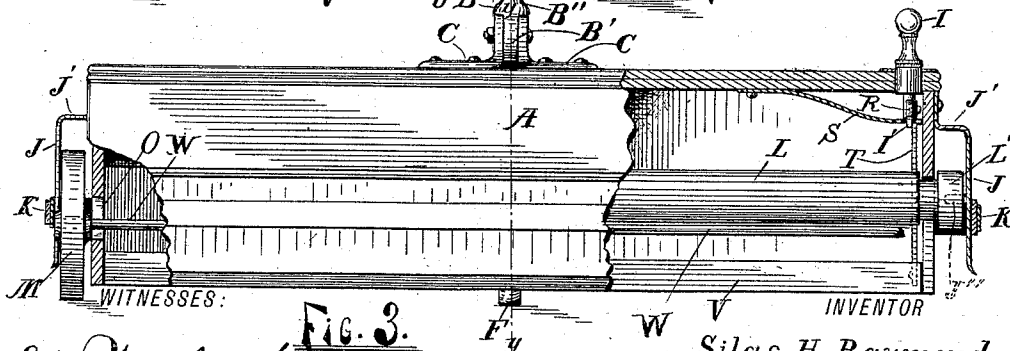
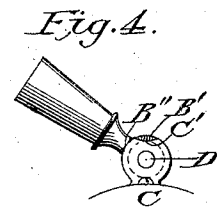
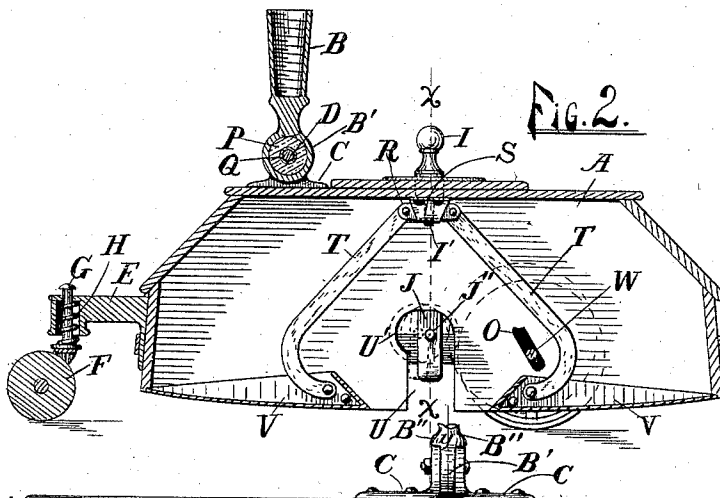
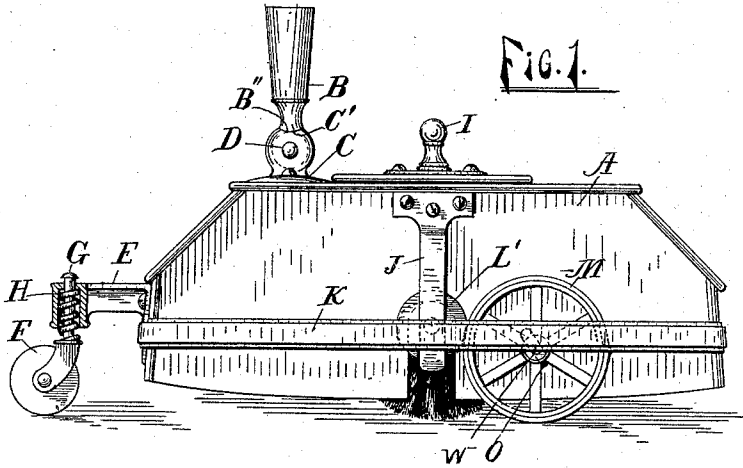


(No Model.)

S. H. RAYMOND.
CARPET SWEEPER.

No. 476,213.

Patented May 31, 1892.



WITNESSES:
Lois Moulton
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UNITED STATES PATENT OFFICE.

SILAS H. RAYMOND, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO T. STEWART WHITE AND THOMAS FRIANT, OF SAME PLACE.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 476,213, dated May 31, 1892.

Application filed July 22, 1891. Serial No. 400,369. (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; and its object is to simplify and reduce the cost of construction and to provide the same with certain new and useful features hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is an end elevation of a device embodying my invention; Fig. 2, a vertical section of the same on the line *yy* of Fig. 3; Fig. 3, a side elevation broken away to show the construction, being partly in section, on the line *xx* of Fig. 2; Fig. 4, a detail of bail-socket, showing position of the same when the sweeper is in use.

Like letters refer to like parts in all of the figures.

A is the case, and B the bail-socket, provided with a ring B' at its lower end, having a large opening, which is filled with rubber or other elastic material P, in the center of which is a metal bushing Q, through which passes the pivot-bolt D, which bolt also passes through the angle-plates C C, which plates are secured to the case at each side of the ring B'. On each side of the bail-socket B are convex projections B'', which engage corresponding concave seats C' in the upper part of the plate C when the bail-socket is vertical.

K is a band of rubber encircling the case and serving to prevent scratching or marring of furniture struck by the sweeper.

L is the brush-shaft, having driving-pulleys L' at each end. Said shaft is inserted in openings U in the ends of the case, said openings having lateral extensions U' on the side opposite the driving-wheels, of which there are but two, which are journaled on the op-

posite ends of a rod W, which rod is inserted in slots O in the end walls of the sweeper-case, said slots having their upper ends inclined toward the brush-shaft.

At the middle of the side of the case opposite the driving-wheels is a bracket E, having a caster-wheel F attached, the pintle G of said caster being free to move vertically in the bracket and provided with a vertically-elastic spring H, surrounding said pintle, engaging the yoke of the caster at its lower end and the bottom of the pintle-socket at its upper end. Said brush-shaft is journaled in hangers J, which are flexible in a direction at right angles to the axis of the brush-shaft, being adapted to twist at their horizontal part J'.

I is a push-pin vertically movable in the top of the case, near the lower end of which is attached a T-head R, to the respective ends of which are pivoted the upper ends of the connecting-rods T, the lower ends of which rods are pivoted to the respective dust-pans V near to and between the pivots of said pans and their forward edges. Engaging the lower end I of the push-pin is a lifting-spring S, consisting of a flat plate secured to the inside of the top of the case. The tension of this spring lifts the pin and through the rods T closes the pans, and when the push-pin I is depressed the pans are opened to discharge their contents. As pressure is applied to the handle the rod W moves along the slot O diagonally upward and inward, and the brush-shaft moves laterally into the extensions U' as the hanger is laterally deflected. At the same time the caster-hanger compresses the spring H, thus lowering the case toward the floor at both sides and bringing the brush in close contact with the carpet. The caster-wheel being located so far away from the wheels M gives a broad base and reduces the tendency to tilt the case. The elastic bushing P forces the projections B'' into concave seats C', and thus sustains the handle in a vertical position, and when the handle is inclined the friction of bail-socket B against the sides of angle-plates C serves to steady the handle, and by mounting the device

on three wheels—one of which is a caster-wheel—it turns about in curved lines of motion very easily.

What I claim is—

- 5 1. In a carpet-sweeper, a brush-shaft journaled in laterally-flexible hangers and driving-wheels at one side of said brush-shaft journaled on a rod passing through inclined openings in the case, in combination with a
10 caster-wheel on the side of the case opposite said driving-wheels and a spring engaging said caster-wheel and adapted to be depressed on the downward movement of the case when the latter is being lowered, as described.
- 15 2. In a carpet-sweeper, a handle-socket having a ring at its lower end surrounding an elastic bushing, through which passes a pivot-

bolt, angle-plates at each side of said ring secured to the case, having depressions at their upper sides, and projections on the sides of said socket engaging said depressions, substantially as described. 20

3. In a carpet-sweeper, a push-pin having a T-head, connecting-rods pivoted to the same and to the dust-pans near the pivots of said
25 pans, and a lifting-spring engaging the end of said push-pin, substantially as described.

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

SILAS H. RAYMOND.

Witnesses:

LUTHER V. MOULTON,
DENNIS L. ROGERS.