

Patented June 21, 1887.

INVENTOR.
J. M. McClain
BY *Murray*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN M. McCLAIN, OF CATLIN, COLORADO.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 365,192, dated June 21, 1887.

Application filed December 29, 1886. Serial No. 222,887. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. McCLAIN, of Catlin, in the county of Bent and State of Colorado, have invented a new and Improved Carpet-Sweeper, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved carpet-sweeper which is simple and durable in construction and very effective in operation.

The invention consists of a fan-wheel rotated in a sweeping-box and of a moistened dust-catching wheel emptying into a water-trough.

The invention also consists of the various parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improvement, parts being in section. Fig. 2 is a sectional side elevation of the same on the line xx of Fig. 1, and Fig. 3 is a front elevation of the same partly broken away and partly in section.

The sweeping-box A, of suitable size and form, is provided on each side with a runner, B, and on its front with a vertically-adjustable brush, C. The front part of the open bottom of the sweeping-box A is provided with a transverse opening, E, through which enters the dust disturbed by the brush C. In the compartment F formed in the box A is held a fan-wheel, G, having its shaft H mounted in the sides of the box A, and the said shaft H projects at one end to the outside, and carries on this outer end a grooved pulley, I, over which passes the endless belt J, also passing over the grooved crank-wheel K, mounted near the upper end of the handle L, secured to the box A. From the compartment F a channel, F', leads downward to the transverse opening E. In the box A is also journaled the dust-wheel N, having a rim formed of overlapping strips and projecting at its lower end into a trough, O, filled with water and held removably in the bottom of the box A. Part of the top of the latter is provided with a lid or door, P, located above the dust-wheel N, which can be removed from the box through the said top opening.

Between the water-trough O and the opening E is arranged the dust-pan Q, on which the heavier particles of dust settle.

The brush C is provided on one edge with wire, and on the other edge with hair or jute bristles, and can be reversed at the will of the operator.

The operation is as follows: The runners B are held on the floor, and the operator takes hold of the handle L with one hand and pushes the apparatus forward on the floor, and at the same time he turns the crank-wheel K with his other hand, so as to rotate the fan-wheel G in the direction of the arrow a' , whereby the current of air generated in the said compartment, F, is forced down through the channel F', and directed upward into the box A, where it strikes against the dust-wheel N, whereby the latter is rotated, after which the current of air passes out of the box through the apertures R formed in the rear end of the box A. The upward movement of the current of air draws the dust disturbed by the brush C upward against the moistened rim of the dust-wheel N, which, in its rotation, passes through the water in the trough O, whereby the dust on the rim of the wheel N is washed off and settles in the bottom of the water-trough O, and the rim of the wheel N is constantly kept moist. The heavier particles of dust fall upon the pan Q, and can be removed whenever desired through the bottom opening, E.

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

1. In a carpet-sweeper, the combination, with a sweeping-box, of a fan-wheel mounted in the sweeping-box and a moistened dust-wheel mounted in the said box and rotated by the current of air generated by the fan-wheel, substantially as herein shown and described.

2. In a carpet-sweeper, the combination, with a box, of a brush on the front of the box, a fan-wheel, a moistened dust-wheel rotated by the current of air generated by the fan-wheel, and means for operating the fan-wheel, substantially as herein shown and described.

3. In a carpet-sweeper, the combination, with a box, of a fan-wheel, a water-trough, a dust-wheel journaled in the box above the water-trough and rotated by the current of air

generated by the fan-wheel, and means for operating said fan-wheel, substantially as herein shown and described.

4. In a carpet-sweeper, a sweeping-box having a transverse opening in its bottom and a sweeping-brush held on the front end of the said box, in combination with a fan-wheel adapted to rotate in the compartment formed in the said box, a channel leading from the said compartment to the said transverse opening in the bottom, and a moistened dust-wheel mounted in the said box and rotated by the current of air generated by the said fan-wheel, substantially as shown and described.

5. In a carpet-sweeper, a sweeping-box having a transverse opening in its bottom and a sweeping-brush held on the front end of the said box, in combination with a fan-wheel adapted to rotate in the compartment formed in the said box, a channel leading from the said compartment to the said bottom opening, a dust-wheel mounted in the said box and rotated by the current of air generated by the said fan-wheel, and a water-trough arranged in the

bottom of the box and through which passes the lower side of the said dust-wheel, substantially as shown and described.

6. In a carpet-sweeper, a sweeping-box having a transverse opening in its bottom and a sweeping-brush held on the front end of the said box, in combination with a fan-wheel adapted to rotate in a compartment formed in the said box, a channel leading from the said compartment to the said transverse bottom opening, a dust-wheel mounted in the said box and rotated by the current of air generated by the said fan-wheel, a water-trough arranged in the bottom of the said box and through which passes the lower side of the said dust-wheel, and a dust-pan arranged near the said bottom-opening, and means, as described, for rotating the said fan-wheel, substantially as set forth.

JOHN M. McCLAIN.

Witnesses:

W. T. WALKER,

W. H. BRANDENBURG.