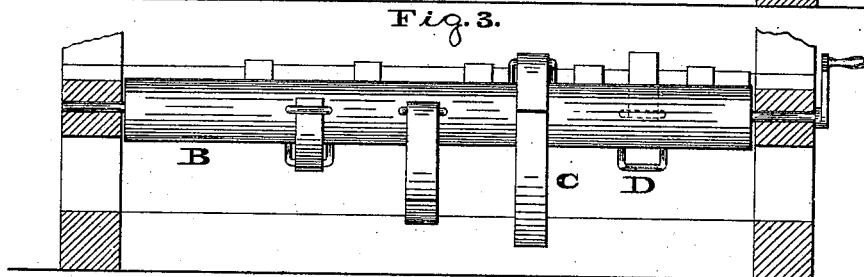
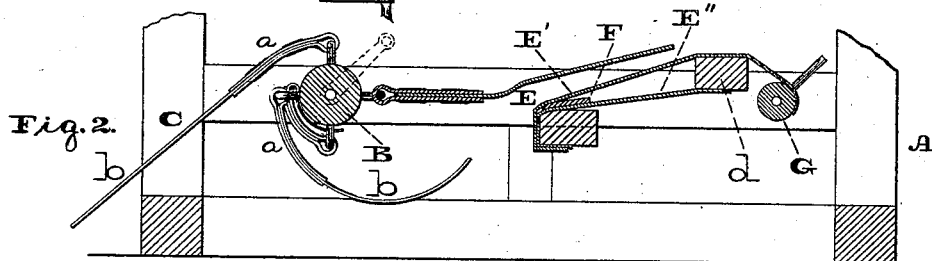
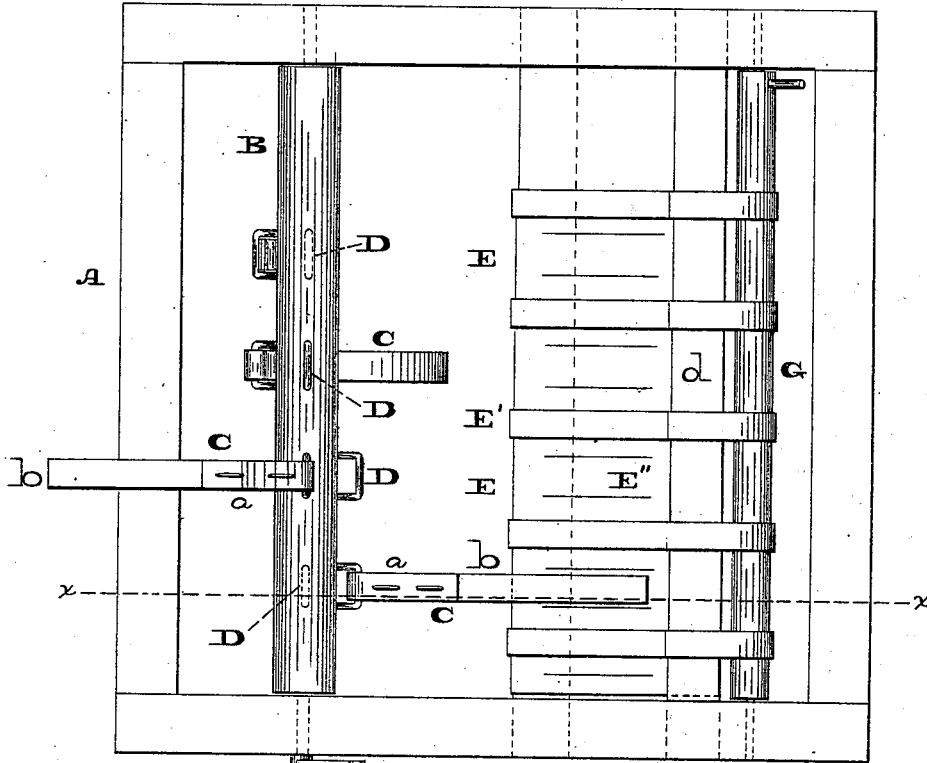


J. L. LEACH.
Carpet-Beater.

No. 212,476.

Patented Feb. 18, 1879.

Fig. 1.



Witnesses:

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UNITED STATES PATENT OFFICE.

JESSE L. LEACH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
CHARLES W. HOLLINSHEAD, OF SAME PLACE.

IMPROVEMENT IN CARPET-BEATERS.

Specification forming part of Letters Patent No. 212,476, dated February 18, 1879; application filed
March 1, 1878.

To all whom it may concern:

Be it known that I, JESSE L. LEACH, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Machines for Cleaning Carpets, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a top or plan view of the machine embodying my invention. Fig. 2 is a transverse vertical section thereof in line *x x*, Fig. 1. Fig. 3 is a rear view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to improvements in carpet-cleaners, as hereinafter more fully set forth and claimed.

Referring to the drawings, A represents a suitable frame for supporting the parts of the machine, and to the sides of the same there is journaled the revolving beater-shaft B.

C represents the beaters, which are connected to the shaft B so as to swing therefrom, and consist of the flexible straps *b* and stocks *a*, which are hinged to the shaft B by means of staples, the said straps *b* being secured in the stocks, and thereby re-enforced at their ends nearest to the shaft. As shown, these stocks are composed each of a strap doubled over so as to constitute a loop around a staple on the shaft, the two ends of the said strap being secured by rivets or stitching, or in an equivalent way, upon the two sides of a strap, *b*, thereby forming a stock which considerably stiffens up the end of the flexible strap.

To the shaft there are also connected staples D, which project from the face thereof, and they are arranged in proximity to the places of connection of the beaters.

Supported on the frame A, in line parallel with the shaft B, is a bed, E, which consists of elevated straps E', secured at their inner ends to the frame of the bed, and passed over an elevating-bar, *d*, mounted on the side pieces of the frame A, the other or outer ends of the straps being properly secured.

E'' represents the depressed portion of the bed, which occupies a position below the straps E', and is constructed of leather, rubber, or

other flexible material. On the upper face of the pad E'', at the inner end thereof, or end on the side facing the beater-shaft, there are secured pieces F, against which the straps E' are in contact, for elevating said straps at the line nearest the beaters.

It will be seen that the beater-shaft is on nearly a horizontal line with the bed. When the shaft rotates, the swinging beaters extend from the shaft, the stocks or arms standing at or about right lines, and the tips at a slight obtuse angle; consequently, when the beaters reach the bed they conform to its incline and deliver their blows flat, directly downward, and sharp on the carpet, which is passed over the bed backward and forward in any suitable manner, the blows being delivered below the horizontal line, and above an angle of, say, twenty degrees depression. By these means I overcome pulling or "scuff blows," which fray the ends of the carpet, and the cut places which frequently exist at the sides of the carpet.

In many cases the width of the carpet is such that it occupies less space than the width of the bed; consequently certain beaters are uselessly and injuriously striking the pad. To prevent this those beaters are folded or gathered, and secured by means of the staples D, thus making said beaters inoperative.

In order to adjust the tension of the straps E' relatively to the texture or strength of carpets, I employ a roller, G, and attach the outer ends of said straps thereto.

By rotating the roller in one direction the straps will be tightened, and by a reversed movement the straps will be slackened. In the former case carpets that are strong and in good order will be beaten or cleaned while suspended or resting on the elevated straps E', and in the latter case the weight of the carpet and action of the beaters will depress the carpet on the pad, so that as it is not stretched it will be enabled to endure with safety the beating operation. Should the carpet be temporarily withdrawn from the bed and the beater-shaft be in motion, the beaters will strike the depressed pad E'' without injury to themselves or to the bed.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. The swinging beaters C, composed of flexible straps secured to and stiffened by the stocks *a* at their inner ends, and pivoted to a revolving shaft, B, substantially as described, and for the purpose set forth.

2. The bed E, formed of a depressed pad, E'', elevating-straps E', and adjusting-roller G, substantially as described, and for the purpose set forth.

3. The beater-shaft provided with beaters C, composed of flexible straps with the stiffening-stocks *a*, and with the staples D, for securing the beaters when not in use, substantially as described.

4. The pad E'', provided with the pieces F,

in combination with the straps E' and roller G, substantially as described, and for the purpose set forth.

5. The adjusting-roller G, in combination with the elevating-straps E', bar *d*, and pad E'', substantially as described, and for the purpose set forth.

6. The combination of the swinging beaters C, pivoted to a revolving shaft, B, with the bed E, formed of a depressed pad, E'', and elevating-straps E', substantially as described, and for the purpose set forth.

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Witnesses:

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