G. W. D. MEDBURY.

CARPET-SWEEPER.

No. 185,865. Patented Jan. 2, 1877.

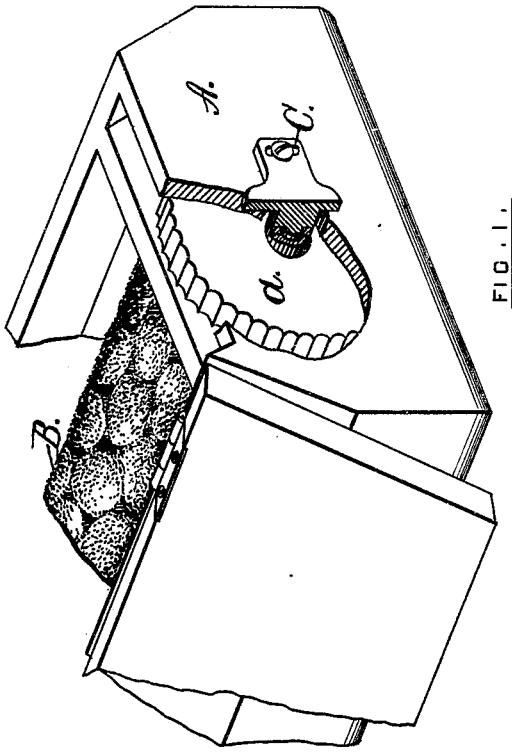

FIG. 1.

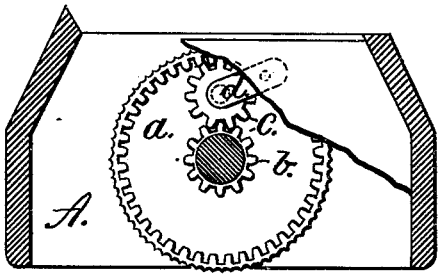

FIG. 2.

WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE W. D. MEDBURY, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN CARPET-SWEEPERS.

Specification forming part of Letters Patent No. **185,865**, dated January 2, 1877; application filed June 13, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. D. MEDBURY, of the city of Providence, county of Providence, and State of Rhode Island, have invented new and useful Improvements in Carpet-Sweepers; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a perspective view of one end of my improved carpet-sweeper, the top being shown as open, and part of the box as broken away to show the driving-disk and the journal-bearing of the brush-cylinder. Fig. 2 is a cross-section of the carpet-sweeper, showing the driving-disk roughened on its edge, and provided with internal cogged gear, as also the intermediate gear and the gear secured to the revolving brush-cylinder.

The invention consists in the arrangement of the driving-disk, provided with a scalloped or roughened edge, and with an internal cogged gear, by which motion is imparted through the stationary intermediate pinion to a pinion secured to the revolving brush, and thus the driving-disk, when the carpet-sweeper is pushed over the carpet, imparts a rapid rotary motion to the brush.

In the drawings, A is the box or case of the carpet-sweeper, provided with the dust-receivers and revolving brush. B is the revolving brush. C is the journal-bearing for the revolving brush. *a* is the driving-disk, arranged to extend below the box A sufficient to insure contact with the carpet, and to prevent slipping the edge of the disk *a* is scalloped or otherwise roughened, so as to insure its rotation. The driving-disk *a* is also provided with an internal cogged gear, by which the rotative motion is communicated to the pinion *b*, secured to the shaft of the revolving brush by means of the pinion *c*, which pinion revolves on a stud or pin projecting from the arm *d*, and is held in position by securing the arm *d* to the box A.

By this arrangement a positive motion is imparted to the revolving brush, which will revolve with three times the velocity with which the driving-disk revolves, and thus insure a thorough brushing of the carpet.

When in a carpet-sweeper the brush is driven by frictional contact, or by bands, such friction-gears and bands will soon wear, and the brush will not revolve with the required speed, the carpet will not be thoroughly cleaned, and the sweeper soon set aside as a useless machine.

In my improved carpet-sweeper the brush is revolved by positive gears at a given speed, and these gears, being strong and not liable to slip, insure such speed in the revolving brush as will thoroughly clean the carpet.

The driving mechanism is not costly, is simple in construction, not liable to slip, and can be replaced when worn at a small cost and with little labor.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a carpet-sweeper, the combination, with the revolving brush B, of the traction wheel or disk *a*, loose on the shaft of the brush, and provided with the internal cogged gear, the pinion *b*, secured to the brush, and the intermediate pinion *c*, arranged to impart rotative motion to the brush, substantially as and for the purpose specified.

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