

G. S. SANFORD.
CARPET SWEEPER.

No. 481,829.

Patented Aug. 30, 1892.

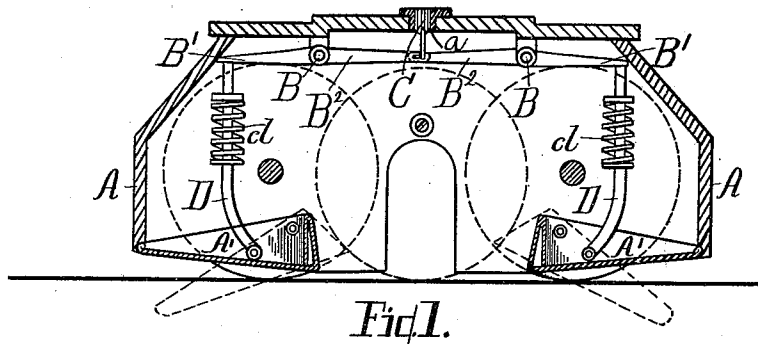


Fig. 1.

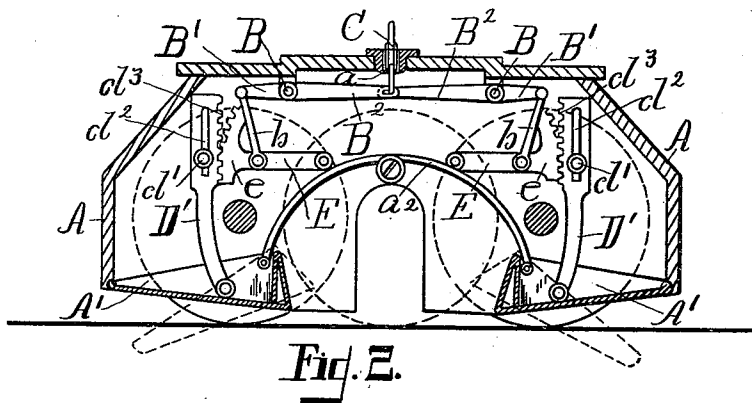


Fig. 2.

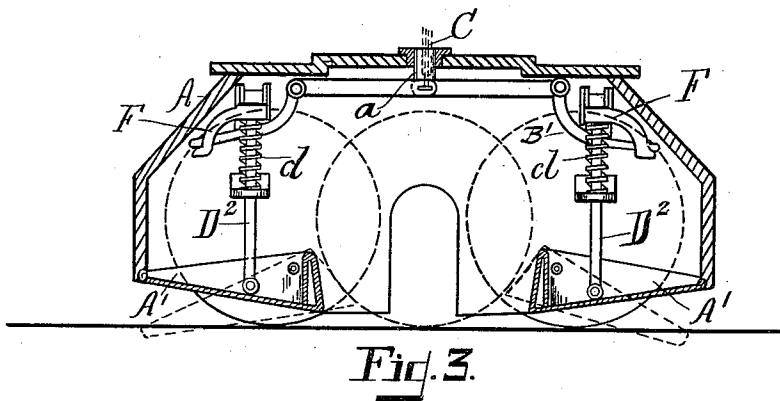


Fig. 3.

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(No Model.)

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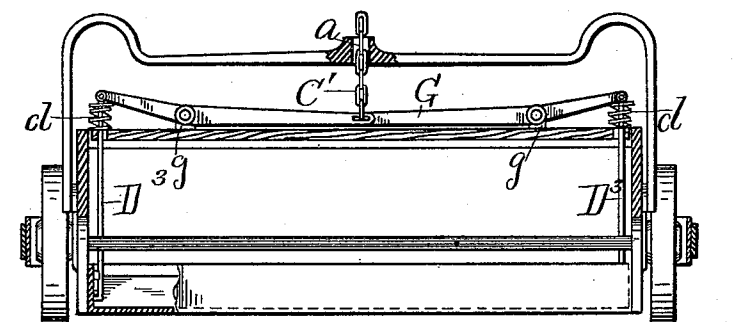


Fig. 4.

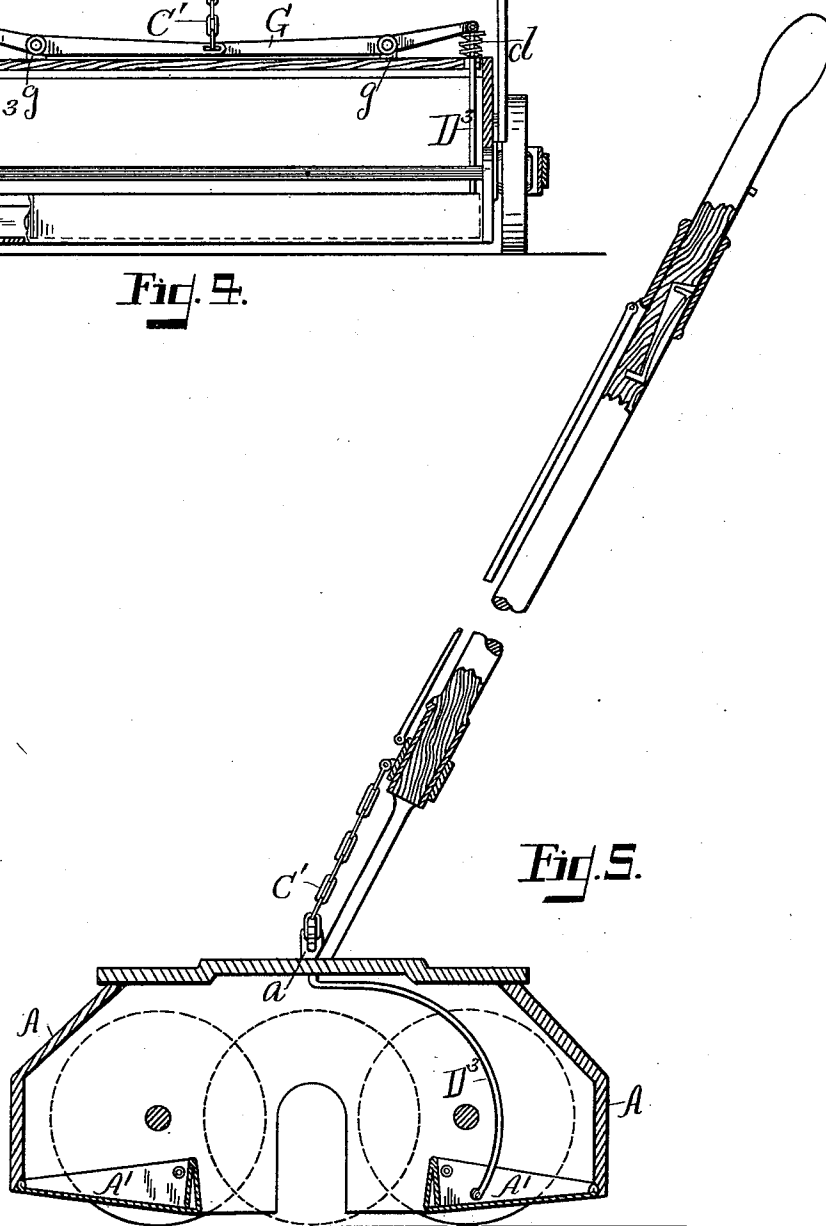


Fig. 5.

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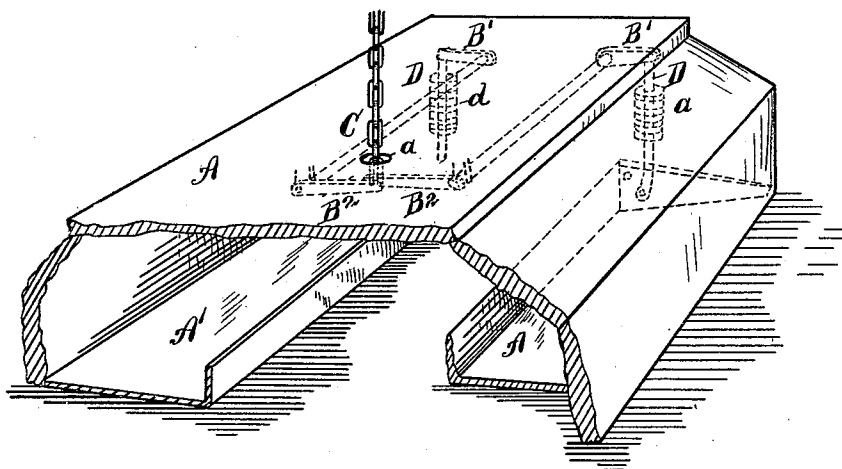
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Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE S. SANFORD, OF MOUNT CLEMENS, MICHIGAN.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 481,829, dated August 30, 1892.

Application filed November 9, 1891. Serial No. 411,376. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. SANFORD, a citizen of the United States, residing at Mount Clemens, county of Macomb, State of Michigan, have invented a certain new and useful Improvement in Carpet-Sweepers; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to carpet-sweepers of the class shown by my several applications filed herewith, to wit: Serial Nos. 411,373 and 411,375, filed November 9, 1891, in the former of which I have shown and claimed, broadly, the combination of various means for opening and closing the dust-pan with a rod or cable permanently connected therewith and operating longitudinally with the handle of the sweeper. In this application I desire to cover certain special forms embodying this principle.

In the drawings, Figure 1 is a sectional view showing the employment of levers in conjunction with a plunger provided with a coil-spring. Fig. 2 is a sectional view showing a vertical plunger and a system of levers, one provided with a tooth-segment engaging with a rock-arm on the side of the plunger. Fig. 3 is a sectional view of a construction similar to that shown in Fig. 1 in which the lever is engaged indirectly with the plunger. Fig. 4 is a view in which the levers employed are on the outside of the case and the plunger or link extending up through the case and engaged with a coil-spring on the outside. Fig. 5 is a cross-sectional view of the interior of a sweeper constructed according to the form shown in Fig. 4. Fig. 6 is a semi-perspective view of a sweeper-case, showing the position of the rock-shaft and rock-arms, with their connections dotted in, and also the dust-pans and the connections therewith, the connection of one of the rods with the pan being omitted for clearness.

In the drawings, A is the frame or case of the sweeper.

A' is the dust-pan.

B is a rock-shaft located longitudinally in

the case and rigidly attached thereto, and close to the inner end of the case is a rock-arm B'.

B² is a rock-arm attached to the rock-shaft in the center and extending inward underneath the opening *a* in the top of the case, and to the inner end of which is attached a cable C.

D is a vertical rod moving up and down in suitable guides and provided with a spring *d*, adapted to force the rod to the extreme upper end of its movement. The rod D is pivoted at the lower end to the dust-pan A'. The action of the spring is to hold the dust-pan in its closed position, and when the cable C is drawn upward by elevating the rock-arm B² and depressing the rock-arm B' the rod D is depressed and the dust-pan is forced open.

In Fig. 2 the vertical rod or bar is provided with any suitable guide, such as pin *d'*, engaging with the slot *d*² in the bar or rod, and is provided with a rack *d*³, in which is engaged the segment *e* on the end of the lever E. This lever is connected with the rock-arm B' by the link *b*.

In Fig. 3 the construction is similar to that shown in Fig. 1, but employs a connecting-link F between the vertical rod D² and the rock-arm B'.

In Figs. 4 and 5 the construction is varied from that shown in Figs. 1, 2, and 3 in the employment on top of the sweeper of a straight lever G, pivoted to a standard *g* on the top of the case A, and in which the vertical rod or link D³ is bent or set off to carry its lower end to the side of the sweeper to pivot it to the dust-pan, and is provided above the case with a coil-spring adapted to draw the rod upward and close the dust-pan. In this case the cable or rod C' is engaged directly with the levers outside of the case instead of passing down through the top of the case through the opening *a*.

It is to be understood that in each of these variations the construction may be duplicated to provide for opening and closing two dust-pans, and two cables or rods running lengthwise of the handle may be employed, each connected with a lever either inside or outside of the case to provide for dumping each pan separately, if desired, or one lever only may be employed with the construction shown

in Fig. 4, pivoted or engaged with two vertical rods or standards on the same end of the case and adapted to open both dust-pans.

What I claim is—

- 5 In a carpet-sweeper, mechanism for dumping the dust-pan, consisting of a vertical rod pivoted at its lower end to said dust-pan, a spring adapted to close said dust-pan, a rock-arm adapted to force said rod downward and
10 open the dust-pan against the resistance of

the spring, and means connected with said rock-arm and extending up the handle and movable longitudinally therewith for operating the same, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

GEORGE S. SANFORD.

Witnesses:

M. A. REEVE,
CHAS. H. FISK.