(No Model.)

S. H. RAYMOND.

CARPET SWEEPER.

No. 564,647. Patented July 28, 1896.

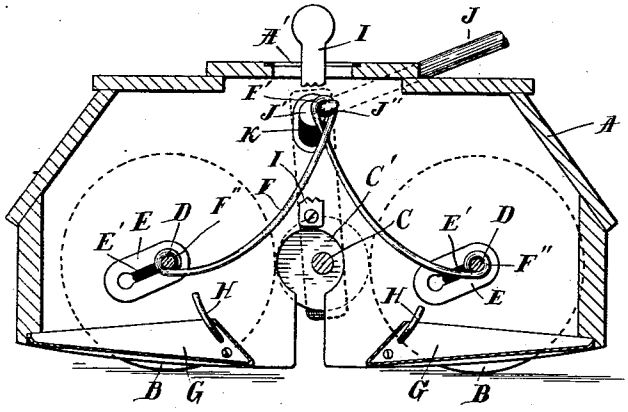

Fig. 1.

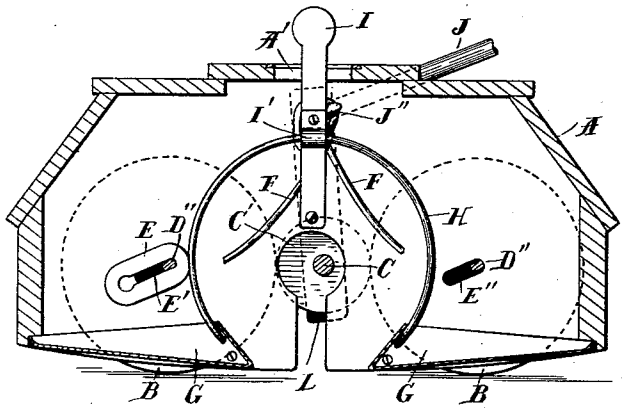

Fig. 2.

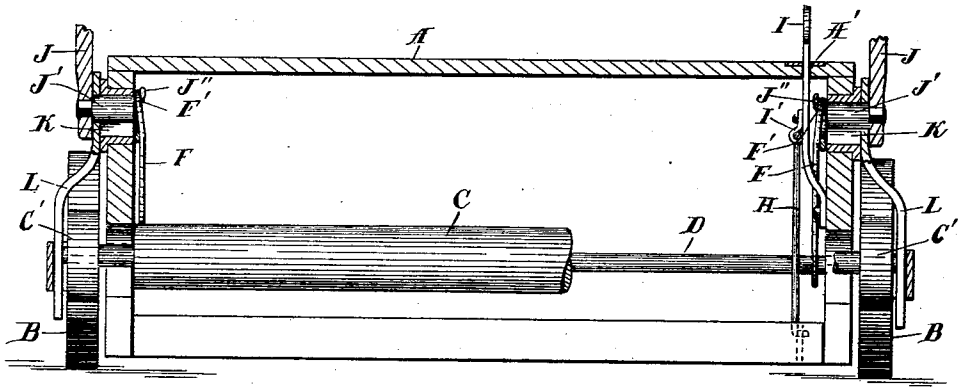

Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

SILAS H. RAYMOND, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO T. STEWART WHITE, THOMAS FRIANT, GAIUS W. PERKINS, AND CHARLES J. REED, OF SAME PLACE.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 564,647, dated July 28, 1896.

Application filed May 13, 1895. Serial No. 549,089. (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 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 a transverse vertical section of a device embodying my invention, illustrating the mechanism for vertically adjusting the case by inclining the bail; Fig. 2, the same, illustrating the pan-operating mechanism with one plate E omitted to show opening at the end of the case; and Fig. 3, a longitudinal vertical section of the entire device.

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

A represents the case, supported upon four drive-wheels B, which wheels engage the respective sides of the pulleys C′ on the respective ends of the brush-shaft C to rotate the same. Said wheels are journaled on rods D, which rods pass through similarly-inclined openings E″ in the ends of the case. Connecting said rods near each end are curved wire springs F, which have their respective ends F″ coiled around the respective rods D. Said springs tend to force the drive-wheels B in contact with the pulleys C′. Each of said springs F extends upward at the middle and is attached to a crank-pin J″ on the inner end of the journal J′ of the bail J. Said pin is eccentric to the axis of said journal, whereby as the bail is inclined and the journal rotated the said pin moves about the axis of the journal J′, and thus moves the rods D toward the respective ends of the slots E″. Said slots being all inclined in one direction, the said rods are moved toward the upper ends of said slots as the bail is inclined in one direction, and the device is thus lowered, and by inclining the bail in the opposite direction the rods are moved toward the lower ends of said slots and the device raised, and the various angles of inclination of the bail will also variously adjust the rods in the slots, and thus adjust the device to various elevations.

At each end of the machine a pendulous hanger L is journaled near its upper end on the bail-journal J′ and is provided with a journal for the brush near its lower end. These hangers swing from side to side to accommodate the movement of the rods in the slots. To prevent the rods from turning and wearing the ends of the case, they are flattened at D″, and a plate E, having a slotted opening E′ to fit said flattened portion and an enlarged end to said opening to pass over the round end of said rod, is provided. Said plates are secured to the ends of the case at each opening therein, through which openings said rods pass.

Bushings K, having vertically-elongated openings, surround the journals J′, permitting vertical movement of the bail, which is sustained in the upper part of said openings by the springs F. By pressure on the bail these springs may be depressed and the bail, together with the brush, lowered relative to the balance of the structure.

The dust-pans G are pivoted near their inner angles and are held closed, and are opened by a curved spring pivoted to each of said pans at its respective ends, and pivoted near its middle at I′ to a lever I, said lever being pivoted at its lower end to the case and moving laterally in an opening in the case. By moving said lever toward either of said pans the same will be opened by the forward movement imparted to the spring H. The pan-dumping mechanism, however, is not claimed in this application, as it is made the subject of claims in my application, Serial No. 554,407, filed June 29, 1895.

What I claim is—

1. In a carpet-sweeper in combination with a case, and vertically-movable drive-wheel bearings and a pivoted bail; crank-pins on

said bail, and flexible arms connecting said crank-pins and bearings and yieldingly supporting said case, substantially as described.

2. In a carpet-sweeper, a case having inclined slots, rods movable in said slots, supporting-wheels journaled on said rods, a bail journaled to said case, crank-pins on said bail, and springs connecting said crank-pins and rods, substantially as described.

3. In a carpet-sweeper, a case having inclined slots, a bail pivoted to said case, crank-pins on the bail-pivots, rods movable in said slots, drive-wheels on said rods, springs connecting said rods and crank-pins, hangers pivoted to said bail-pivots, and having journals for the brush-shaft, and a brush rotative on said journals, and having pulleys engaging the drive-wheels, substantially as described.

4. In a carpet-sweeper, a case having inclined slots, and vertical slots, rods movable in the inclined slots, drive-wheels journaled on said rods, a bail journaled in said vertical slots and vertically movable therein, crank-pins on the bail-journals, springs connecting said pins and rods, hangers pivoted at the upper end to the bail-journals, a brush-shaft journaled on the lower ends of said hangers, and having pulleys engaging said drive-wheels, substantially as described.

5. In a carpet-sweeper, in combination with a case having elongated openings, rods movable in said openings, having flattened portions near the same, and drive-wheels journaled on said rods, plates secured to said case having elongated openings engaging said flattened portions of said rods and enlarged ends to said openings, substantially as described.

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

SILAS H. RAYMOND.

Witnesses:
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LOIS MOULTON.