

H. S. ALLISON.  
Carpet-Cleaners.

No. 146,975.

Patented Feb. 3, 1874.

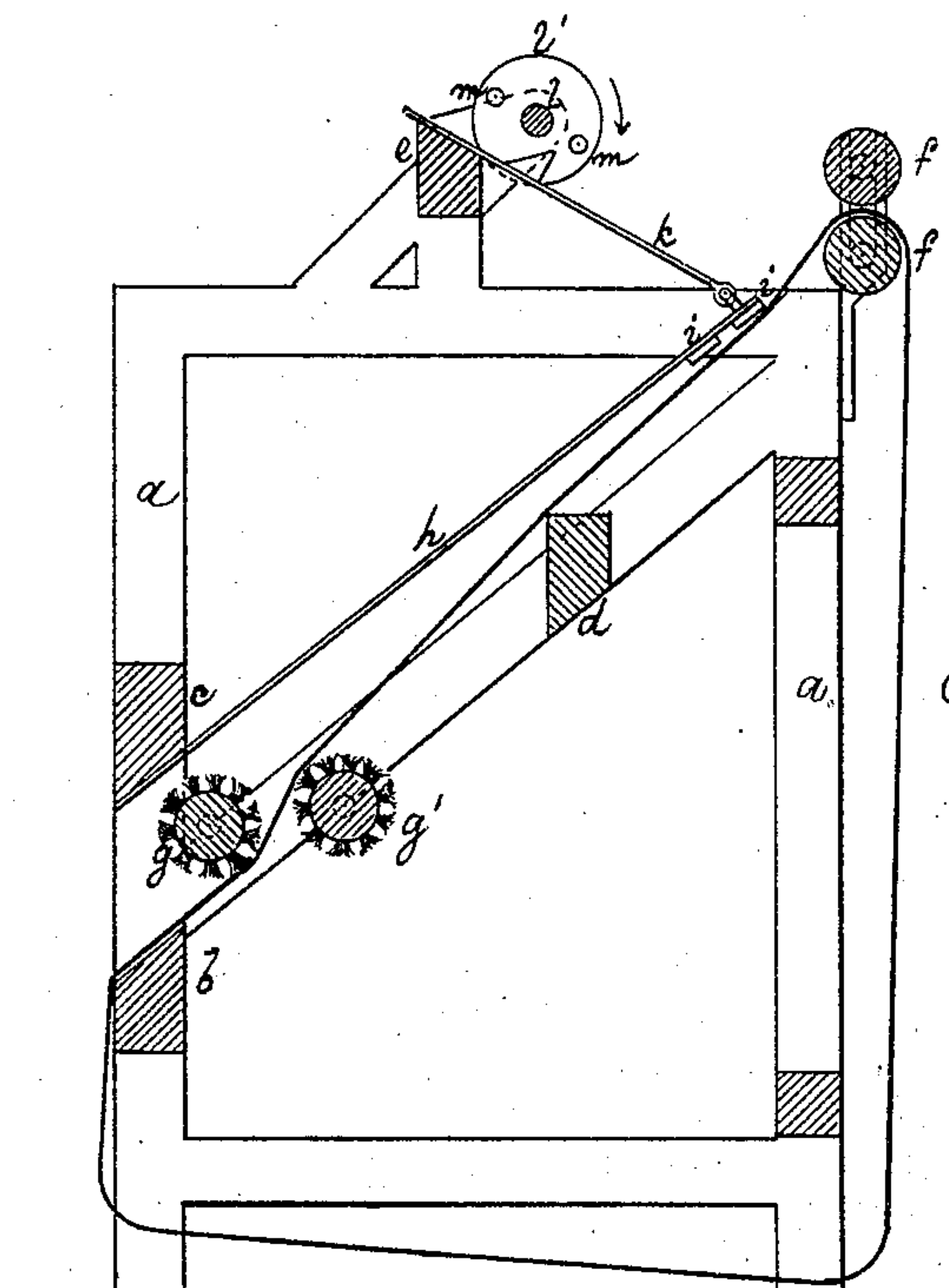


Fig 1.

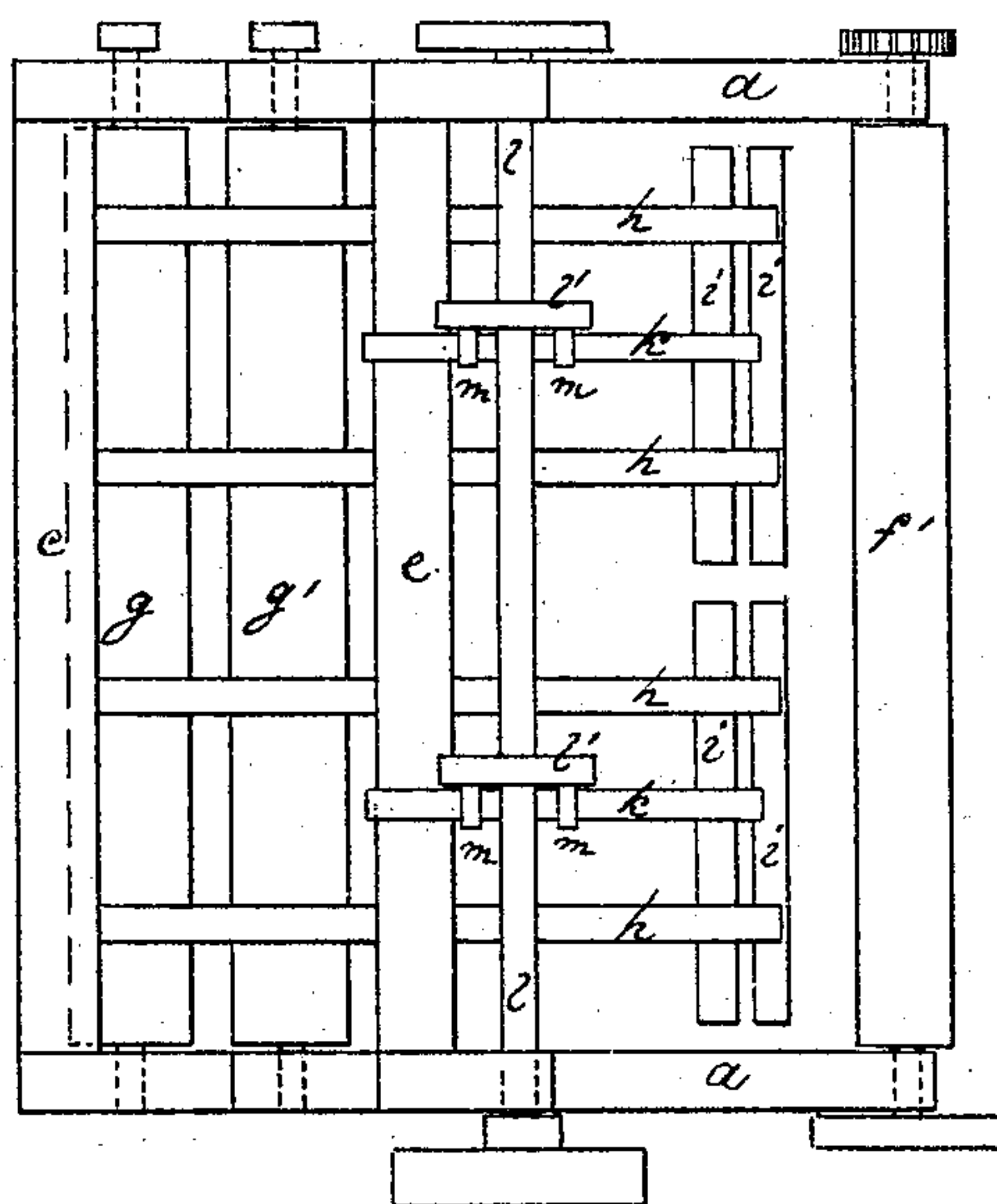


Fig 2

Witnesses  
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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN CARPET-CLEANERS.

Specification forming part of Letters Patent No. **146,975**, dated February 3, 1874; application filed August 5, 1873.

*To all whom it may concern:*

Be it known that I, HENRY S. ALLISON, of the city, county, and State of New York, have invented an Improved Machine for Cleaning Carpets, of which the following is a specification:

In the drawings referred to in this specification, Figure 1 represents a vertical cross-section, and Fig. 2 a plan view, of the machine.

Heretofore in machines for cleaning carpets, the carpet was either made to travel from one reel to another and back again while the beating and brushing took place, or else the ends of the carpet were tacked together, and the carpet, thus made endless, was being propelled continuously and horizontally in one direction by feed-rollers, and had to be supported by a bed of cords or other open-work where the blows of the beaters were given. Nevertheless the carpet had a chance to bag between the cords or in the open spaces of the supporting-bed, and thus the bed would receive more of the blows than the carpet.

The object of my invention is to construct a carpet-beating machine of the endless kind, in which the carpet, while being under the action of the beaters, shall travel upward, so as to cause the weight of the carpet below the feed-rollers to keep the carpet under tension while the beaters are so treated as to deliver their blows directly below the feed-rollers, thus avoiding the necessity of an open bed, which would only destroy the effect of the blows, as shown above. Another object of my invention is to construct the beaters themselves in a manner to be more effective.

The machine is constructed as follows: *a a'* are two vertical frames, which support the horizontal cross-beams *b, c, d*, and *e*, the feeding-rollers *f f'*, which cause the carpet to travel along under the operations of beating and brushing, and the revolving brushes *g g'*. The beaters consist each of two long elastic bars,

*h h*, fastened with their rear ends to the cross-beam *c*, and having two or more slats, *i i*, fastened to their front ends in a transverse direction. The springs are in an inclined direction or position of about forty-five degrees, more or less, and are being raised each by a rod, *k*, which is hinged to one of the slats *i*, and slides back and forth upon the upper side of the cross-beam *e*. There is a revolving shaft, *l*, having as many disks *l'* keyed onto it as there are beaters in the machine, each disk having two or more pins, *m m*, in front, by which the rods *k k* are being raised and dropped alternately, thus producing the beating motion for the carpet.

The carpet passes over the cross-bar *b*; thence through between the two revolving brushes *g g'*; thence over the cross-beam *d*, which supports the carpet, and thence through between the feeding-rollers *f f'*; thence downward to the floor, and, finally, back again to the cross-beam *b*, the ends of the carpet being fastened together to make it endless.

The motion of the feeding-rollers *f f'*, and also the motion of the revolving brushes, may be obtained directly from the cam-shaft *l*.

I claim as my invention—

1. The beaters, constructed each of two elastic bars or springs, *h h*, and slats *i i*, and operated by the cam-motion of the pins *m m*, substantially as and for the purpose specified.

2. Beaters constructed and operated substantially as specified, in combination with feed-rollers *f f'*, situated as described, so as to propel the carpet in an inclined upward direction, to cause the weight of the carpet below the said feed-rollers to keep the carpet straight and under tension while receiving the blows of the beaters, as set forth.

HENRY S. ALLISON.

Witnesses:

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