(No Model.)

S. H. RAYMOND.

CARPET SWEEPER.

No. 471,086. Patented Mar. 15, 1892.

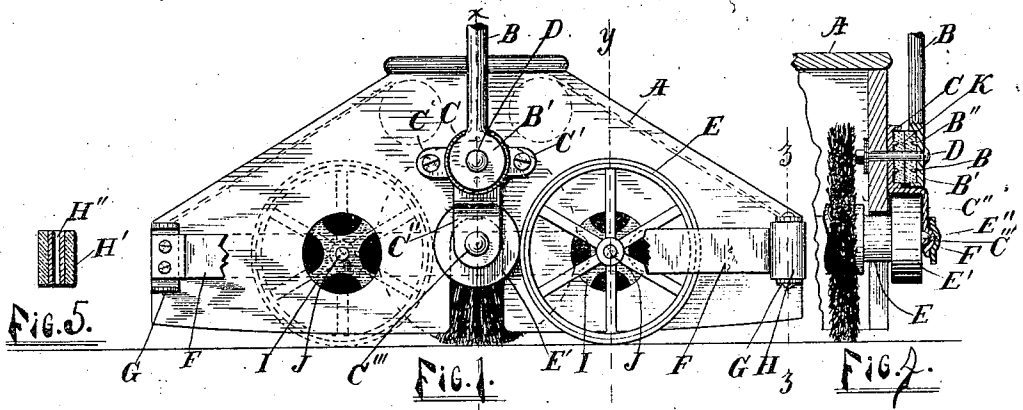

Fig. 5. Fig. 1. Fig. 4.

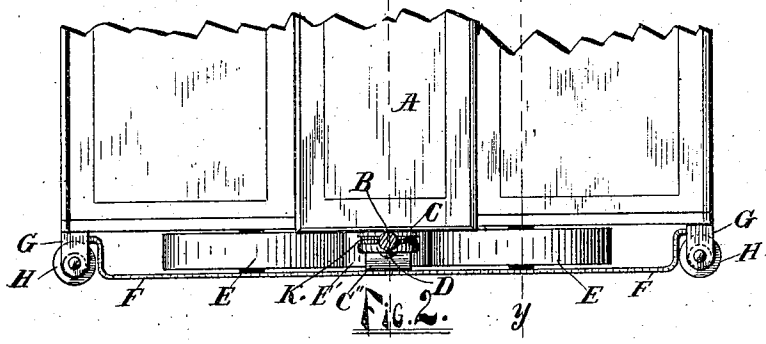

Fig. 2.

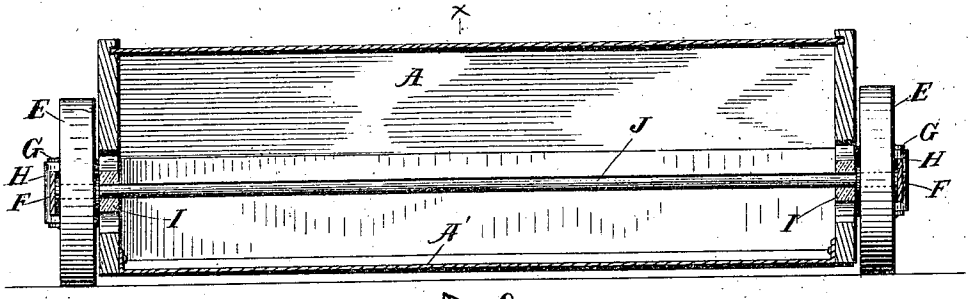

Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

SILAS H. RAYMOND, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO WM. B. REMINGTON, ERASTUS J. HORTON, FRED. E. REMINGTON, T. STEWART WHITE, AND THOMAS FRIANT, ALL OF SAME PLACE.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 471,086, dated March 15, 1892.

Application filed August 15, 1890. Serial No. 362,131. (No model.)

To all whom it may concern:

Be it known that I, SILAS H. RAYMOND, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Carpet-Sweepers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in carpet-sweepers. Its object is to provide a sweeper that shall be cheap, durable, and convenient to operate; and it consists in certain details of construction hereinafter more particularly described and claimed.

Reference being had to the accompanying drawings, Figure 1 is one end elevation of a device embodying my invention, with portions removed to better show the construction; Fig. 2, a plan of one end of the same intact; Fig. 3, a vertical section of the same on the line Y Y of Figs. 1 and 2; Fig. 4, a vertical section on the line X X, and Fig. 5 a vertical section of the corner roll H on the line Z Z.

Like letters refer to like parts in all the figures.

A is the case, which may be made in any convenient form and provided with openings at the under side of each end to accommodate the brush-shaft E, which is provided with a friction-pulley E′, and a convex journal E″ at each end, which latter engages with a depression in the lower end of a flexible pendent hanger C″, which depends from the bail-plate C, and is adapted to hold the brush-shaft in position or to be sprung outward, releasing the end of the journal for permitting the brush-shaft to be detached from the case. Plate C is cupped to receive the wood friction-plate K and provided with spurs B″ to prevent the said plate K from turning in said cup. The bail-plate C is also provided with lugs C′ C′ to receive screws for securing it to the case A. The ends of the bail are also provided with corresponding cups, spurs B″, and friction-plates K. A bolt D passes through the respective centers of said bail ends and bail-plates and serves to attach the bail and secure the required friction between the plates K to hold the bail in any desired position, while permitting said position to be shifted at pleasure by applying proper force.

The driving-wheels E are secured upon the respective ends of the rods J, which extend through the case from side to side and project therefrom sufficient to receive said wheels. Within openings in the end walls of the case and surrounding the rods J are flexible bushings I, made, preferably, of rubber, having a central opening for the rods J, and radial arms with their ends in contact with the end walls of the case, to secure greater flexibility. These bushings provide elastic or movable points of attachment for the rods J and serve to secure spring-pressure contact of the driving-wheels with the pulleys E′ on the brush-roll, and also to mount the entire device on springs.

F is a fender-plate attached at each of its ends near the corners of the case A, extended outward and thence parallel with the end of said case outside of and in contact with the ends of the rods J. This serves to protect the inclosed parts and keep the wheels E in position at each corner, with its middle part under the end of the fender-plate F; and secured by the same screws is a yoke G, between the arms of which is journaled a roll H, consisting of an inner metal tube H″ and an outer tube H′, of rubber or other suitable material. Said roll is arranged with its axis vertical and so located as to project beyond the planes of both the sides of the core and the fenders F, thus preventing other contact with the base or furniture. The rolls, being free to turn when coming in contact with any object, will not be so likely to produce marks upon the same or resistance due to friction, but will roll freely along the surface of the same. The yoke G may be made integral with the fender-bar F by providing the same with suitable lugs or projections; but I prefer the construction shown, as it permits the use of plain strips of metal in their construction.

A′ is the usual dust-pan, having any convenient means for discharging its contents, thus forming no part of my invention.

What I claim is—

1. In a carpet-sweeper, bail-plates attached to each end of the case, friction-plates of suitable material attached to said bail-plates, a

bail having corresponding friction-plates at each end, and bolts a taching said ends and plates, substantially as described.

2. In a carpet-sweeper, bail-plates provided with cups and spurs, friction-plates secured by said cups and spurs, a bail provided at each end with corresponding cups, spurs, and friction-plates, and bolts passing through said plates and bail ends, substantially as described.

3. In a carpet-sweeper, bail-plates provided with cups and wood friction-plates, a bail secured to said plates with bolts, pendent hangers integral with said bail-plates having bearings at their lower ends, and a brush-shaft having journals engaging said bearings, and means for rotating said brush-shaft, substantially as described.

4. In a carpet-sweeper, in combination with a suitable case, bail-plates C, secured to the end walls upon each end of the case provided with cup-bearings, a bail having corresponding cup-bearings arranged at each end opposite to and adapted to engage the said plates, friction-blocks between said plates and bail ends, and means of attaching the bail ends to the plates, substantially as set forth.

5. In a carpet-sweeper case, and in combination, with traction-wheels mounted upon rods which extend longitudinally through said case parallel with the brush-shaft, elastic bushings I, surrounding said rods, having radial arms and arranged in the end walls of said case, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

SILAS H. RAYMOND.

Witnesses:
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