

(No Model.)

S. H. RAYMOND.  
CARPET SWEEPER.

No. 491,954.

Patented Feb. 14, 1893.

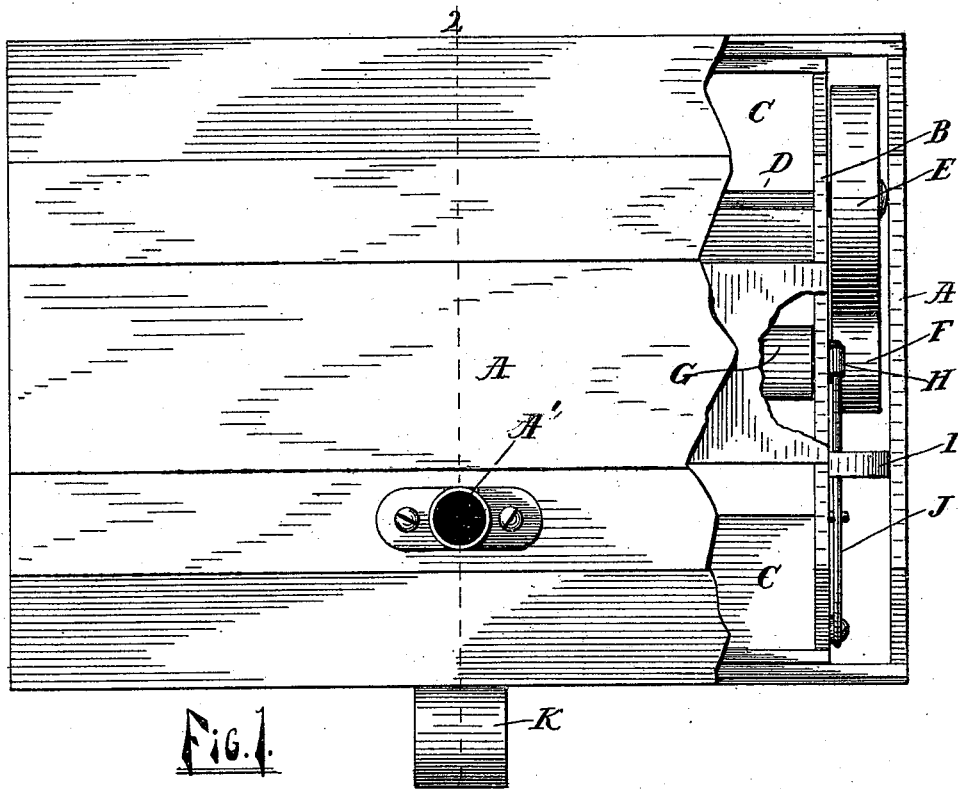


Fig. 1.

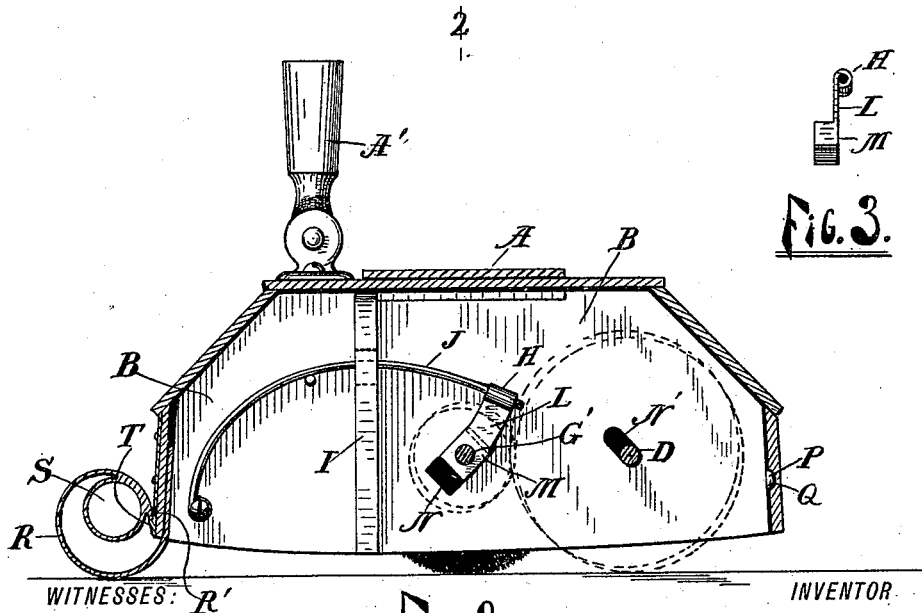


Fig. 3.

WITNESSES: R'

Fig. 2.

INVENTOR

Silas H. Raymond.

BY

Luther V. Moulton  
ATTORNEY.

Louis Moulton  
Ada M. Carey.

# 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. 491,954, dated February 14, 1893.

Application filed April 12, 1892. Serial No. 428,901. (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 plan view of a device embodying my invention with portions of the same broken away to show the internal construction. Fig. 2 an end view of the same with the outer case in section, on the line 2—2— of Fig. 1, and an end elevation of the inner frame and parts attached; and, Fig. 3 a detail of the journal box for the brush shaft.

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

A represents the outer case, which consists of a plain shell, having the bail socket A' attached; within this case is a detachable frame B, having attached the dust pans C. A rod D passes through inclined slotted openings N' in the end walls of said frame, said rod has driving wheels E journaled upon its respective ends, which wheels engage the floor and support the forward side of the device, and also engage the driving pulleys F on the outer ends of the brush shaft G, which shaft is journaled in movable bearings M, which bearings engage inclined slotted openings N in the end walls of the frame, said bearings have upwardly extended arms L attached, which are provided with eyes H, which engage the free ends of springs J, said springs being attached to the end walls of the frame B, and adapted to force the bearings M toward the upper ends of the openings N, said openings N and N' are inclined toward each other, at their upper ends, at an angle of about forty-five degrees, so that as the rod moves up the inclined open-

ing N', by pressure on the case applied through the bail A' the springs J yield and allow the bearings M to move downward in the openings N, in a direction substantially at right angles to the line of motion of the rod D, thus lowering the brush relatively to the case, and at the same time lowering the case relatively to the floor, the result being that the pans and case are lowered toward the floor less than is the brush, which is the most desirable movement of these parts.

At each end of the frame is a strip I which engages the inner surface of the case and guides the frame to place, where said frame is secured at the front side by a knob P engaging a depression Q in the inner surface of the case, and at the rear by the spring catch R', formed by the free end of the shoe R, which shoe is attached to the frame at its forward end and is turned in a substantially involute curve downward and rearward, engaging the floor and supporting the rear of the device, and continuing thence upward and forward terminating adjacent to the outer surface of the case, forming said catch R', which engages a suitable hook T attached to said case. Attached to this shoe R and near said free end is a ring S, within which the finger is inserted to release said end from the hook T, whereupon the frame B may be removed from the case, the shoe R thus serves to support the device on the floor; to form a catch to secure the frame in place, and a handle to manipulate the same when detached from the case.

What I claim is—

1. In a carpet sweeper, in combination with driving wheels, and a brush shaft having pulleys engaging said wheels, bearings for said wheels and shaft, supported in oppositely inclined slotted openings, and movable therein, substantially as described.

2. In a carpet sweeper, driving wheels journaled on diagonally movable bearings, a brush shaft having pulleys engaging said driving wheels, diagonally movable bearings for said brush shaft, and springs attached to said brush shaft bearings, substantially as described.

3. In a carpet sweeper in combination with an outer case and an inner detachable frame,

a depression in the inner surface of the case, a knob on the frame engaging said depression, a shoe attached to the opposite side of the frame, engaging the floor and supporting the structure and turned in an involute curve, and engaging a hook on the case, substantially as described.

4. In a carpet sweeper, in combination with a case, and a removable frame therein, a shoe attached to the frame and extended rearward and upward in a substantially involute curve, and engaging a hook on said case, forming a combined shoe, handle, and catch, substantially as described.

5. In a carpet sweeper, a case, a detachable frame in said case, a rod passing through diagonal slotted openings in the frame, driving

wheels on said rod and supporting one side of the device, a brush shaft having pulleys engaging said driving wheels, bearings for said shaft engaging and movable in diagonal slotted openings in said frame, springs attached to said bearings and to said frame, a shoe attached to said frame, said shoe curved rearwardly in a substantially involute curve supporting the rear of the device, and engaging a hook on the case, substantially as described.

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

SILAS H. RAYMOND.

Witnesses:

ADA M. HARVEY,

LUTHER V. MOULTON.