

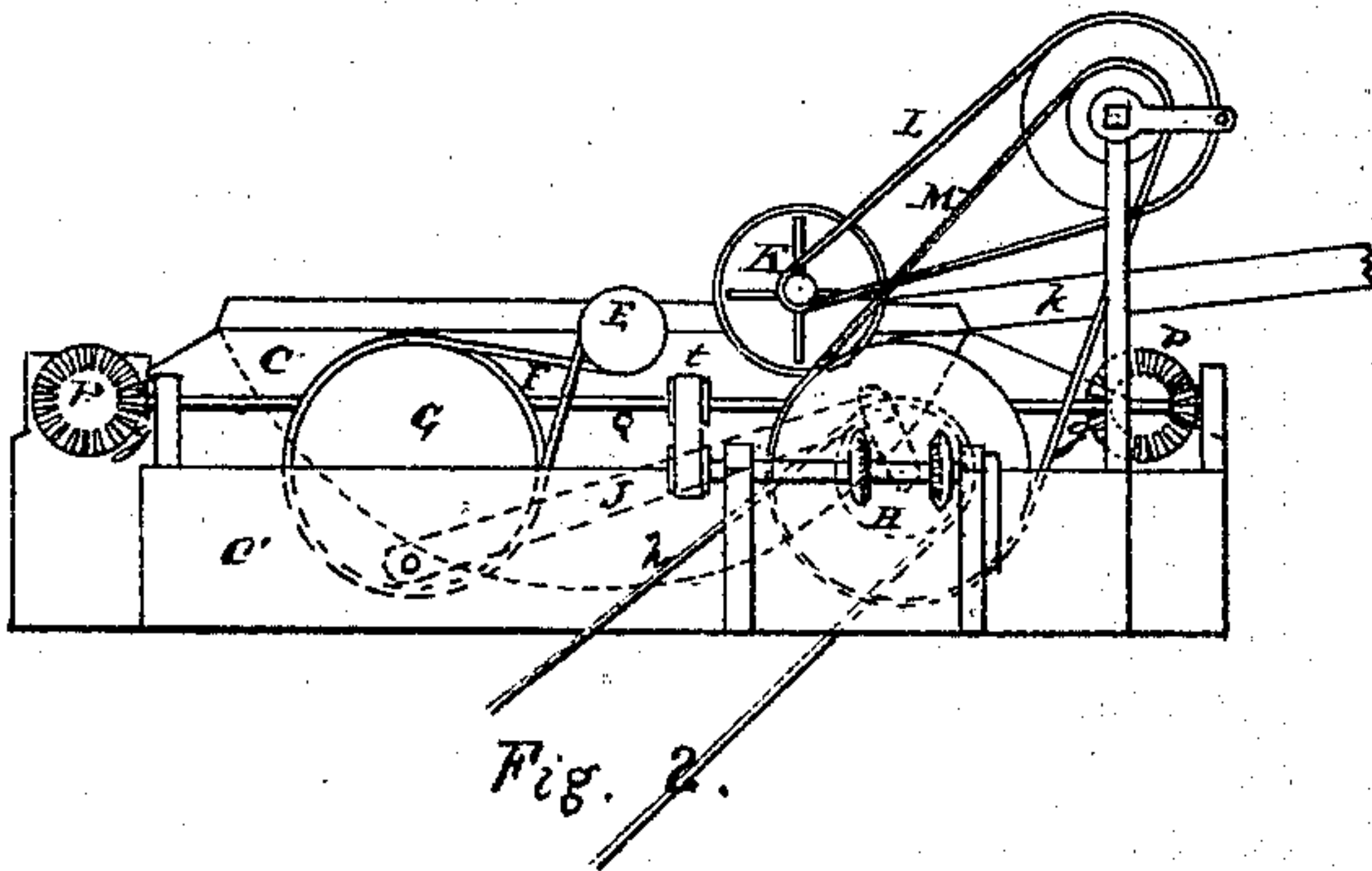
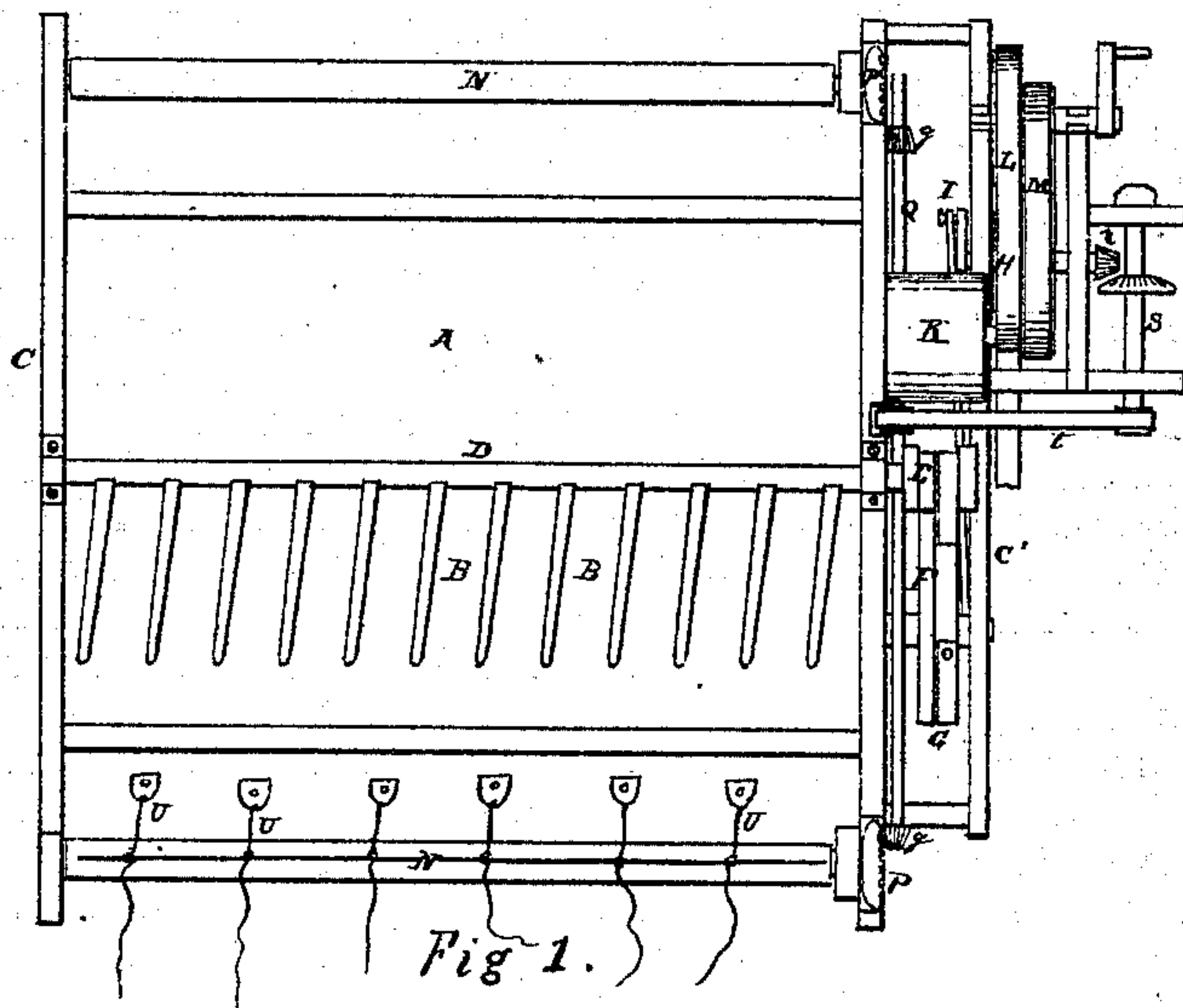
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JOHN W. WHEELER & WILLIAM A. WHEELER.

Improvement in Carpet Beaters.

No. 122,297.

Patented Dec. 26, 1871.



WITNESS.

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JOHN W. WHEELER AND WILLIAM A. WHEELER, OF CLEVELAND, OHIO.

IMPROVEMENT IN CARPET-BEATERS.

Specification forming part of Letters Patent No. 122,297, dated December 26, 1871.

SPECIFICATION.

We, JOHN W. WHEELER and WILLIAM A. WHEELER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Carpet-Beating Machine, of which the following is a specification:

This invention relates to a carpet-beating machine in which oscillating beaters are employed to whip the carpet on the under side as it passes over them through the machine. Also, in combination with the mechanism for beating, there is arranged an exhaust-fan, which carries off the dust and discharges it outside of the building in which the machine is located.

The construction and operation of the machine are fully set forth in the following description:

Referring to the accompanying drawing, Figure 1 is a plan view with top removed to show beaters. Fig. 2 is an end view, showing the driving mechanism.

A is a box or chamber, which may be made of wood or other suitable material, in the form of a half-cylinder, if desired, in which the beaters B oscillate. The chamber is fitted in a strong frame, C, and is covered over with a suitable cover that may be removable, which forms a close chamber, in which the dust is confined. A shaft, D, is fitted in suitable boxes in the ends of the chamber, to which are secured beaters B B, made of wood or suitable material. They are set in a diagonal line from the shaft, so that in their rapid strokes they will strike all parts of the carpet. On the end of the shaft D, projecting through the end of the chamber, is a pulley, E, connected by cross-belts F to a large pulley, G. The belts F are secured at each of their ends to the pulleys, which have only a reciprocating motion. The elasticity of the belts gives a sudden whipping movement to the beaters, which strike the carpet and spring back. Attached to the main frame C is a frame, C', which supports the driving parts of the machine. In the said frame C' is placed a driving-pulley, H, connected by a belt, h, from which power is derived for operating the machine. On the shaft of the driving-pulley H is a crank, I, connected by a pitman, J, to the large pulley G, by which motion is imparted to the beaters. At the upper side of the chamber is placed a fan, K, connected by belts L M to the driving-pulley H, from which it derives motion. A spout, K, leading from the fan out through the walls of the

building, conducts the dust off. At the sides of the machine are placed rollers N N, from which the carpet is rolled from one to the other, being stretched between them, and passing over the shaft D, friction-rollers O O, placed in the slot or opening between the cover and side of the chamber. The rollers N N are connected by bevel-gear P P to a cross-shaft, Q, having bevel-pinions q q arranged to be thrown into gear with either of the gears P P, by which an alternate movement may be given to the rollers for carrying the carpet back and forth through the machine for thoroughly beating and cleaning it. On the shaft of the driving-pulley H is a bevel-pinion, r, connected to a counter-shaft, S, which is connected by pulleys and belt t to the shaft Q, by which motion is imparted to the rollers N N. To adapt irregular ends or shapes of carpets to the rollers N N they are provided with cords U U having clamps at the ends for securing them to the carpet, the cords passing through rings on the rollers N N. The cords being drawn up and tied serve to piece out and hold the carpet tight in all parts.

The operation of this machine is to whip or beat the carpet, while passing through a chamber, with oscillating beaters; the beaters, striking the carpet and quickly flying back and forth, beat the dust from the carpet without injury; at the same time the exhaust-fan, producing a strong current of air outward from the chamber, carries off the dust and discharges it through the spout as fast as it is beaten from the carpet. By this means the carpet is quickly and thoroughly cleaned, and no dust or dirt escapes into the building where the machine is situated.

We claim—

1. The combination of the oscillating beaters B B, the pulleys E and G, and the flexible belts F F in a carpet-beating machine, substantially as described, and for the purpose set forth.

2. The shaft D and its beaters B, pulleys E and G, rollers N N, cross-shaft Q, and blower K, combined and arranged with the chamber A, in the manner and for the purposes set forth.

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Witnesses:

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