construction shown and described, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope  
85 of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A card-grinding cylinder coated with  
90 emery and provided with two or more intersecting spiral grooves, substantially as set forth.

2. A card-grinding cylinder the surface of which is coated with emery and divided into  
95 diamond or other angular shaped blocks, substantially as set forth.

3. A card-grinding cylinder the surface of which is coated with emery, and provided with two or more intersecting spiral grooves,  
100 which latter divide the surface thereof into diamond or other suitable shaped blocks, substantially as set forth.

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

CHARLES SCHREBLER.

Witnesses:

JACOB B. HOLTZWORTH,  
A. A. HUBER.