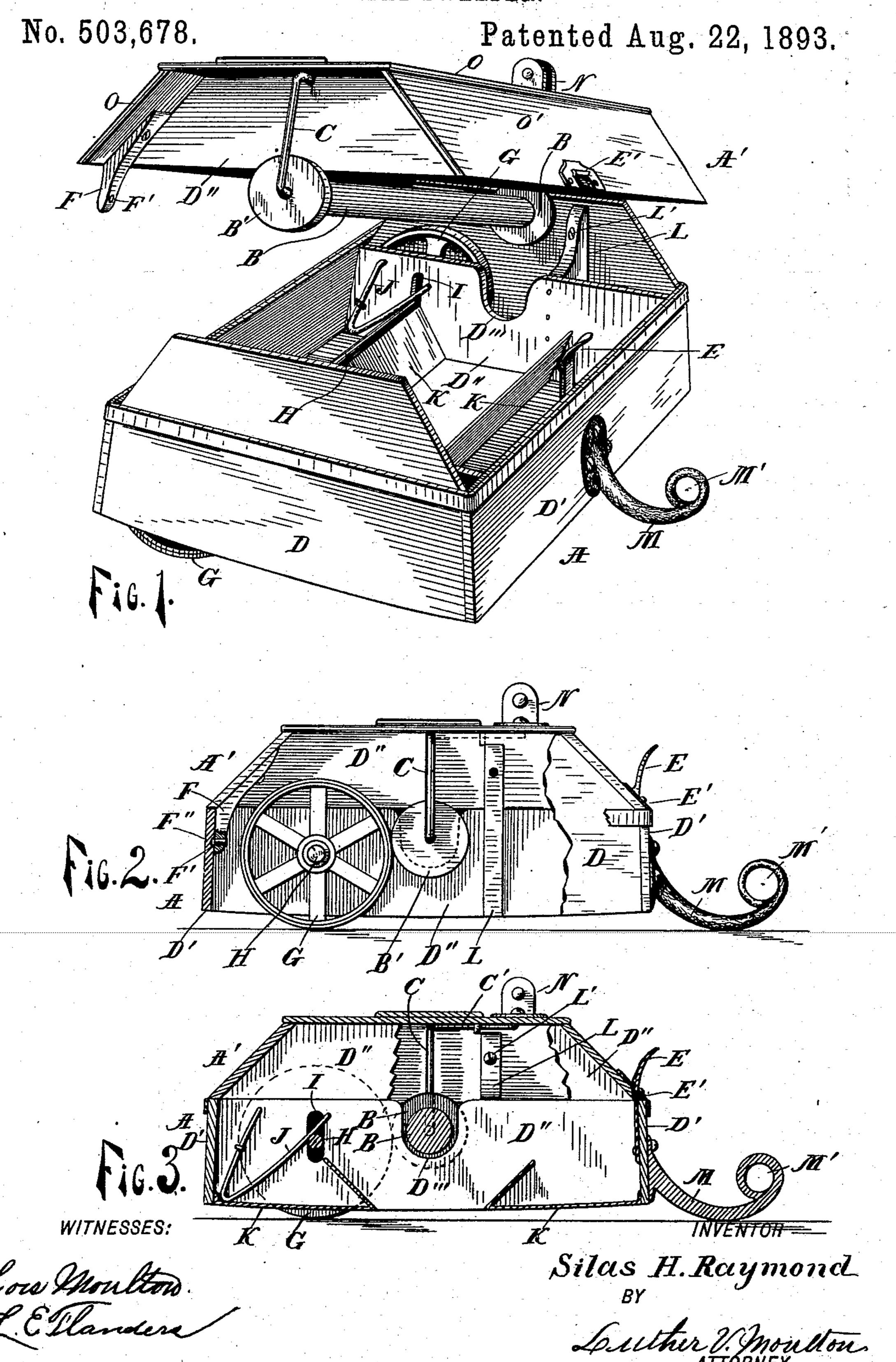
S. H. RAYMOND. CARPET SWEEPER.



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. 503,678, dated August 22, 1893.

Application filed July 20, 1892. Serial No. 440,600. (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 perspective view of a device embodying my invention, with the case sepa20 rated; Fig. 2 an end elevation of the same, closed, and with portions broken away to show the construction; and Fig. 3 a transverse vertical section through the middle of the device.

Like letters refer to like parts in all of the

25 views.

The case is divided horizontally into two parts A and A', the lower part A consisting of the end walls D and the side walls D' permanently attached at the corners, and the up-30 per part A' consists of the horizontal top O, and the inclined sides O'O', which are all secured to the upper portions of two partitions D" near each end of the case. The lower parts of said partitions D" are detach-35 ably secured to the end walls D by brackets L, permanently attached to said partitions at one side, and secured at the other side to said end walls by removable screws L'. The dust pans K are also attached to and connect said 40 lower portions of the partitions D", which partitions are also provided with vertical slots through which passes a rod H, on the outer end of which are journaled supporting and driving wheels G. Said rod and wheels abut 45 against the inner surfaces of the end walls D and are there kept in place. Springs J are attached to said partitions D", and engage the rod H and force the same downward in the slots I, said springs yielding to vertical 50 pressure upon the bail attached at N, and

allowing the device to approach closer to the floor when pressure is applied to said bail.

B is the brush shaft, which is provided with pulleys B' at each end to engage the wheels G. Said shaft is journaled in the inwardly 55 turned lower ends of the flexible hangers C, which hangers are rigidly attached at their upper ends to the upper part A' of the case, and are preferably connected at their upper ends by the substantially U-shaped 6c bent piece C' integral with the same; said hanger C being flexible in both directions may be sprung apart to remove the brush. and also serve to press the pulleys B'against the driving wheels G with a constant spring 65 pressure, regardless of the pressure upon the bail. The springs J serve only to depress the rod H and raise the case and the hangers press the pulleys B against the brush shaft. Depressions D'" are formed in the up- 70 per side of the lower part of the partition D" to accommodate the brush shaft, and the pulleys B', hangers C, wheels G, and brackets L, are located between the end walls D and the partitions D". The respective parts A and 75 A' of the case are detachably secured to each other at one side by means of lugs F attached to the upper part A', and engaging the inner side of the adjacent side wall D'. Said lugs are provided with projections F', engaging 80 depressions F" in said walls, and at the other side said parts are secured by a spring hook E on the lower part, which engages a suitable plate E' on the upper part. One side of the device is supported by the driving wheels G, 85 and the other side of the same is supported by a shoe M which projects from the lower part beneath the spring hook E. This shoe has a ring M' at the outer end and is adapted to serve as a handle to hold and manipulate the 90 lower part of the case when detached from the upper part of the same, and also as a means by which the sweeper may be hung up out of the way when not in use. By the described construction the device may be 95 grasped by the bail, attached to the upper part with one hand, and by the shoe M attached to the lower part with the other hand, and by releasing the spring hook E, from the plate E' the parts of the case A and A' may roo be separated, the upper part carrying with it the brush shaft, which is now easy of access for clearing the brush of any accumulations, or for oiling its journals. The dust pans will thus also be fully exposed and their contents may now be examined at pleasure before they are emptied, which latter is done by turning the lower part of the case over. By springing the hangers C apart, the brush shaft may be removed, and by taking out the screws L' the lower part of the partitions D' will be released, and the driving wheels G, rod H, and dust pans K may be separated therefrom. The device is thus easily taken apart for repairs or cleaning.

What I claim is—

1. In a carpet sweeper, the combination with the case, driving wheels, a brush shaft having pulleys at its ends engaging said driving wheels, and flexible hangers engaging said case at their upper ends and said brush shaft at their lower ends, said brush shaft at their lower ends, said brush shaft being journaled directly on said hangers and said hangers serving to support said brush shaft and to press the pulleys thereon against said driving wheels, substantially as described.

2. In a carpet sweeper, drive wheels journaled on vertically movable bearings, a spring depressing said bearings, a brush shaft, and so flexible hangers rigidly attached to the case at their upper ends, having said brush shaft journaled on their lower ends, and pressing said shaft toward said drive wheels, substan-

tially as described.

3. In a carpet sweeper a case having its side and end walls detachably secured to the top of the same, hangers rigidly attached to said top at their upper ends, a brush shaft journaled on the lower ends of said hangers and

pressed against said driving wheels by the 40 same, partitions detachably secured to the lower part of said case, dust pans attached to said partitions, vertical slots in said partitions, a rod removably engaging said slots, driving wheels journaled on the ends of said rod, and 45 a spring depressing said rod, substantially as described.

4. In a carpet sweeper, the combination of the casing, the drive wheels, the brush shaft, pulleys mounted on the ends of said brush 50 shaft and engaging said drive wheels, and flexible hangers for said brush shaft, said hangers being rigidly secured at their upper ends to the casing and having their lower ends bent and received by openings in the 55 ends of said brush shaft, substantially as

shown and described.

5. The herein described carpet sweeper, in which all of the parts may be quickly separated, consisting of the casing divided hori-60 zontally into two parts detachably secured together, the brush shaft, flexible hangers supporting said brush shaft, said hangers being secured to the upper of said parts of the casing at their upper ends and having their 65 lower ends removably engaged with the ends of the brush shaft, partitions detachably secured within the lower part of said casing, the dust pan secured to said partitions, a rod journaled in said partitions, and the drive 70 wheels on the ends of said rod, all substantially as shown and described.

In testimony whereof Iaffix my signature in

presence of two witnesses.

SILAS H. RAYMOND.

Witnesses:

LOIS MOULTON, LUTHER V. MOULTON.