

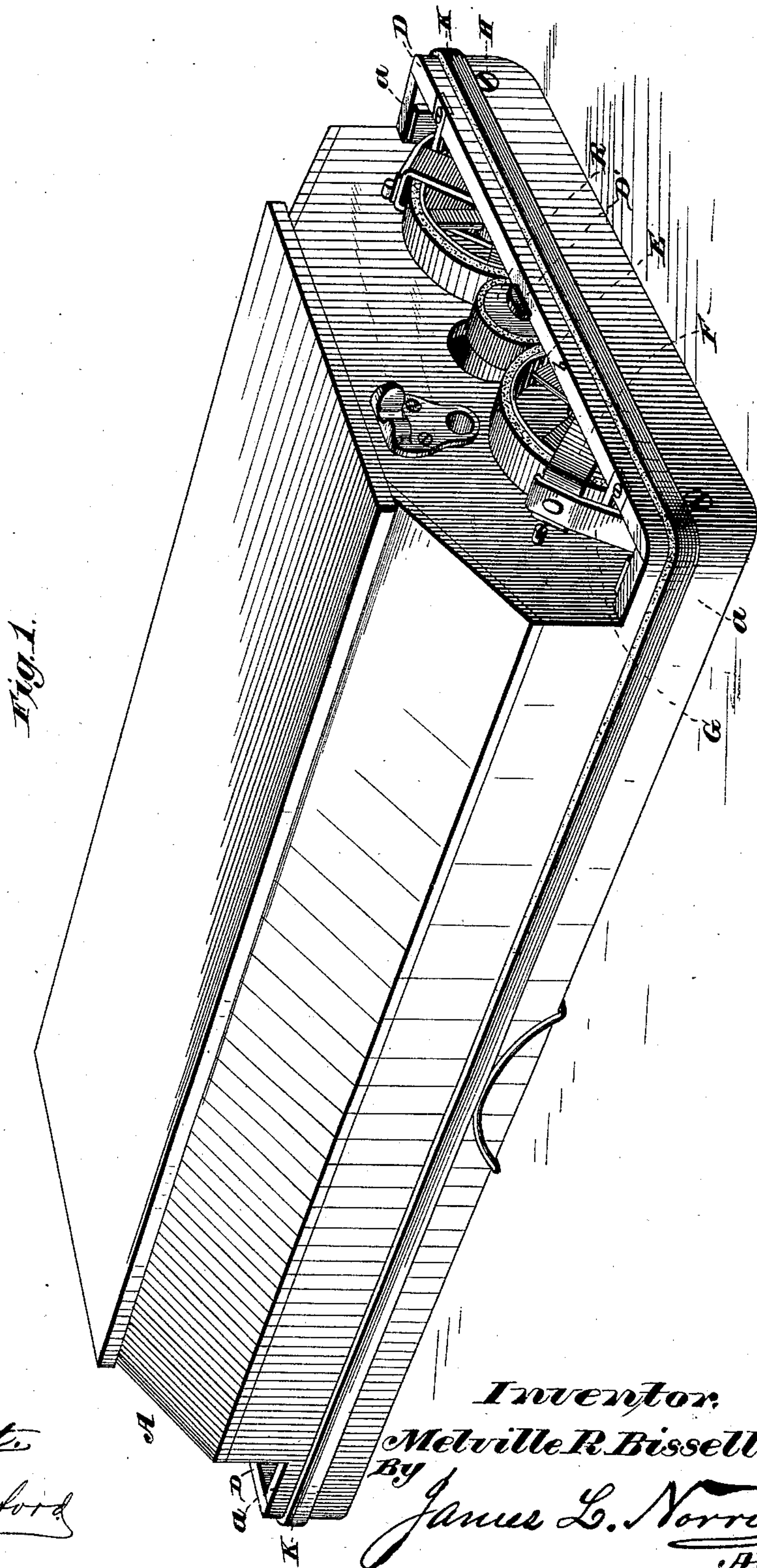
(No Model.)

2 Sheets—Sheet 1.

M. R. BISSELL.
CARPET SWEEPER.

No. 285,000.

Patented Sept. 18, 1883.



Witnesses.

Robert Everett.

J. A. Rutherford.

Inventor.

Metville R. Bissell.

By

James L. Norris.

Atty.

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Fig. 2.

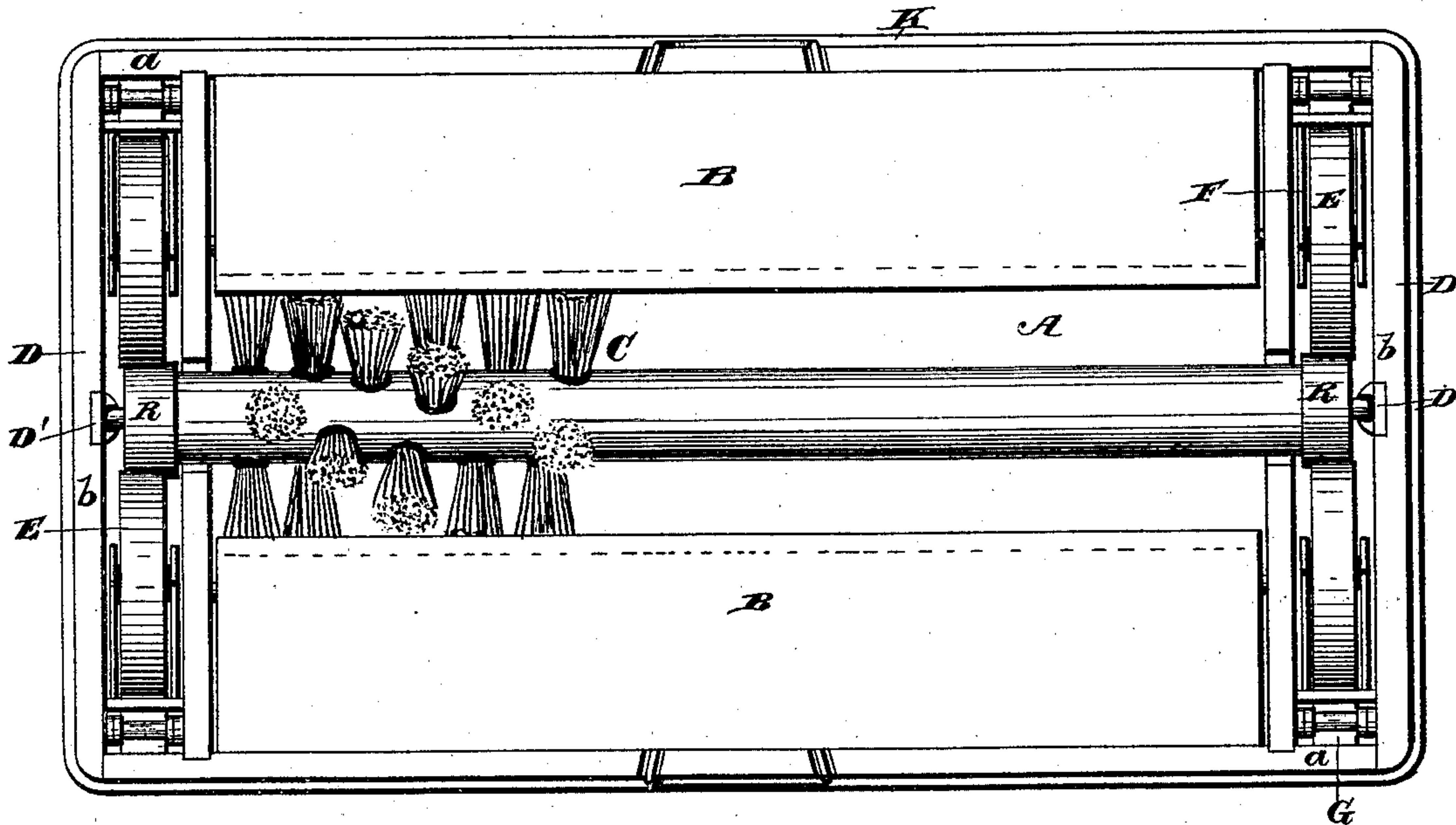
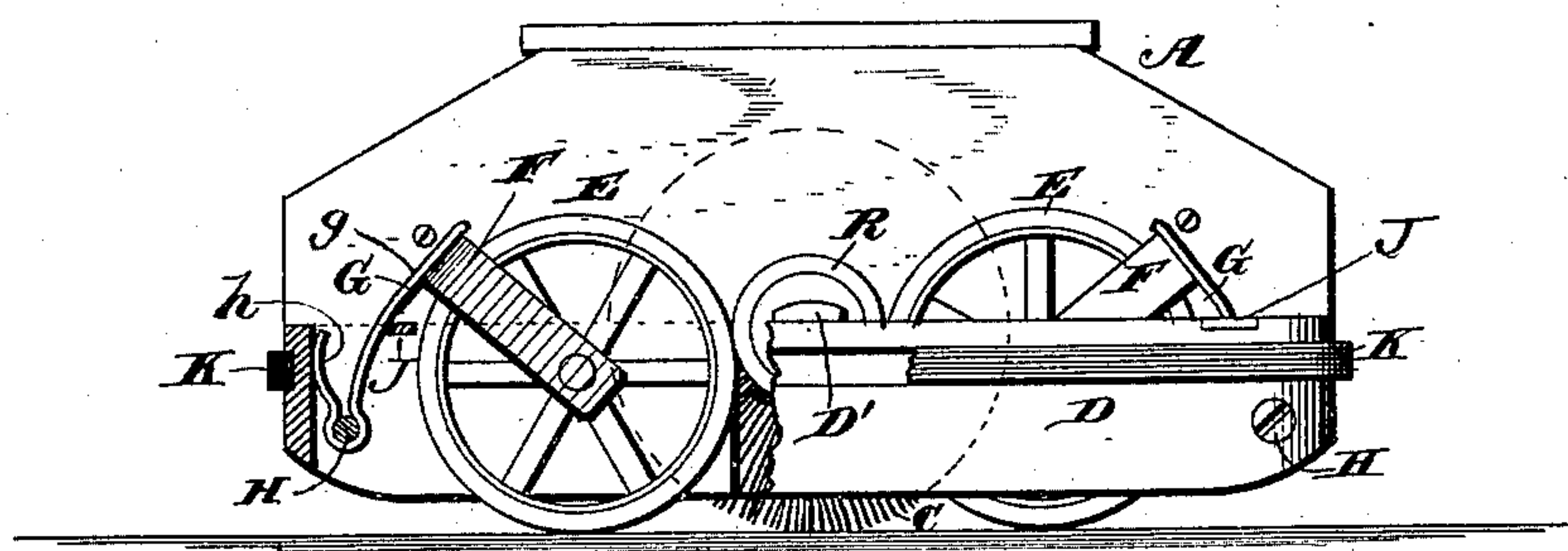


Fig. 3.



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UNITED STATES PATENT OFFICE.

MELVILLE R. BISSELL, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO THE
BISSELL CARPET SWEEPER COMPANY, OF SAME PLACE.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 285,000, dated September 18, 1883.

Application filed May 24, 1883. (No model.)

To all whom it may concern:

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

The present invention relates to that class of carpet-sweepers in which a revolving brush serves to deliver the dust or collected material into pans contained in a case or box mounted on bearing-wheels, said pans being arranged so that they can be tipped for emptying them.

The object of the invention is to provide a case or box which has supports or a supplementary frame at each end thereof for the reception of the bearing-wheels, so that the latter will be exposed to view and easily accessible, for the purpose of permitting dirt accumulating on their peripheries or anything that might clog them, to be easily removed without the necessity of inverting the box. Another object of the invention is to fit on the main frame or box and on the supplementary end frames that support the bearing-wheels an india-rubber or elastic band, which serves as a guard for preventing the marring or injury of furniture or other objects brought in contact with the sweeper.

The objects of my invention I accomplish by the construction and arrangement of parts hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a sweeper-casing constructed according to my invention. Fig. 2 is a bottom view of the same. Fig. 3 is an end elevation with part of the supplementary frame broken away to show the spring-supports for the bearing-wheels.

The case or box A contains in its lower part two pivoted pans or dust-receivers, B, between which is arranged a revolving brush, C, having its bearings in supplementary frames D, arranged beyond the ends of the box proper of the sweeper. These frames are formed by extending the side boards of the box A beyond the ends thereof, as is shown at *a*, and attaching to said extended portions at each end of the box a transverse bar or board, *b*, whose lower edge is on a level with the lower

edge of the box A. Suitable bearing-plates or supports, *D'*, attached to the inner sides of the transverse bars or boards *b* receive the gudgeons or journals on the ends of the revolving brush, and these bearing-plates are generally provided with slots, so that they can be adjusted up and down on retaining-screws passing through said slotted plates and entering the transverse bars or boards *b*.

The bearing or transporting wheels E, for supporting the sweeper and actuating the revolving brush, are arranged in pairs between the supplementary frames D and the ends of the box, and are mounted or journaled in hangers or yokes F, which are carried by spring-arms G. The bearing-wheels may have hard or solid peripheries, or be provided with india-rubber tires, for obtaining greater adhesion between the bearing-wheels on the brush-shaft, and for lessening noise.

The spring-arms consist of a long plate or member, *g*, to the upper end of which the wheel-yoke is secured and a shorter plate or member, *h*, bearing upon the inner side of the extended portion of the sweeper-box. A bolt or pin, H, passing through an eye or contracted portion at the junction of members *g* and *h*, serves to hold the spring-arm G in position. The bolt or pin extends through the bar or board *b*, and enters the end board of the sweeper-box. The brush shaft or spindle arranged between the wheels at each end of the box has the customary wheels, R, turning in contact with the bearing-wheels, for operating the brush by means of said wheels. These wheels R may have hard peripheries, or be provided with rubber tires. The spring-arms G, carrying the bearing-wheels, will permit the latter to yield to the inequalities of the surface over which they travel, and stop plates or bridges J, extending across the space in which the bearing-wheels are located, serve as rests for said spring-arms and hold the peripheries of the bearing-wheels at a proper elevation or plane in relation to the base of the sweeper-box. A groove made in the side boards of the sweeper-box and in the supplementary frames D receives a continuous india-rubber or other elastic band, K, which serves as a cushion or guard for preventing injury to furniture and

other objects brought in contact with the
sweeper. This elastic band is stretched and
slipped over the sweeper-box and supple-
mentary frames, and retained in its seat or
5 groove by its own elasticity.

It will be evident that by extending the
side boards of the sweeper-box beyond the
ends thereof, and attaching transverse bars
to said extended portions, supplementary
10 wheel-supporting frames of a firm and stable
nature are provided, and that the wheels ar-
ranged in said supplementary frames are ex-
posed to sight and are readily accessible, so
that they can be easily freed from accumulated
15 dirt.

I am aware that a carpet-sweeper has heretofore been composed of a sweeper-case having secured to each end a separate journal-box support having a slot receiving the box, in
20 which the journal at one end of the brush-shaft is arranged, said journals of the brush-shaft being retained in the slotted journal-box supports by engaging with the ends of a bail to which the sweeper-handle is secured. My
25 invention differs from such in several material respects, in that I prolong the side pieces of the sweeper-case itself, and connect the extremities of such side pieces by transverse bars having bearings which of themselves support
30 and hold the end journal of the brush-shaft when the sweeper-box is lifted; and, further, the transverse connecting-bars have their lower edges on a level with the bottom of the sweeper-box, thus bringing such bars in the
35 same proximity to the floor as the box itself. I am also aware that a carpet-sweeper has been provided with a continuous elastic band arranged in a groove formed in the side and end walls of the sweeper-box, and such there-
40 fore I do not claim.

Having thus described my invention, what I claim is—

1. In a carpet-sweeper, the combination of

the box having its sides extended beyond its ends, and the transverse bars for connecting 45
said extended portions with the bearing-wheels arranged between the ends of the box and said transverse bars, and the revolving brush having its end journal supported by bearings on the transverse bars, such bearings 50
retaining the brush-shaft in position when the sweeper-case is lifted, substantially as described.

2. In a carpet-sweeper, the combination, of the sweeper-box having its side pieces pro- 55
longed beyond its ends, the transverse bars connecting the extremities of the side pieces, the brush-shaft having the journals at its ends supported by bearings on the transverse bars, and the bearing-wheels arranged between the 60
ends of the box and the transverse bars, substantially as described.

3. In a carpet-sweeper, the combination of the sweeper-box having its side pieces prolonged beyond its ends, the transverse bars connect- 65
ing the extremities of the side pieces and having their lower edges arranged on a level with the bottom of the sweeper-box, and the brush-shaft having end journals supported by bearings on the transverse bars, substantially as 70
described.

4. A carpet-sweeper composed of a sweeper-box having its side pieces prolonged beyond its ends and connected at their extremities by transverse bars which have bearings to sup- 75
port the journals on the ends of the brush-shaft, said side pieces and transverse bars having grooves in which is arranged an elastic band, substantially as described.

In testimony whereof I have hereunto set my 80
hand in the presence of two subscribing witnesses.

MELVILLE R. BISSELL.

Witnesses:

CHAS. BATEMAN,
R. W. BUTTERFIELD.