

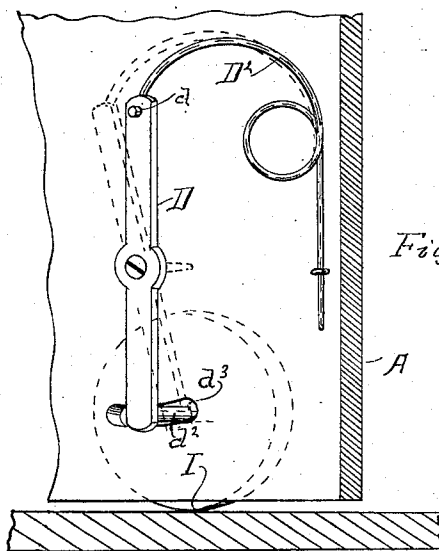
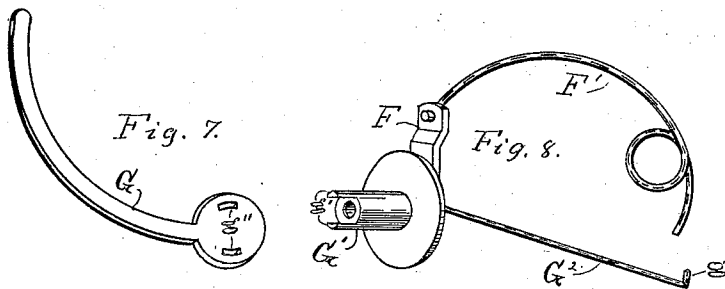
(No Model.)

2 Sheets—Sheet 2.

C. KING,
CARPET SWEEPER.

No. 575,960.

Patented Jan. 26, 1897.



Witnesses.

Mabel W. Jones.
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UNITED STATES PATENT OFFICE.

CHARLES KING, OF GRAND RAPIDS, MICHIGAN.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 575,960, dated January 26, 1897.

Application filed January 25, 1896. Serial No. 576,902. (No model.)

To all whom it may concern:

Be it known that I, CHARLES KING, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Carpet-Sweepers, of which the following is a specification.

My invention relates to improvements in the carpet-sweeper described and shown in my application, Serial No. 555,655, filed July 11, 1895, and its objects are to make improvements therein, as will be set forth in the claims. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a transverse vertical section of the case on the line $x x$ of Fig. 3, showing the relative positions of the several operative parts. Fig. 2 is a perspective of my adjustable wheel-supports. Fig. 2' is a perspective of my stationary wheel-support. Fig. 3 is a longitudinal section of the case. Fig. 4 is a front elevation of the pan supporting and actuating mechanism with a portion of the case and the pan shown in outline. Fig. 5 is a side elevation of the same with an end view of one of the pans. Fig. 6 is a plan, and Fig. 6' is an edge view, of the plates to which the brush-shaft is pivoted. Fig. 7 is a perspective of the lever with which the pans are dumped. Fig. 8 is a perspective of the pan-dumping mechanism detached from the lever; and Fig. 9 is a perspective of the adjusting mechanism for the drive-wheel, shown as attached to a section of the end of the case and the wheel shown in outline beyond.

Similar letters refer to similar parts throughout the several views.

My appliance for supporting the pans E consists of the levers C, pivoted to the ends of the case A, as at c , each with a short arm extending upward to connect with the handle-bow H, as at c' , and two lateral arms extending some distance each way from the pivot-point c and having pivoted to the end of each a connecting-rod C', which extends thence downward and is connected with the inner edge of the end of the adjacent pan by means of the short bearing c'' , passing through the end of the pan loosely, so that the pan is pivoted thereon. To hold the pan to a proper position, I pivot links C² at one end to each

of the bearings c'' and the opposite ends to the case, as indicated in Fig. 1.

I support the outer edges of the pans E by means of the arms G³. Each is attached to the pans at one end by means of the hook g , passing through the end of the pan, (see Fig. 4,) and the other end is attached to the hub G', which hub passes through the end of the case (indicated by the dotted lines in Fig. 4) and has attached to its outer end a lever G, by means of which it may be manipulated to dump the pan, as indicated by dotted lines to the right of Fig. 1. The handle G may be secured to the support G' by any suitable means, as the entrance of the fingers g' into the apertures g'' and riveting or otherwise. To the inner end of the hub G', I attach a short lever F, which is actuated by the spring F' (the opposite end of which is attached to the case) to throw and hold the outer edges of the pans to their normal position in the case, as in Fig. 1.

For manipulating the levers C for throwing the inner ends of the pans up and down I form slots a through the ends of the case in position to allow the projections c' on the ends of the handle-bow to pass through and work from side to side alternately as the handle is drawn or pushed upon, so that the connection with the short vertical arm of the lever C will cause the lateral arms of the lever to raise and lower, and with them, through the medium of the connecting-rods C', the inner ends of the pans, all of which motions are indicated by the dotted line upon the left side of Fig. 1.

My means for supporting the brush-shaft B consists of thin steel plates J, having an aperture j' , through which the projections c' on the handle-bow H pass and a countersunk aperture j to receive the centers b at each end of the brush-shaft. These plates are attached at one end to the ends of the case in position to act as a guard for the projections on the handle-bow, as above suggested, and the other ends project downward to position to receive the centers b in the brush-shaft and are held in contact therewith by the spring of the guards K. With this construction the brush-roll may be readily inserted or removed by simply springing the guard and the plate sufficiently to admit of the convenient manipula-

tion, as indicated by dotted lines in Fig. 3. The heads of these plates are made broad enough each side of the aperture j to completely cover the slot a in the ends of the case.

5 One pair of the wheels I of my sweeper are supported on the pins d^2 on the stationary supports D' , which are solidly attached to the ends of the case, as indicated in Fig. 1. The other pair of wheels I' are supported upon
10 similar pins at the lower ends of the lever D . These levers are pivoted (one at each end, as in Fig. 3) to the ends of the case, as at d' , (see Fig. 1,) with the pins projecting through slots d^3 in the ends of the case for the support of
15 the wheels outside of the case, and are held in position by springs D^2 . These springs are securely attached at one end to the ends of the case and flexibly attached at the other ends to the upper ends of the levers D , as at d in
20 Figs. 1 and 9.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In combination with the case and dust-
25 pans of a carpet-sweeper, levers pivoted one to each side of the case, an arm projecting upwardly from each lever, the handle-bow of the sweeper connected at its ends with said arms through slots in the case, lateral arms
30 projecting from each side of the levers, each

connected with the inner edge of the pan adjacent to it, and spring-supports for the outer edges of the pans, substantially as shown and described.

2. The combination with the case and dust- 35
pans of a carpet-sweeper, levers pivoted one to each side of the case, an arm projecting upwardly from each lever, the handle-bow of the sweeper connected at its ends with said arms through slots in the case, lateral arms 40
projecting from each side of the levers, each connected with the inner edge of the pan adjacent to it, revoluble bearings passing through apertures in the ends of the case and levers attached to the outer ends thereof, arms each 45
pivoted at one end to the outer edges of the pans and secured, at the other end, to one of said revoluble bearings, and arms on the inner ends of said revoluble bearings and springs attached thereto and to the case and 50
adapted to return the pans to their normal position, substantially as and for the purpose set forth.

Signed at Grand Rapids, Michigan, January 7, 1896.

CHARLES KING.

In presence of—

ITHIEL J. CILLEY,
BYRON E. PARKS.