W. H. Hankinson,

Carpet Cleaner.

No. 108,589. Patented Oct. 25. 1870.

Fig: 1

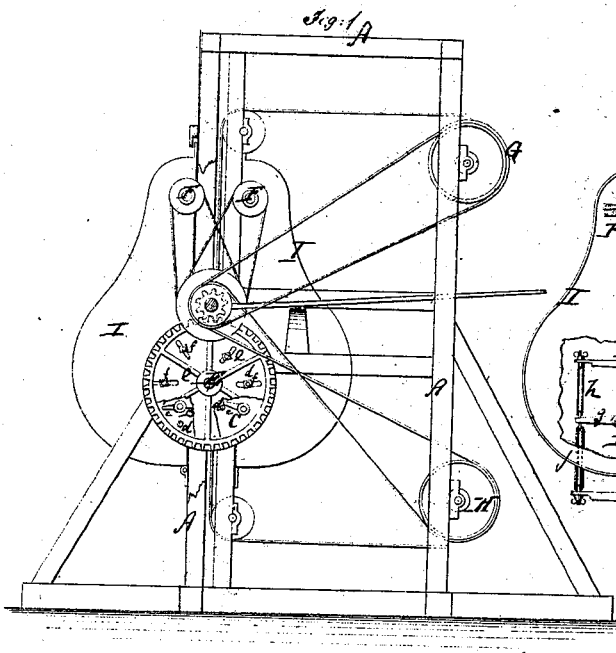


Fig: 3

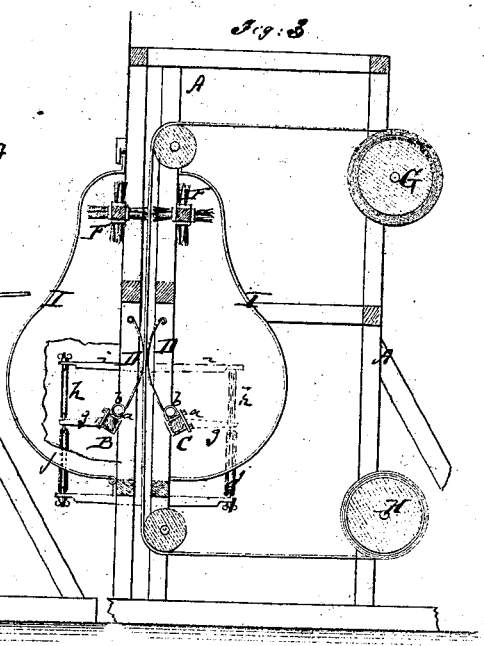
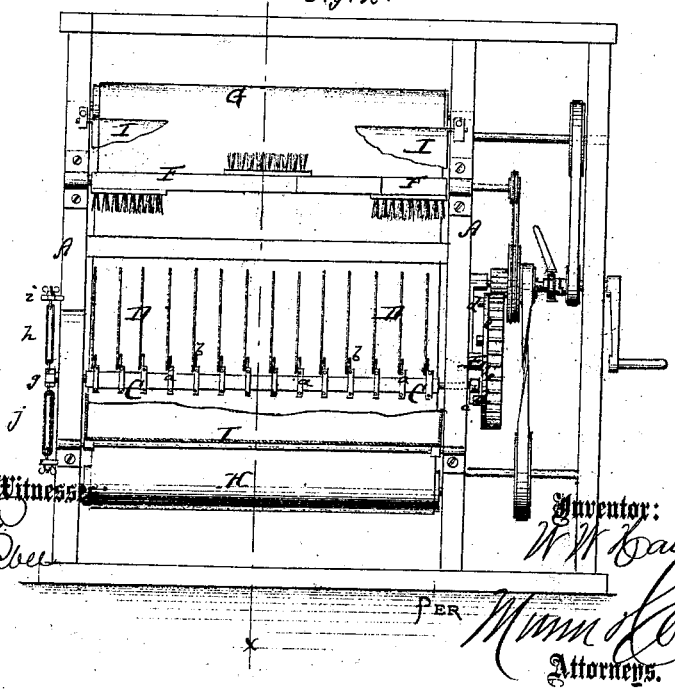


Fig: 2.



Witnesses:

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WILLIAM H. HANKINSON, OF NEW YORK, N. Y.

Letters Patent No. 108,589, dated October 25, 1870.

IMPROVEMENT IN CARPET-BEATERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM H. HANKINSON, of the city, county, and State of New York, have invented a new and improved Carpet-Beater; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents an end elevation of my improved carpet-beater.

Figure 2 is a side elevation, partly in section, of the same.

Figure 3 is a vertical transverse section of the same, taken on the plane of the line *x x*, fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved machine for beating and cleaning carpets and other fabrics; and

It consists in the combination and arrangement of beaters, springs, toothed disk, and brush and rock-shafts, and more particularly in the arrangement of a set of double-acting springs, by which the strokes of the beaters are made elastic, and properly yielding. The carpet is thereby prevented from injury during the beating process.

A in the drawing represents the stationary frame of my improved carpet-beater.

This frame is made of wood, or other suitable material, and of such suitable size and strength as adapts it best to the support of the machinery used.

B C are the two beater-shafts, hung in the frame, and provided with wire beaters D D.

These beaters are secured to their shafts by means of clasps *a a*, or in other suitable manner, and have coils *b b*, or other means of becoming elastic.

The shafts B C are hung parallel to each other, and carry projecting cranks *c c* at their inner ends, which cranks, when struck by projecting pins *d*, on a revolving disk, *e*, cause the shafts B C to be swung, so that the beaters are carried apart.

The disk *e* is mounted upon a horizontal driving-shaft, E, which receives rotary motion by suitable mechanism.

The pins *d* are fitted through slots in the disk *e*, and clamped by nuts *f*, being thus made adjustable to regulate the strokes of the beaters.

The outer ends of the shafts B C carry cranks *g g*, which are, by strong springs *h h*, connected with a cross-bar, *i*, of the frame A.

When the shafts B C are swung, by means of the pins *d*, the springs *h* are stretched, and will, as soon as the pins *d* leave the cranks *c*, rapidly contract, so as to swing the shafts back, and powerfully force the beaters against the carpet suspended between them.

Thus, as the shaft E is being revolved, the beaters will be alternately carried away from and against the carpet, and will consequently beat the same in the requisite manner.

j j are compensating springs, weaker than the springs *h*, and applied to the opposite sides of the cranks *g*, as shown. They serve to temper the strokes of the beaters, tending to draw them off the carpet at the moment of the stroke, and prevent thereby the injuring of the carpet by the violence of the strokes.

F F are rotary brushes, arranged above or below the beaters on opposite sides of the carpet, and connected with the driving-shaft by suitable devices. They serve to remove the dust laid loose by the beaters.

The carpet is hung upon suitable rollers, G H, which are revolved to gradually move it along between the beaters.

It is evident that the springs used in connection with the rock-shafts B C, may be made spiral, flat, or of other suitable form, of metal, rubber, or other material.

A case, I, may be used to envelope the beating and brushing machinery, and to keep the dust from flying about.

Having thus described my invention,

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

1. The combination, in a carpet-beater, of the adjustable wire beaters D D, rock-shafts B C, cranks *c*, disk *e*, pins *d*, springs *h* and *j*, cranks *g*, and brush-shaft F, all arranged substantially as shown and described.

2. The springs *h*, combined with the cranks *g* and compensating springs *j*, for the purpose of actuating the carpet-beaters, substantially in the manner herein shown and described.

WILLIAM H. HANKINSON.

Witnesses:
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