

(No Model.)

S. H. RAYMOND.
CARPET SWEEPER.

No. 476,210.

Patented May 31, 1892.

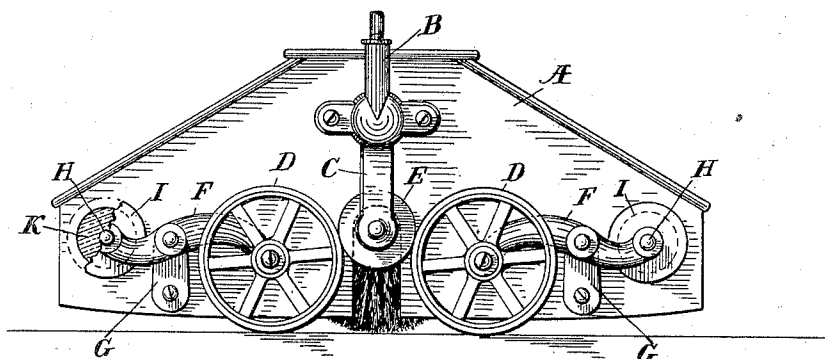


Fig. 1.

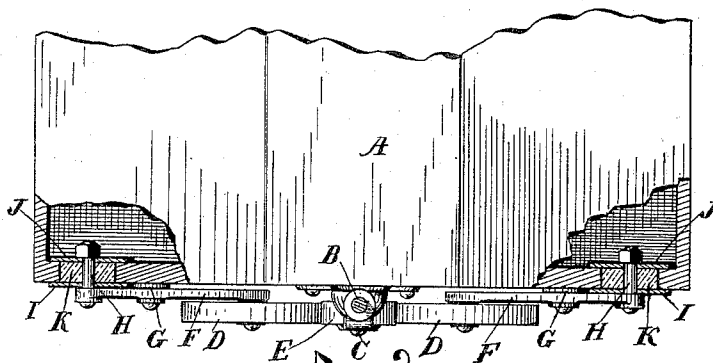


Fig. 2.

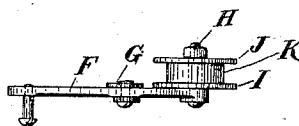


Fig. 3.

WITNESSES:

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CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 476,210, dated May 31, 1892.

Application filed February 16, 1891. Serial No. 381,697. (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 objects are to simplify and cheapen the construction of the same, and to provide a device having certain other novel and useful features hereinafter 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 plan view of one end of the same with corners broken away and parts in horizontal section, and Fig. 3 a detail of one of the drive-wheel levers and attached parts.

Like letters refer to like parts in all the figures.

A is the case, of the usual construction, having the bail B and spring-hangers C for the brush-shaft, which shaft is provided with pulleys, one of which is shown at E. The driving-wheels D contact these pulleys at opposite sides, somewhat below the plane of the axis of the brush-shaft, and are journaled on the adjacent ends of horizontal levers F, which are fulcrumed upon and pivoted near their outer ends to one end of vertical rocker-arms G, the other ends of said rocker-arms being pivoted to the case A. The outer ends of said levers F are flexibly attached to the case A by studs H, which pass through the end of said case and are surrounded by elastic bushings K of suitable material, preferably of soft rubber, which bushings are inserted in suitable openings in the walls of the case A and provided with circular plates or washers I J, somewhat larger than the openings in said case, to retain said bushings in place and steady the levers F. By this construction I avoid any occasion to extend any rod or axle

through the case; also, locate all the journals and pivots on the outside of the same away from the dust and sand thrown by the brush; also, where they may be easily reached for oiling. I am also enabled to use a solid rubber bushing K of comparative rigidity. The drive-wheel being mounted on the long arm of the lever, moving much farther than studs H and having considerable leverage on the same, gives great elasticity to the movements of said wheels with but little compression of bushing K. I also obtain by this arrangement both vertical and horizontal elasticity for the drive-wheels, thus enabling me to press the brush in close contact with the floor at pleasure, and at the same time increase frictional contact between the drive-wheels D and brush-shaft pulleys E.

What I claim is—

1. In a carpet-sweeper, the combination, with levers having driving-wheels journaled to their inner ends and flexibly connected to the case at their outer ends, of rocker-arms pivotally connected to the case and to said levers, substantially as described.

2. In a carpet-sweeper, a brush-shaft having the pulley E, levers having wheels journaled on their inner ends adapted to contact the floor and said pulley, said levers connected to the case at their outer ends by studs passing through flexible bushings inserted in openings in said case and intermediately pivoted to one end of rocker-arms, the other end of which arms are pivoted to the case, substantially as described.

3. In a carpet-sweeper, a lever having a driving-wheel journaled to one end, a laterally-projecting stud at the opposite end, passing through an elastic bushing inserted in the wall of the case and also through circular plates of larger diameter than said bushing, said plates engaging the opposite faces of said wall, and a rocker-arm pivoted at one end to said lever near said stud and at the other end to said case, substantially as described.

4. In a carpet-sweeper, a case having pendant flexible hangers, a brush-shaft journaled in said hangers, having pulleys outside said case, driving-wheels engaging said pulleys at

opposite sides below the plane of the axis of
the brush-shaft, and levers having said driv-
ing-wheels journaled on their inner ends, in-
termediately pivoted to rocker-arms near their
5 outer ends, and flexibly connected to said
case at their outer ends, substantially as de-
scribed.

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

SILAS H. RAYMOND.

Witnesses:

LUTHER V. MOULTON,
LOIS MOULTON.