

(No Model.)

S. H. RAYMOND.
CARPET SWEEPER.

No. 488,950.

Patented Dec. 27, 1892.

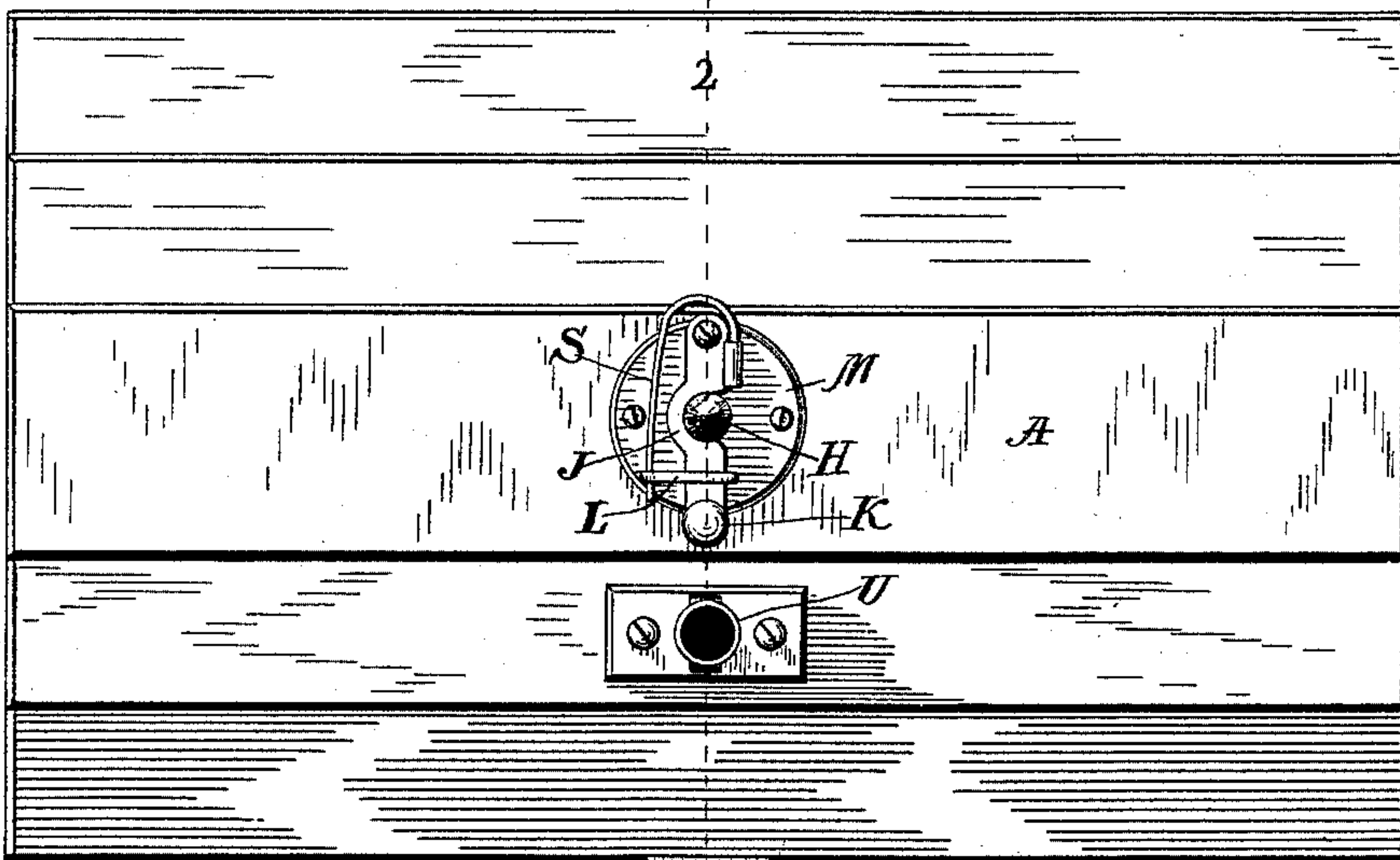


Fig. 1.

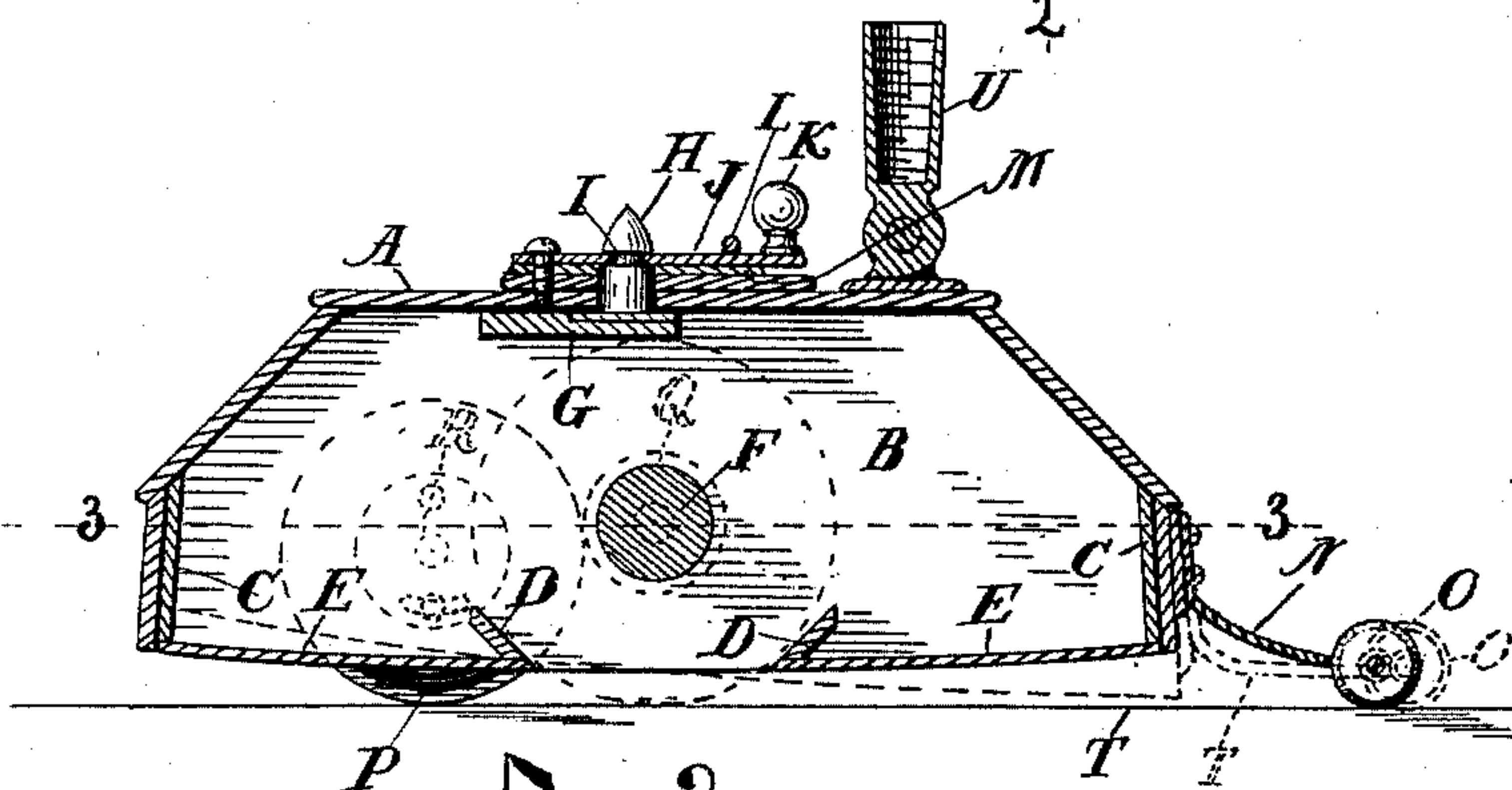


Fig. 2.

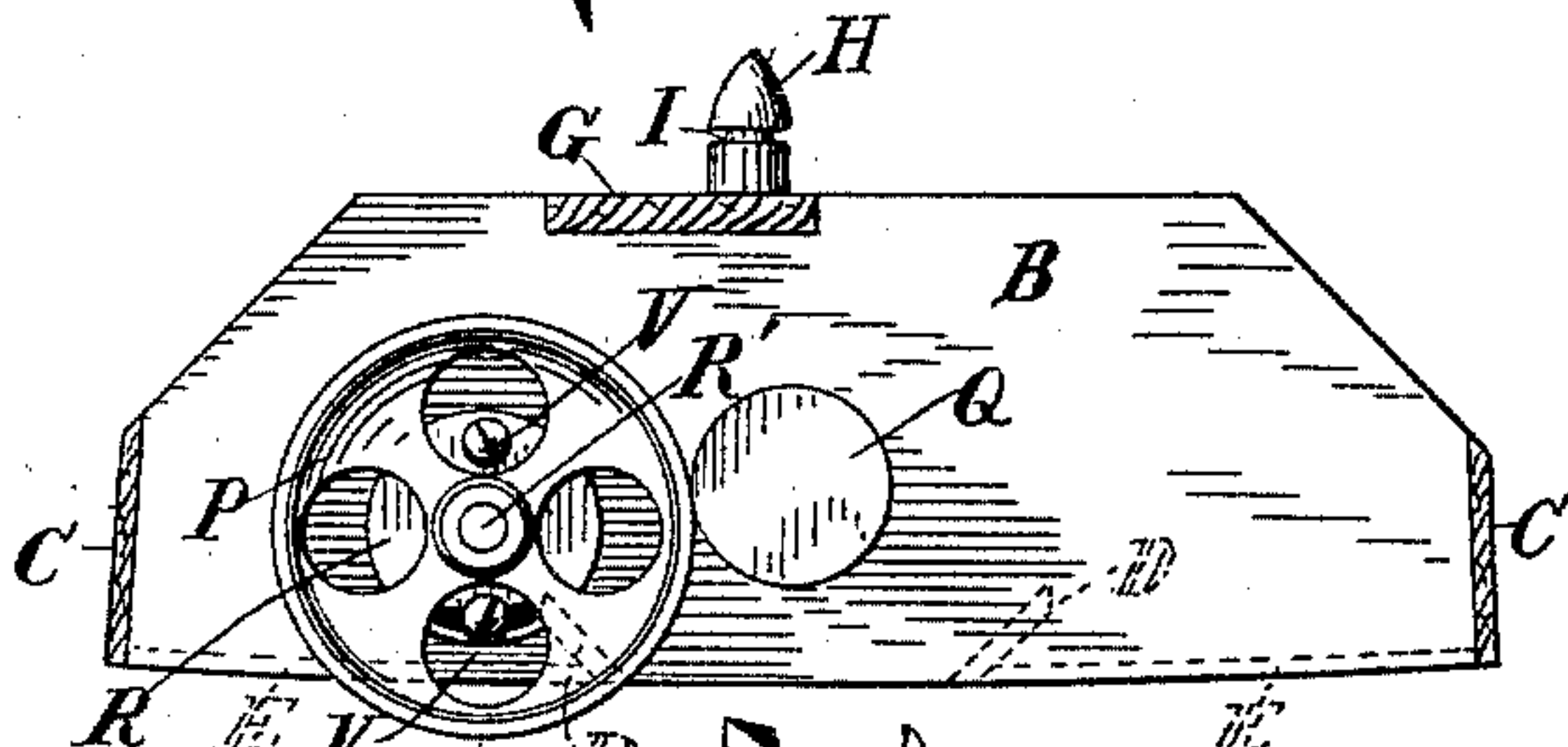


Fig. 3.

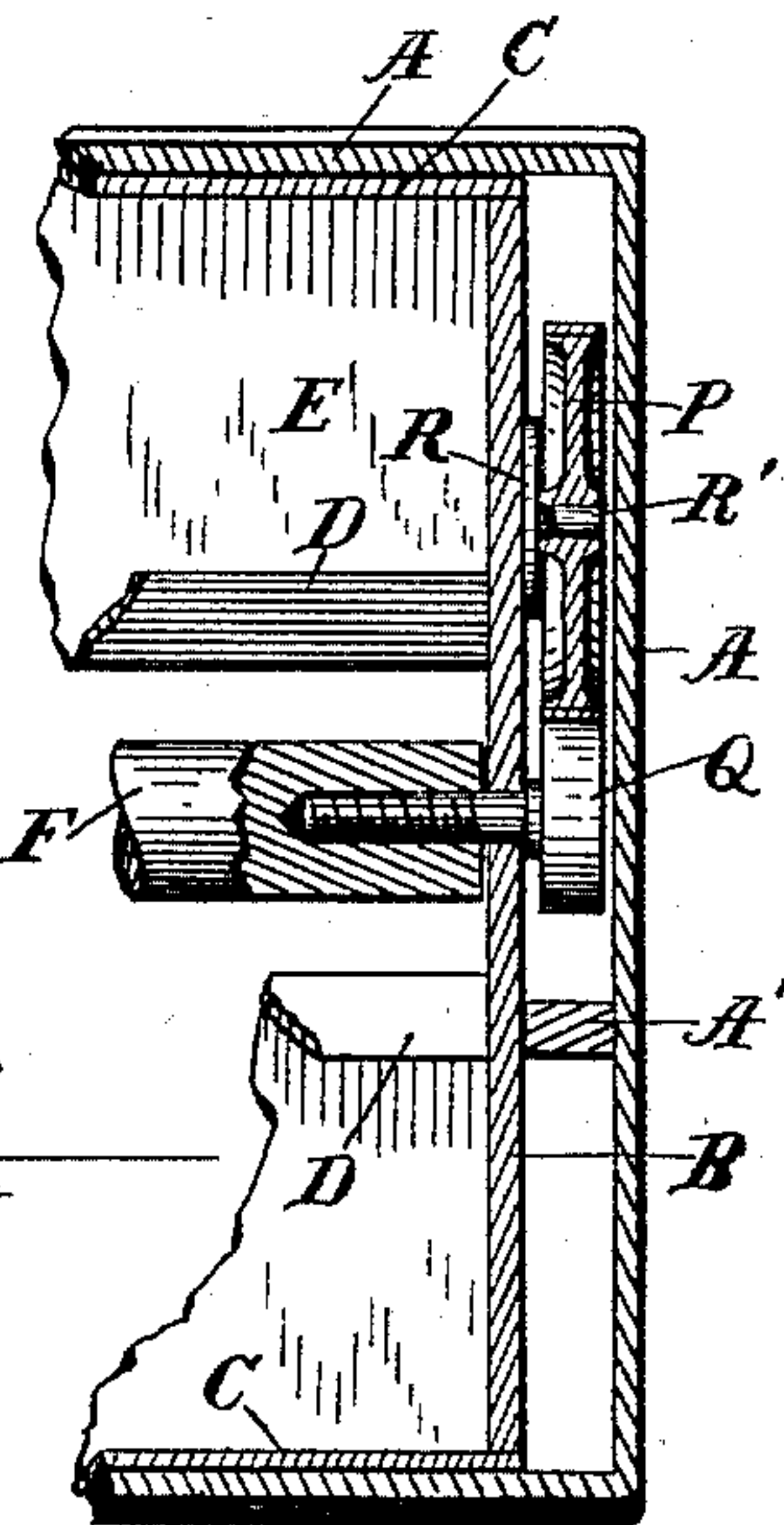


Fig. 4.

WITNESSES:
George W. Shock
Edward D. Norton

INVENTOR

Silas H. Raymond

BY

Luther V. Moulton
ATTORNEY.

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. 488,950, dated December 27, 1892.

Application filed January 16, 1892. Serial No. 418,227. (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. Fig. 2 a vertical section of the same on the line 2—2 of Fig. 1. Fig. 3 a horizontal section of the same on the line 3—3 of Fig. 2; and, Fig. 4 an end elevation of the inner frame and parts attached.

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

A is an outer case having attached the usual handlesocket U. Within this case is a detachable frame somewhat shorter than said case, to make room for the driving wheels and brush pulleys. Said frame consists of two end walls or partitions B connected at the top by a bar G, and at the bottom by the dust pans, consisting of the inclined strips D D at each side of the brush, the bottoms E E and the outer strips C C. This bar and the parts of the dust pans are all permanently attached to the end walls B B forming a strong frame within which is journaled the brush shaft F, having pulleys Q Q on the outside of said frame at each end thereof. These pulleys engaged driving wheels P P which wheels engage the floor at their lower sides, and support the forward side of the device. Said driving wheels are journaled on studs R' attached to disks R adj-
justably secured to the outer surface of the walls B, by means of screws V V passing through openings near the respective upper and lower sides of said disk, one of which openings is slotted concentric with the other
to permit of adjusting said disk about the

same. Thus by slackening back the screw in the slotted opening the stud R' may be swung toward the axis of the brush shaft, and contact secured between the driving wheel P and brush pulley Q. By again tightening said screw, the stud R' is fixed in position and will not recede on the backward stroke of the sweeper, and fail to properly drive the brush as is the case with yielding bearings.

To secure the vertical elasticity necessary to bring the brush in closer contact with the carpet by downward pressure upon the handle, I provide a flexible arm or spring N attached to the rear of the case, and projecting therefrom, in the end of which spring is journaled a roll O which contacts the floor. As pressure is applied to the handle this spring N yields as shown by dotted lines, thus allowing the rear of the case to approach the floor as shown by the line T.

To secure the frame within the case, I attach a pointed stud H to the bar G which stud passes freely through the top of the case and a plate M upon which is a latch J which engages a groove I in said stud. Said latch is pivoted at one end to swing horizontally, and has a concavity in one side engaging one side of said stud, and is held down by a strap L near its free end which strap embraces said latch and the end of a spring S and is of such length as to permit of sufficient lateral movement of the free end of said latch, by means of the knob K to release the stud H and permit the removal of the frame from the case. The spring S is attached to the latch J in such position that it tends to force said latch toward the stud and to engage it with the groove I. The conical end of the stud, forces the latch back as the case is placed over the frame and pressed down to place. Blocks A' are provided in each end of the case to guide the frame to place. By this construction I am able to use but two driving wheels for the brush shaft and get sufficient action of the same on the backward stroke which is not the case when said wheels are on yielding bearings, I am also at the same time able to provide a simple and cheap means of supporting the rear of the device, and lowering the brush by downward pressure upon the handle.

also by this device provide for easily detach-
ing and replacing the inner frame carrying
the working parts and thus to make the pans
a part of the said frame and fixed thereto
5 thus entirely dispensing with all springs, le-
vers &c., to open and close the pans, being
able to empty the same by detaching the
frame, such ready detachment also enables
me to gain easy access to the brush for remov-
10 ing any thing adhering thereto, to further fa-
cilitate which the bar G is not entirely above
the brush, but a little at one side of the mid-
dle of the frame.

What I claim is;—

15 1. In a carpet sweeper in combination with
an outer case an inner frame consisting of
end walls connected by a bar at the top and
dust pans at the bottom, all rigidly attached
to said end walls, detachable fastenings to se-
20 cure said frame in the case and a brush shaft
and driving wheels journaled on said frame
substantially as described.

2. In a carpet sweeper, the combination of
the case, the brush shaft, the driving wheels
located at one side only of the brush shaft 25
and supporting one side of said case, said
driving wheels being journaled on unyielding
bearings, and a wheel supporting the other
side of said case and journaled in vertically
flexible bearings, substantially as described. 30

3. In a carpet sweeper in combination with
a case, and a detachable inner frame, having
dust pans, brush shaft, and driving wheels
attached, a pointed stud on said frame, en-
gaging an opening in said case, a groove in 35
said stud and a pivoted latch engaging said
groove, substantially as described.

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

SILAS H. RAYMOND.

Witnesses:

LUTHER V. MOULTON,
M. L. MOULTON.