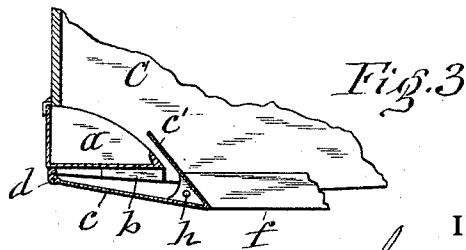
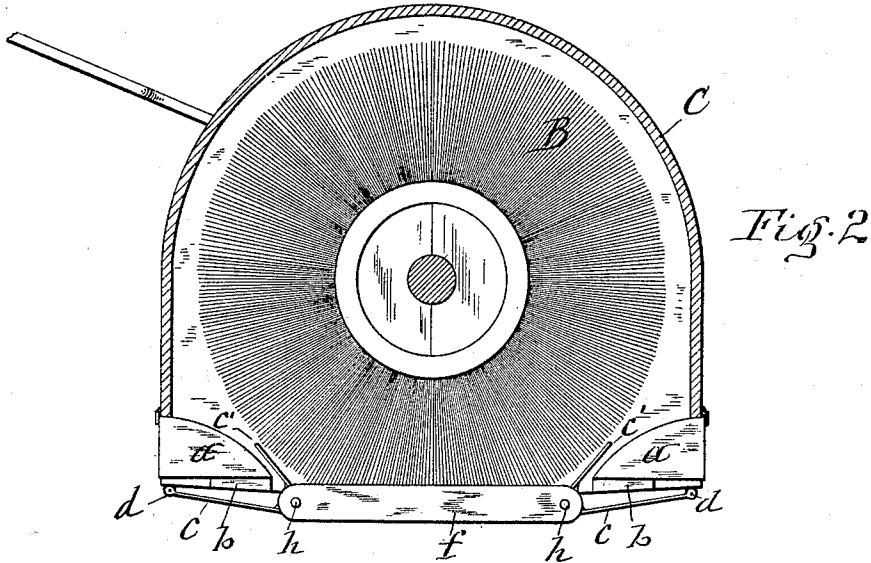
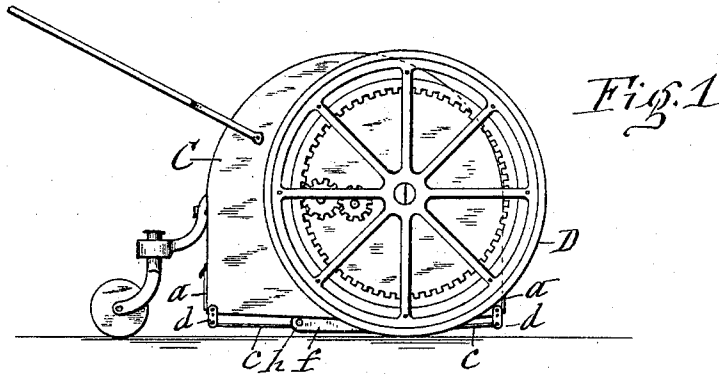


(No Model.)

J. S. HITCHCOCK.
CARPET SWEEPER.

No. 584,308.

Patented June 8, 1897.



WITNESSES:

J. J. Laess
Th. B. Smith

INVENTOR

John S. Hitchcock
By E. Laess
his ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN S. HITCHCOCK, OF SYRACUSE, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE ONONDAGA SWEEPER COMPANY, OF SAME PLACE.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 584,308, dated June 8, 1897.

Application filed October 19, 1896. Serial No. 609,301. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. HITCHCOCK, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Sweeping-Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of sweeping-machines in which a horizontal cylindrical brush is pivoted to an inclosing case and receives rotary motion from traction-wheels carrying said case, and dust-pans within the case to collect the sweepings.

The object of the invention is to effectually prevent the escape of dust from under the machine and to insure the collection of the sweepings in the dust-pan; and to that end the invention consists, essentially, in the combination, with the rotary brush, its inclosing case, and dust-pan, of guard-plates extending along the sides of the case at the bottom thereof and connected to the case by vertically-yielding supports, allowing said guard-plates to conform to the unevenness of the floor and by closing the spaces under the sides of the case insure the collection of the sweepings in the dust-pan, as hereinafter more fully described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a side view of a sweeping-machine provided with my improvements. Fig. 2 is an enlarged vertical longitudinal section of the machine, taken immediately at the inner side of the case thereof; and Fig. 3 is a transverse section of one of the dust-pans and adjacent parts of the guard-plates.

B represents the rotary cylindrical brush, which is disposed horizontally across the interior of the case C and journaled in suitable bearings on the sides of said case. Said case is open at the bottom for the protrusion of the sweeping portion of the brush. Traction-wheels D, pivoted to the sides of the case, support said case slightly raised from the floor over which the machine is made to travel in the operation of sweeping. In said operation the brush receives its rotary motion from said traction-wheels.

a a denote the dust-pans, which are placed removably in the front and rear portions of the case C and are made, preferably, of the

form of drawers supported at their inner portions on ledges b b, projecting from the sides of the case.

Suitable catches on the exterior of the case and adapted to engage the exterior of the dust-pans serve to retain the latter in the case.

In order to prevent the dust from escaping from under the case C and to insure the collection of the sweepings in the dust-pans, I employ suitable guard-plates extending along the sides of the case at the bottom thereof and connected to the case by vertically-yielding supports allowing said guard-plates to conform to any unevenness of the floor and by closing the spaces under the sides of the case prevent the escape of the dust from the case, and in connection with said side guard-plates I employ bottom guard-plates extending across the case beneath the dust-pans and connected to the side guard-plates to be raised and lowered with the same in traveling over an uneven floor. All of said guard-plates are separate from the dust-pans to allow the said plates to vibrate vertically without disturbing the dust-pans in their positions. These guard-plates may be of any suitable shapes and construction. I prefer, however, to construct and connect them to the case in the following manner:

The bottom guard-plates c c, which extend across the case, as aforesaid, I hinge to the case respectively adjacent to the front and rear thereof, as shown at d d, and thus permit the inner portions of said plates to vibrate vertically. Said portions are formed with upward-inclined dust-guiding flanges c' c', which project over the inner portions of the dust-pan, as shown in Figs. 2 and 3 of the drawings. Said flanges serve to conduct the sweepings into the dust-pans. These bottom guard-plates I utilize also for serving as the vertically-yielding supports of the side guard-plates f', which are pivoted at their ends to the bottom guard-plates c c at points adjacent to the inner edges thereof, as shown at h h. Said side guard-plates bear constantly on the floor and are of sufficient widths to invariably close the spaces under the sides of the case C, and thus prevent escape of dust from under the case.

In sweeping an uneven floor the side guard-plates f' yield vertically to raised portions of

the floor, and by their connection with the bottom guard-plates *c c* the latter are raised simultaneously to allow them to pass over said raised portions of the floor.

5 What I claim as my invention is—

1. The combination with the rotary brush, its inclosing case and dust-pan, of guard-plates separate from the dust-pan and extending along the sides of the case at the bottom thereof and connected to the case by vertically-yielding supports allowing said plates to conform to the unevenness of the floor and close the spaces under the sides of the case independently of the dust-pan, as set forth.

15 2. The combination with the rotary brush, its inclosing case and dust-pan, of vertically-yielding guard-plates separate from the dust-pan and extending along the bottoms of the sides of the case and along the receiving edge of the dust-pan and oversaid edge, said guard-plates being connected to the case by vertically-yielding supports to allow them to move vertically without disturbing the dust-pan and to conform to the unevenness of the floor, and by maintaining contiguous thereto confine the sweepings in the case and conducting them to the dust-pan as set forth.

3. The combination with the rotary brush, its inclosing case and dust-pans respectively

in the front and rear portions of said case, of bottom guard-plates extending across the case beneath the dust-pans and hinged to the case respectively adjacent to the front and rear thereof and side guard-plates pivotally connected at opposite ends to the ends of the inner edges of the aforesaid bottom guard-plates, as set forth.

4. The combination with the rotary brush, its inclosing case and dust-pans respectively in the front and rear portions of said case, of bottom guard-plates extending across the case beneath the dust-pans and hinged to the case respectively adjacent to the front and rear thereof, side guard-plates pivotally connected at their ends to the aforesaid bottom guard-plates adjacent to the inner edges thereof, and inclined dust-guiding flanges extending from the inner edges of the latter plates part way over the dust-pans, substantially as shown and described.

In testimony whereof I have hereunto signed my name this 10th day of October, 1896.

JOHN S. HITCHCOCK. [L. S.]

Witnesses:

JOHN J. LAASS,
M. A. LEYDEN.