

S. F. LEACH.
CARPET-SWEEPER.

No. 184,633.

Patented Nov. 21, 1876.

Fig. 1.

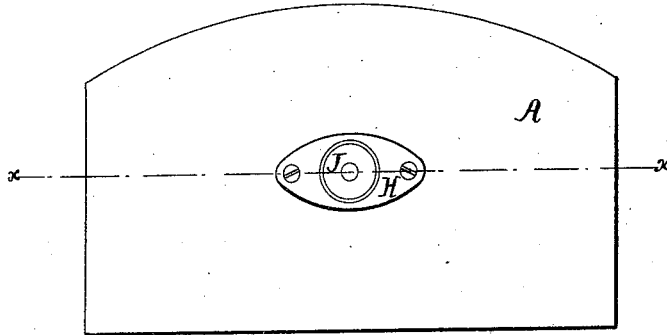
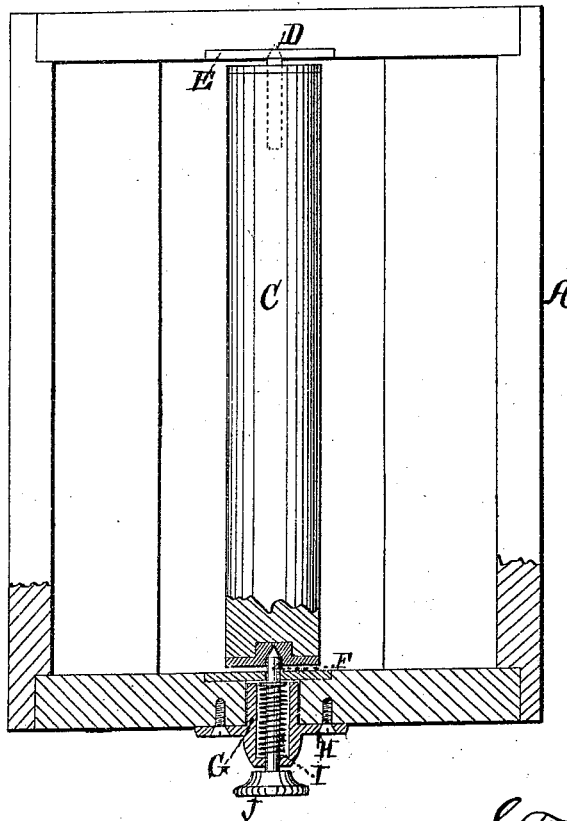


Fig. 2.



WITNESSES:

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IMPROVEMENT IN CARPET-SWEEPERS.

Specification forming part of Letters Patent No. **184,633**, dated November 21, 1876; application filed October 2, 1876.

To all whom it may concern:

Be it known that I, SAMUEL F. LEACH, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Carpet-Sweeper; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification.

The present invention has reference to carpet-sweepers, and is designed to furnish means whereby the brush-cylinder can be readily removed from the box or casing, and will always remain tight and run without noise. To this end the invention consists in the provision of a sliding spring-pressed center or pivot, which is fitted into a socket applied to the side of the brush box or casing, said center being adapted to receive one end of the brush-cylinder, the opposite end of which has a gudgeon or journal, which turns in a face or bearing plate applied to the brush box or case.

In the accompanying drawing, forming part of this specification, the casing or box A is of the ordinary construction, and has the customary receptacles or trays for collecting the dirt swept up by the brush-cylinder C as the same revolves on the floor. In order to retain the brush cylinder detachably in place, so as to enable it to be easily removed when required, I provide one end of the cylinder with a fixed gudgeon, D, which runs in a face or bearing plate, E, applied to the side of the box A. The opposite end of the cylinder runs on a center or pivot, F, fitted movably in the other side wall of the box, so as to enable said pivot to be projected and retracted for fastening and detaching the brush-cylinder. The pivot F enters a hole in a metallic wearing plate applied to the end of the cylinder. A metallic socket-piece, G, having a plate or flange, H,

for securing it to the outer side of the box by means of screws, is adapted to receive the pivot or center, and also a coiled spring, I, encircling said pivot. The spring serves to hold the pivot in engagement with the brush-cylinder. The rear end of the pivot F extends through a hole in the closed end of the socket, and bears a milled head, J, for grasping the pivot, to retract the same from the outside of the box.

The pivot having been retracted from the cylinder, the same can be readily removed through the top of the box, thus avoiding the necessity of emptying the pans or spilling the dirt.

By running the brush on centers, as shown, noise is prevented, as the bearings are always tight.

The pivots or centers are provided with pointed or conical ends, so that the brush will run easily and without friction. The spring serves to press the center forward as it wears away, thus keeping the brush always tight.

I am aware that brush-cylinders have been fitted on removable bearings or axes, and provided with detachable journals; but they are defective, because they are either screwed into place or held by fastening-screws, which are liable to work loose.

Having thus described my invention, what I claim as new is—

In a carpet-sweeper, the combination of the self-adjusting center or pivot F, having spring I and head J, with the box A, socket-piece G H, brush C, and fixed gudgeon D, as and for the purpose set forth.

SAMUEL F. LEACH.

Witnesses:

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