

M. ALLEY.  
Carpet-Beating Machine.

No. 221,762.

Patented Nov. 18, 1879.

Fig. 1.

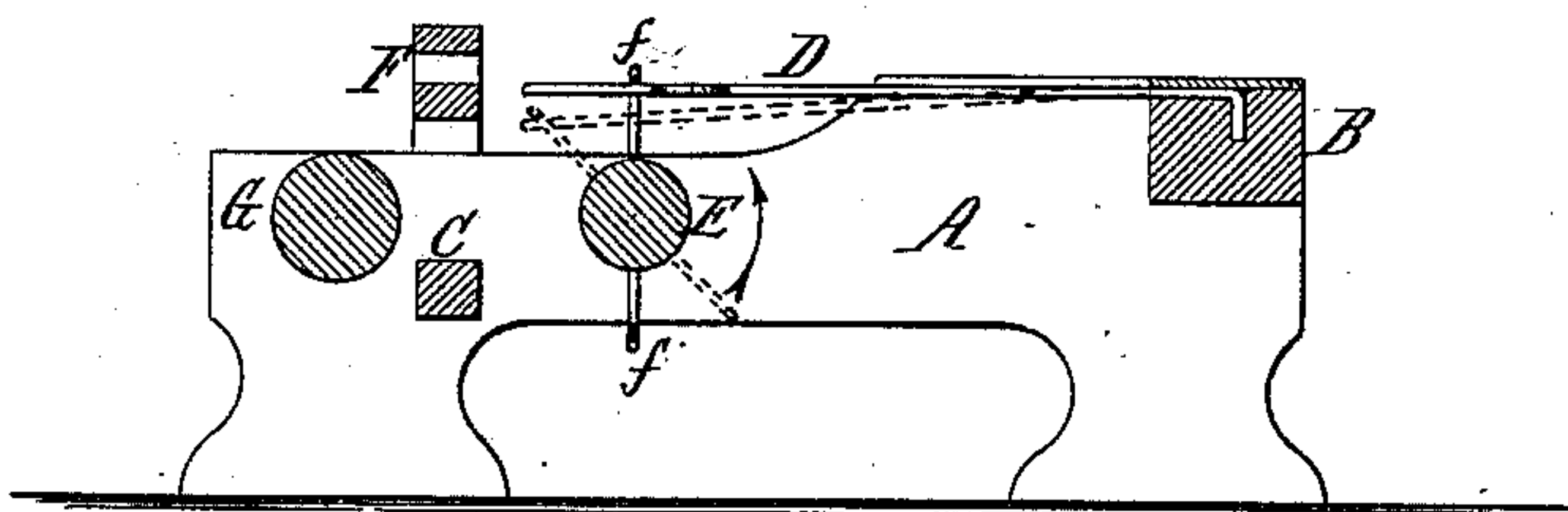


Fig. 2.

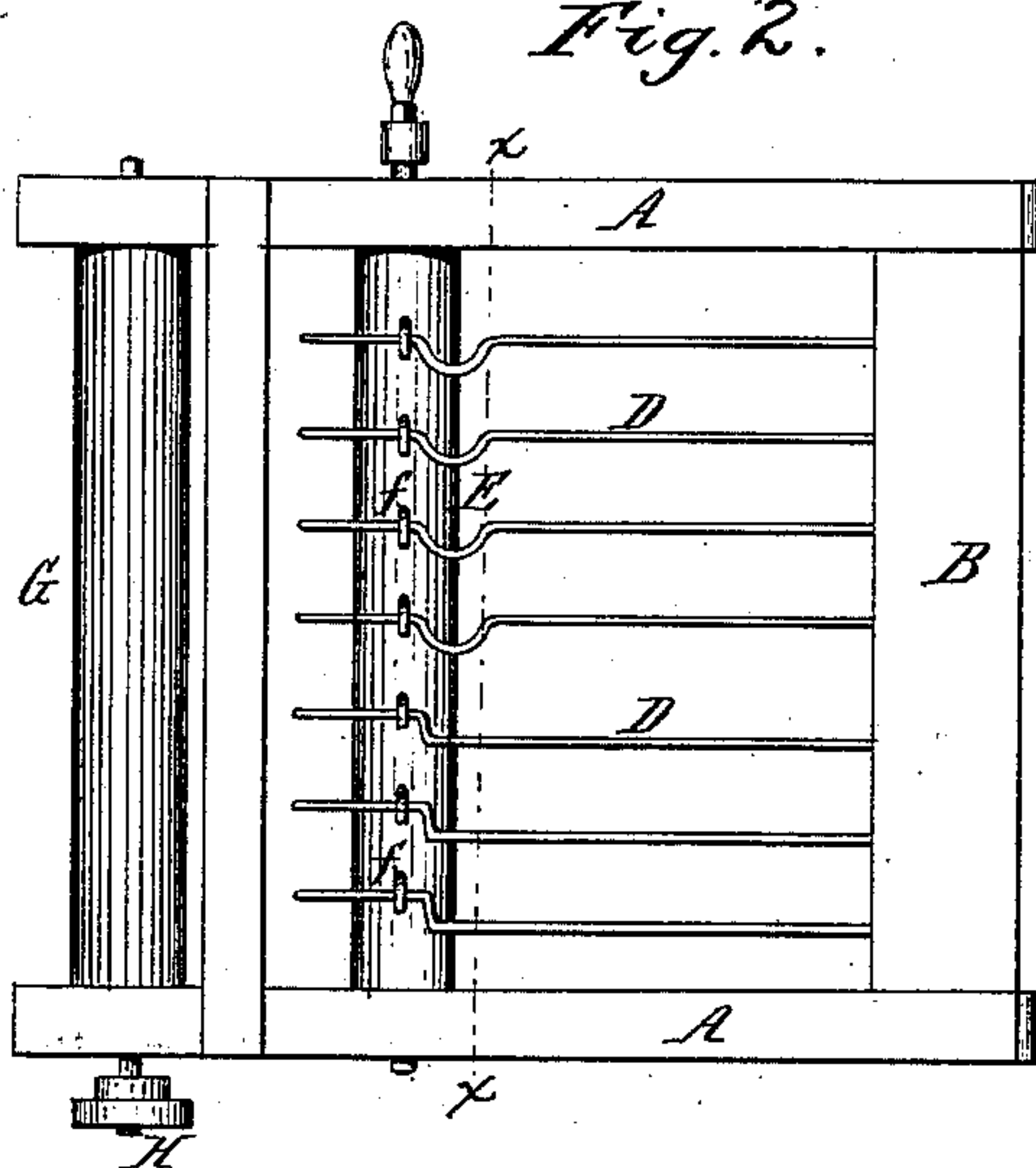
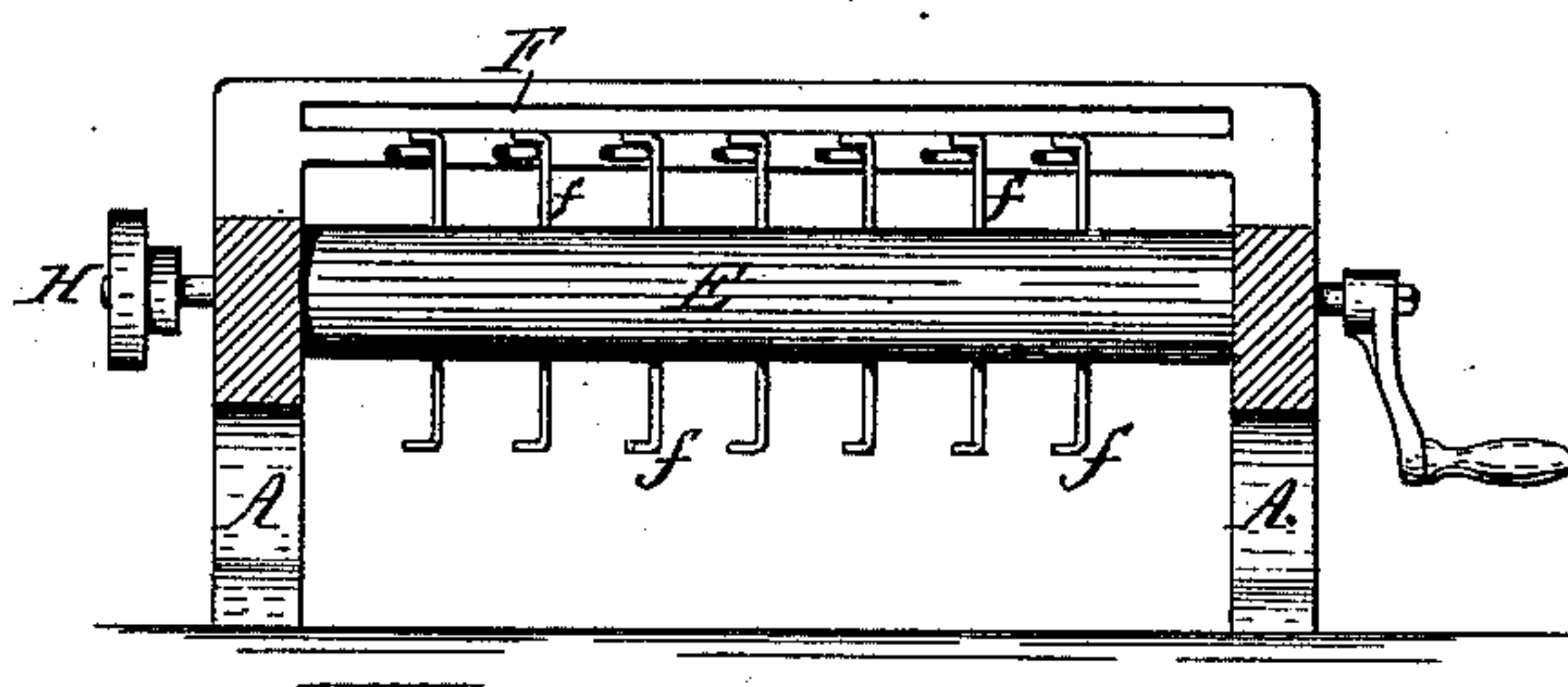


Fig. 3.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN CARPET-BEATING MACHINES.

Specification forming part of Letters Patent No. **221,762**, dated November 18, 1879; application filed September 23, 1879.

*To all whom it may concern:*

Be it known that I, MOSES ALLEY, of Friendship, in the county of Allegany and State of New York, have invented new and useful Improvements in Carpet-Beating Machines, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to a machine for dusting and beating carpets in an easy, thorough, and expeditious manner.

The invention consists, principally, of a carpet-beating machine provided with elastic arms or beaters, which are deflected or bent by rotating hooks, and which strike or beat the carpet in their return movement; also, of certain details of construction, as will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a sectional elevation of my improved carpet-beating machine. Fig. 2 is a top-plan view thereof. Fig. 3 is a cross-section in line *x x*, Fig. 2.

Like letters of reference designate like parts in the several figures.

A A represent the side frames of the machine, connected at the rear by a bed-piece, B, which is arranged flush with the top of the rear portions of the side frames, A A. C is a cross-piece, which connects the side frames, A A, near the front of the machine.

D are the elastic beater-arms, arranged in a horizontal plane in line with the upper side of the bed-piece B, to which they are secured with their rear ends, while their forward ends are free to vibrate. The arms D are preferably constructed of steel rods, so as to be at the same time strong and elastic.

E is the shaft or roller which actuates the beater-arms. It is arranged transversely below the same, and provided with several rows of hooks, *f*, which engage over the free ends of the beater-arms D, and depress the same as the shaft E is rotated until the hooks pass by the ends of the arms D, when the latter spring back. The arms D are bent so as to permit the hooks *f* to engage over their free ends. As shown in the upper portion of Fig. 2,

this bend is preferably made U-shaped; but, if desired, the arms may be bent like a bayonet, as shown in the lower portion of Fig. 2.

F is a slotted guide, arranged transversely in front of the free ends of the arms D, and secured to the depressed portions of the side frames A A.

G is a feed-roller, arranged at the front end of the machine, for drawing the carpet over the arms D when the machine is driven by power. The roller G is driven by a belt running over one of the pulleys H; and the shaft E may be driven from the roller G by suitable gearing, or in any other suitable manner.

When the machine is to be operated by hand the roller G may be dispensed with, and the shaft E may be operated by means of a hand-crank.

The carpet to be cleaned is placed upon the beater-arms D, and rests upon the rear portions of the side pieces, A, and upon the bed-piece B. The forward portions of the side pieces, A, of the frame are depressed below the level of the beater-arms, so that the carpet is at this point supported solely by the beater-arms. The front edge of the carpet is passed through the horizontal slot or opening of the guide F, whereby the carpet is properly spread. The shaft E is now rapidly rotated in the direction of the arrow, Fig. 1, whereby the free ends of the beater-arms are repeatedly depressed and released, whereby a large number of sharp strokes are delivered against the under side of the carpet in quick succession. In this manner the carpet is very effectually beaten and cleaned with a very small expenditure of power.

The rotating hooks *f* assist in moving the carpet over the beater-arms toward the discharge end of the machine, and as the carpet is supported principally upon the beater-arms, which form an open grate, there is ample room for the free escape of the dust both above and below the carpet.

My improved machine may be constructed of such a size as to make it applicable for domestic use when it is operated by hand, or it



may be constructed so as to be driven by power, as required for carpet-cleaning establishments.

I claim as my invention—

1. The elastic beater-arms D, constructed with a U-shaped bend, substantially as and for the purpose set forth.

2. In a carpet-beating machine, the combination, with the elastic beater-arms D, constructed with a U-shaped bend, of the rotat-

ing shaft E, provided with hooks *f*, substantially as set forth.

3. The combination, with the elastic beater-arms D and driving-shaft E, provided with hooks *f*, of the slotted guide F, substantially as set forth.

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Witnesses:

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