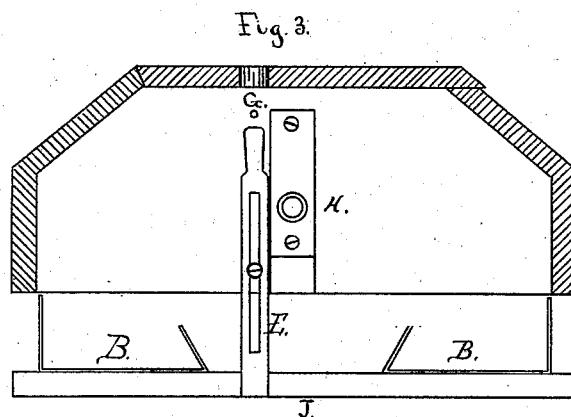
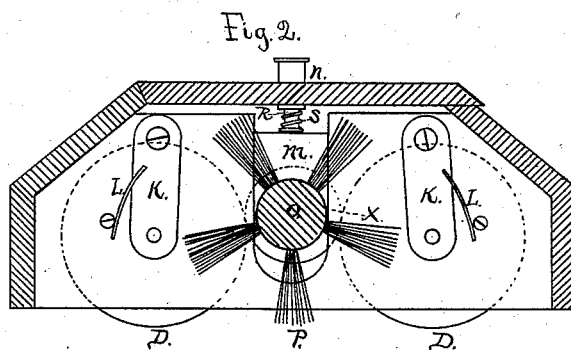
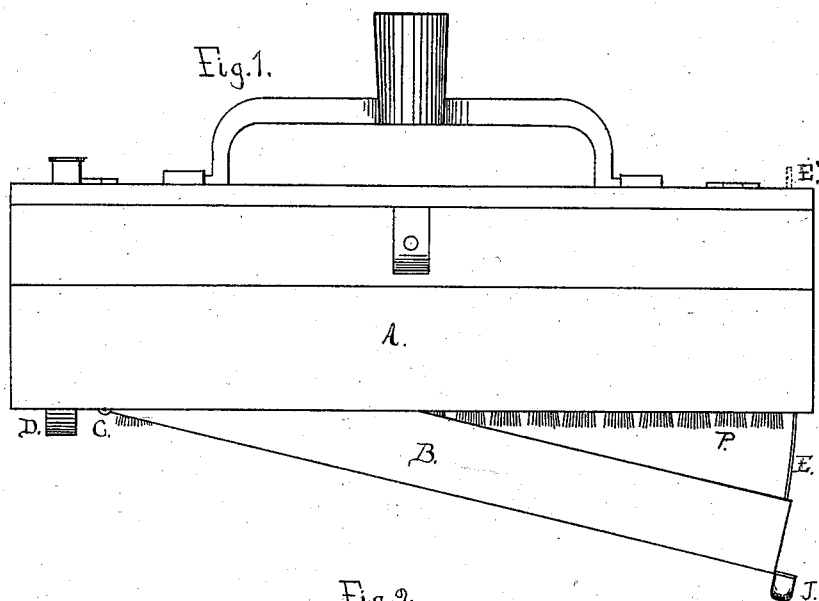


M. R. BISSELL.
Carpet-Sweeper.

No. 217,322.

Patented July 8, 1879.



Witnesses.
Charles A. Reuwick-
J. P. Olmsted

Inventor.
Melville R. Bissell

UNITED STATES PATENT OFFICE.

MELVILLE R. BISSELL, OF GRAND RAPIDS, MICHIGAN.

IMPROVEMENT IN CARPET-SWEEPERS.

Specification forming part of Letters Patent No. **217,322**, dated July 8, 1879; application filed February 21, 1879.

To all whom it may concern:

Be it known that I, MELVILLE R. BISSELL, of the city of Grand Rapids, county of Kent, and State of Michigan, have invented certain new and useful Improvements in Carpet-Sweepers, of which the following is a specification.

The first part of my invention relates to a carpet-sweeper having the dust-pans hinged or pivoted to the frame of the sweeper in such a manner that one end of the dust-pans may be dropped down for the purpose of emptying the dust from the sweeper.

Figure 1 is a perspective view of my invention with one end of the dust-pans dropped for the purpose of discharging the dirt. Fig. 2 is an end view of my carpet-sweeper, showing the arrangement of the bearing produced by means of the drive-wheels, friction-pulley, and bearing-block. Fig. 3 is also an end view, showing the dust-pans lowered, and also showing the device used for holding the pans in place.

In Fig. 1, A represents the box or frame of the sweeper; B, the dust-pans dropped down; D, the drive-wheels; P, the brush; E, the metallic spring used in holding the pans in place and lowering them at pleasure.

The advantages to be derived from hinging the pans to one end of the box and having the other ends drop simultaneously are to allow the dust to slide to the open ends of the pans and be deposited on a dust-pan or any small receptacle; whereas in sweepers that are pivoted at both ends, the pans turning over, the dust is not so easily discharged, and is scattered the whole length of the pans and a litter is made.

The pans B are hinged at C to the box, so that when the sweeper is in use the pans are raised up and fastened even with the lower side of the box; and when the sweeper is charged with dust, by pressing on the spring E, which projects a little above the top of the box, as shown in Fig. 1, the dust-pans drop down in the form shown in Figs. 1 and 3, and the dust is discharged.

The spring E may be provided with a slot and slide on a bolt or screw, as shown in Fig. 3, which regulates the length of the drop, and a pin, G, may be provided for the purpose

of catching the spring E and holding the pans in position to operate on a floor or carpet; but any other suitable device may be used.

The arrangement of the dust-pans and spring is such that after the dust is discharged, by placing the sweeper on the floor, it closes and fastens the pans in their place in the case.

Instead of using the hinges C, as shown in Fig. 1, the pans may be attached to the frame or box by means of pivots, either at the end or toward the center; but I deem the method first above described preferable.

In Figs. 1 and 3, J represents a rod or piece of smooth metal fastened to the drop end of the pans, and serves as a support to the pans, and also supports one end of the sweeper as it is moved along on the carpet.

In Fig. 2, O is the end of the brush-roller; X, a friction-pulley, which may be the roller itself or a pulley rigidly attached to the brush-roller.

D D are the drive-wheels, having their bearings in the pendulums K K. The pendulum-bearings K K are adjusted by means of springs L L. The center of the pulley X is somewhat above the centers of the drive-wheels, which support the friction-pulley, and thereby the end of the brush-roller. Above the brush-roller is the bearing-block M, which rests from above upon the brush-roller. Thus the bearing is formed by the two drive-wheels from below and the bearing-block from above.

The bearing-block is adjusted by means of a spiral spring, S, bolt R, and the set-screw N, by means of which the friction can be increased or decreased at pleasure, and the brush-roller adjusted for light or heavy sweeping.

The set-screw N is attached to the cover of the box or case, and when the cover is raised the bearing-block M can be removed, as also the brush-roller, at pleasure.

I do not claim the arrangement of the friction-pulley, drive-wheels D D, with pendulum-bearings, and head-block to be novel, they being the same device patented to me in patent dated January 29, 1878; but I do not know of such an arrangement ever having been applied to a carpet-sweeper having one end bearing constructed in the ordinary manner.

Instead of having the bearing as above described, a pin may be driven into the end of

brush-roller O and have its bearing in a perpendicular slot.

Having thus described my invention, what I claim to have invented, and desire to secure by Letters Patent, is—

In a carpet-sweeper, the dust-pans B, hinged or pivoted to one end of the box or case of the sweeper, in combination with the cross-

bar J, so that the end of the pans may be dropped down simultaneously to discharge the dust, substantially as described.

MELVILLE R. BISSELL.

Witnesses:

EDWARD TAGGART,
WILSON H. GRAY.