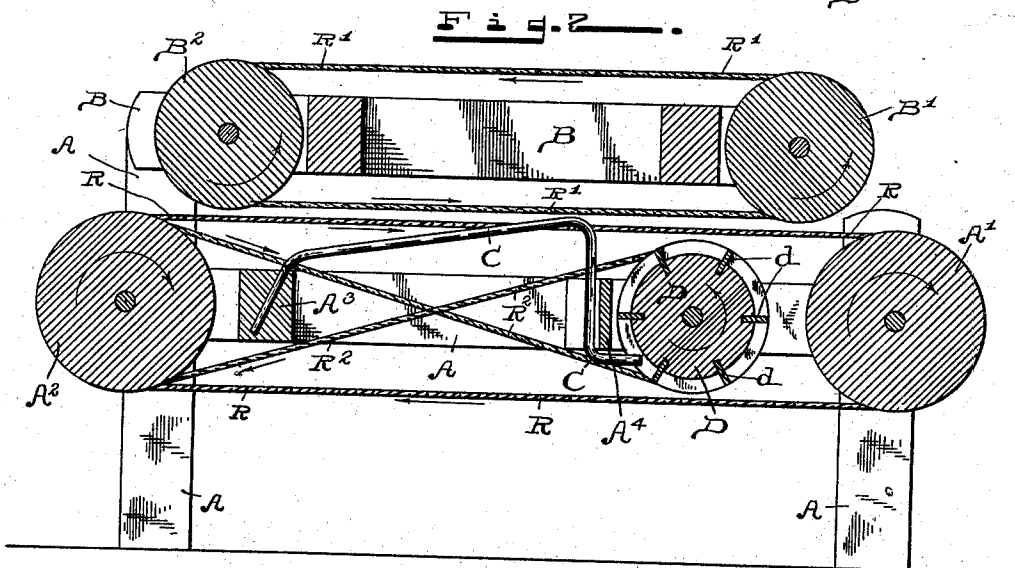
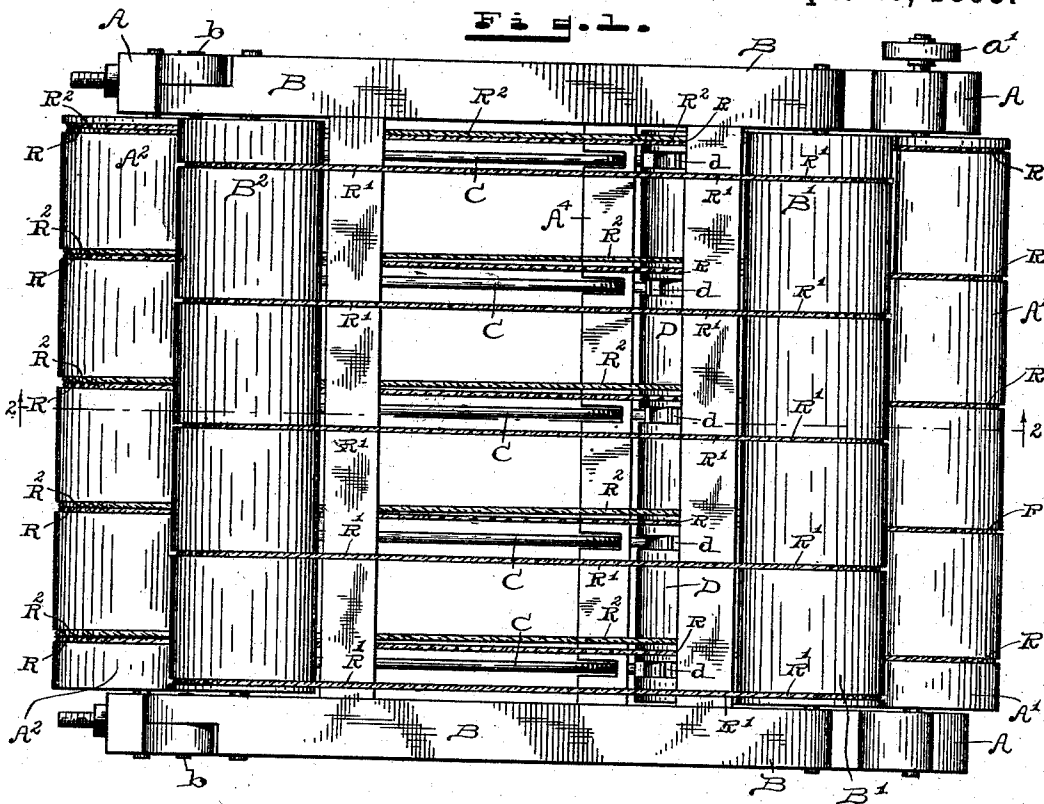


(No Model.)

C. W. RAYMOND.
CARPET BEATING AND CLEANING MACHINE.

No. 505,481.

Patented Sept. 26, 1893.



WITNESSES:

F. H. Warner
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INVENTOR

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per

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UNITED STATES PATENT OFFICE.

CHARLES W. RAYMOND, OF EVANSVILLE, ASSIGNOR OF ONE-HALF TO
JOHN H. HARFORD, OF INDIANAPOLIS, INDIANA.

CARPET BEATING AND CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 505,481, dated September 26, 1893.

Application filed December 23, 1892. Serial No. 456,111. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. RAYMOND, a citizen of the United States, residing at Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Carpet Beating and Cleaning Machines, of which the following is a specification.

My said invention relates to that class of devices known as carpet beating machines, and it principally consists in a series of rollers carrying cords or bands adapted to draw the carpet through the machine, with a series of spring fingers adapted to continuously beat upon the carpet during such passage, and means for operating such fingers, all as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a top or plan view of a carpet beating machine embodying my said invention, and Fig. 2 is a longitudinal sectional view looking upwardly from the dotted lines 2 2 in Fig. 1.

In said drawings the portions marked A represent the frame-work of the machine; B a swinging frame mounted on said frame-work; C the spring fingers, and D a wheel having projections adapted to come in contact with and operate said fingers.

The frame A is an ordinary rectangular frame of suitable construction, and is generally mounted upon legs. Rollers A' and A² as well as the escapement roller D are mounted therein. The roller A' is the main or driving roll, and upon the end of its shaft there may be a pulley a' by which power may be transmitted thereto. Rope belts R are mounted in grooves in this roller, and run thence in similar grooves around the roller A², both rollers thus being given a uniform movement. Said rope belts also serve to support and guide the carpet in its progress through the machine.

The frame B is mounted by pivots b on the frame A, and carries rollers B' and B² which are connected by rope belts R' in the same manner that the rollers A' and A² are connected by the rope belts R. Said rope belts R' are, in operation, upon the opposite side of

the carpet, while it is passing through the machine, to the rope belts R, and said two series of rope belts thus guide and carry the carpet in unison. Power may or may not be applied to the rollers B' and B² but generally it will not be found to be necessary.

The spring fingers C are mounted in a cross bar A³ in the frame A at one end and extend thence on an upward incline toward the discharging end of the machine, until they reach at their highest point an elevation slightly above the upper members of the ropes R, except when forcibly depressed, and are thus adapted to strike with considerable power the under side of the carpet which is passing over said ropes. This will be readily understood from an inspection of Fig. 2. Said fingers are prevented from reaching too great a height in their upward movement by the cross bar A⁴ under which the points of these fingers pass, as shown.

The roller D is provided with as many grooves as there are spring fingers C, and in each groove there are a number of catches d, which catches are preferably (although not necessarily) so distributed as to operate on the fingers successively, instead of simultaneously. Said roller is driven from the roller A² by rope belts R² which run in grooves in the rollers over which they pass, the same as the rope belts R and R'.

The operation of my invention is as follows: A carpet being introduced between the rollers A² and B² it passes through between the ropes in the direction indicated by the arrows, and over the spring fingers C. These are constantly being depressed and permitted to escape by the catches d, and are thus thrown into violent contact with the under side of the carpet, and beat it thoroughly, as will be readily understood.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a carpet beating machine, of a series of rollers, one set being above, and the other below, the carpet in operation, belts or ropes connecting said rollers and adapted to carry a carpet through the machine when operated, spring fingers ar-

ranged in the path of the carpet, and means of actuating said fingers, substantially as set forth.

2. The combination, in a carpet beating machine, of two sets of rollers having grooves in their faces, rope belts laid in said grooves and connecting said rollers, said sets of rollers being arranged to permit the passage of a carpet between them, and beating mechanism arranged to operate in the path of the carpet.

3. The combination, in a carpet beating machine, of a main frame-work, a set of rollers connected by belts or ropes and mounted in said frame-work, a second frame secured to the first and also carrying a set of rollers connected by ropes or belts, spring fingers mounted in said main frame, and an escapement wheel also mounted in said main frame and adapted to operate said fingers, substantially as set forth.

4. The combination, in a carpet beating machine, of a frame A carrying grooved rollers A' and A² with ropes or belts R laid in said grooves and connecting said rollers, a grooved escapement wheel D mounted in said frame-work and driven from the roller A² by means of ropes R², spring fingers C mounted in a cross-bar A³ in the frame-work and adapted to be operated by said escapement wheel, a frame-work B pivoted to the frame A and carrying grooved rollers B' and B², and ropes or belts R laid in said grooves and connecting said rollers, substantially as shown and described.

In witness whereof I have hereunto set my hand and seal, at Evansville, Indiana, this 15th day of December, A. D. 1892.

CHARLES W. RAYMOND. [L. s.]

Witnesses:

ALEX. PRITCHETT,
WM. RANES.