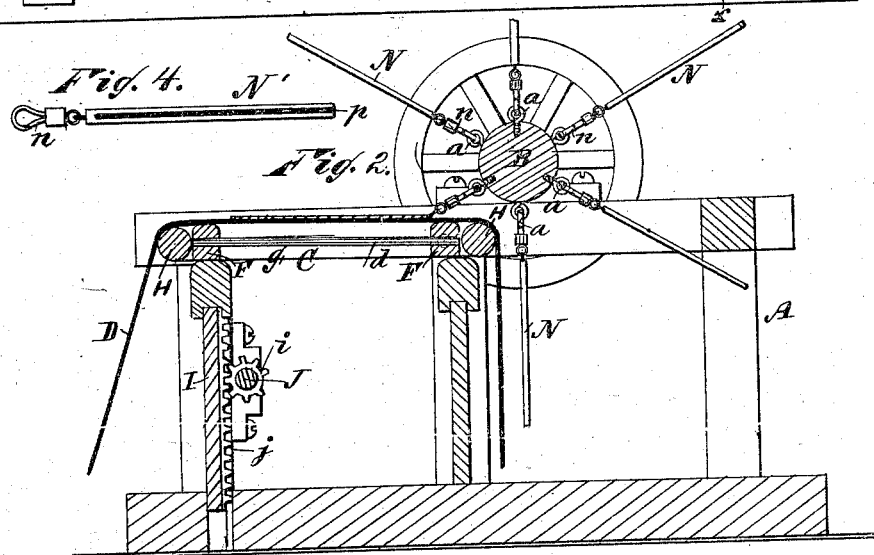
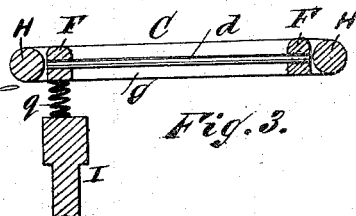


T. S. CHURCH & J. E. DOW.
CARPET BEATING MACHINE.

Patented Aug. 1, 1882.



Theo. J. Hostr.
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J. S. Church

J. E. Dow

BY

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UNITED STATES PATENT OFFICE.

TITUS S. CHURCH, OF BOSTON, AND JOHN E. DOW, OF CAMBRIDGE, MASS.

CARPET-BEATING MACHINE.

SPECIFICATION forming part of Letters Patent No. 262,004, dated August 1, 1882.

Application filed December 2, 1881. (No model.)

To all whom it may concern:

Be it known that we, TITUS S. CHURCH, of Boston, in the county of Suffolk and State of Massachusetts, and JOHN E. DOW, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Carpet-Beating Machine, of which the following is a full, clear, and exact description.

Our invention relates to that class of machines which have arms or beaters of some flexible material attached to a revolving cylinder; and it consists principally in providing the machine with a vertically adjustable and vibrating bed or table, upon which the carpet is placed for cleaning, as hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of our improved carpet-beating machine. Fig. 2 is a sectional elevation of the same, taken on the line *x x* of Fig. 1. Fig. 3 is a detailed sectional elevation of the vibrating bed or table, showing a modification; and Fig. 4 is an elevation of one of our loaded arms or beaters.

A represents the frame of the machine, which may be of any suitable size.

B represents the revolving cylinder, which is provided with the rows of eyes *a*, and C represents the adjustable vibrating table or bed upon which the carpet D or other thing to be whipped and cleaned of dust is to be placed. This table or bed is composed of the series of rods *d*, (of metal or wood,) the parallel side bars, FF, and the parallel end bars, *g g*. The bars FF are correspondingly perforated for holding the rods *d*, as shown in Fig. 2. The ends of the bars *g g* extend past the bars FF, as shown in Fig. 1, and in these extended portions are journaled the rollers H H, over which the carpet or other thing being whipped passes. The bed or table thus formed is pivoted or hinged in the main frame upon the studs or pivots *h h*.

The outer edge of the bed or table is supported upon the vertical board I, which board is adapted to be moved rapidly up and down, for vibrating the bed or table, by means of the shaft J, which is provided with the pinions *i i*,

which engage with the racks *j j*, secured upon the inside of the board, as clearly shown in Fig. 2.

Upon the shaft J, near its crank K, is placed the ratchet-wheel L, and upon the frame is pivoted the pawl *l*, which is adapted to engage with the ratchet for holding the board I and the bed or table at any desired height, so that the carpet or other thing being cleaned may be held in position for receiving the blows from the arms or beaters N of the main cylinder to the best advantage for whipping out and removing the dust.

The beaters N are made of some flexible material—such as heavy leather or rubber—and they are provided with the snap-hooks *n* at one end, by which they are attached to the cylinder, the hooks snapping into the eyes of the cylinder, as clearly shown in the drawings. By means of the snap-hooks the beaters may be readily attached and detached to and from the cylinder, so that the number of beaters may be varied, if desired, according to the thickness of the carpet to be cleaned, and should any of the beaters become detached while using the machine the same may be easily snapped back to place upon the cylinder.

In case very heavy carpets are being treated, we shall use the loaded beaters, such as shown at N', Fig. 4. These beaters will be formed by sewing, riveting, or otherwise securing between two thin sheets of leather or rubber, or flexible material of any kind, the loading *p*, of lead or similar material, of sufficient weight to give blows of sufficient force to render effective the process of whipping for cleaning the carpet thoroughly.

In some cases, where it is desired to give to the object being cleaned still further vibration than will be given by the movement of the board I, the upper edge of this board will be provided with the springs *q*, upon which the outer edge of the board or table C will be supported, as shown in Fig. 3, and it is designed to attach a blower or exhaust-fan to the machine in such a position as to carry the dust beaten from the object being treated to a proper receptacle, where it will be collected and condensed; and in some instances a bed or table will be placed upon both sides of the cylinder B, so that carpets may be whipped

and cleaned upon the reverse motion of the cylinders.

In use it will be understood that it is only necessary to place the carpet upon the bed or table C, and impart motion to the cylinder by hand-power applied to the crank Q, or by a belt passing over pulley upon the shaft of the cylinder, and to impart an oscillating motion to the shaft J by hand-power applied to the crank K, or by suitable machinery, the carpet being moved along over the table or bed as the beating or whipping continues, until the cleaning is completed. This rapid vertical vibration of the carpet, together with the rapid beating, causes the dirt to be removed rapidly and thoroughly from the carpet and without injury to the carpet.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The shaft J, having the pinions *i i*, in combination with the board I, provided with the racks *j*, and supporting the table or bed C, substantially as described.

2. The bed or table C, formed of the perforated parallel pieces F F, end pieces, *g g*, rods *d*, and the rollers H H, substantially as and for the purposes set forth.

3. The bed or table C, hinged in the frame and resting upon the vertically-moving board I, in combination with the cylinder B, provided with beaters, as and for the purposes set forth.

TITUS S. CHURCH.
JOHN E. DOW.

Witnesses:

HENRY H. BUCK,
JOHN H. COAKLEY.