

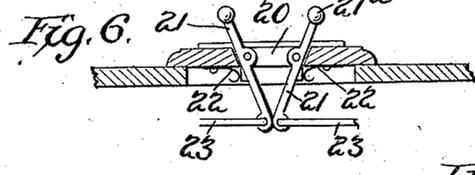
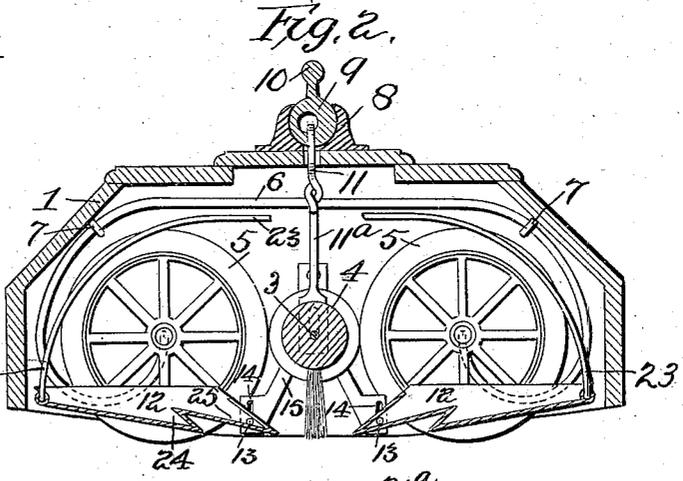
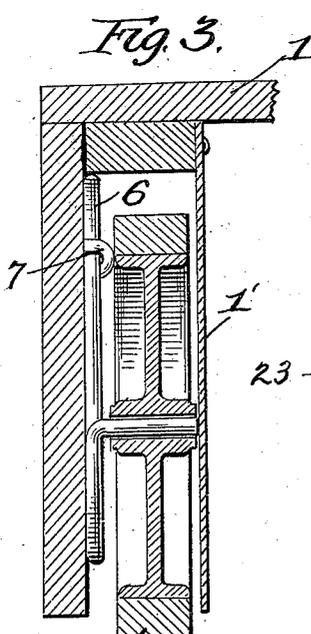
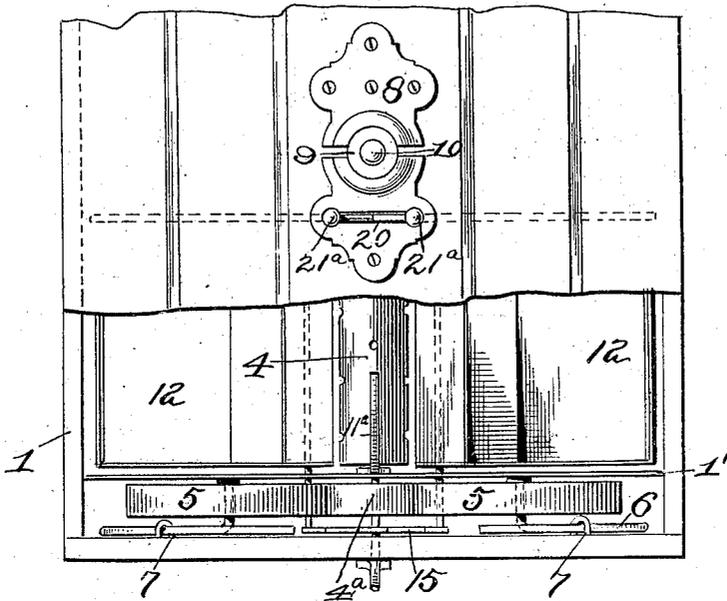
(No Model.)

2 Sheets—Sheet 1.

W. T. HESS.  
CARPET SWEEPER.

No. 555,863.

*Fig. 1* Patented Mar. 3, 1896.



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ATTY.

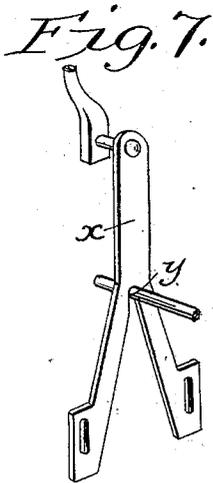
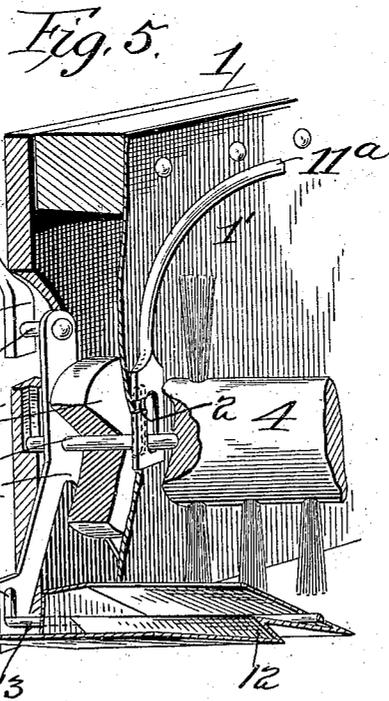
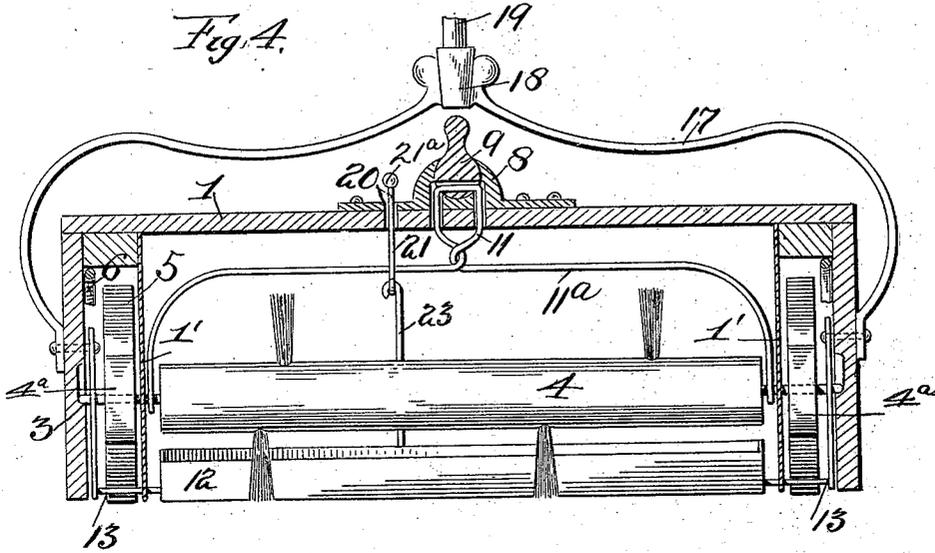
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2 Sheets—Sheet 2.

W. T. HESS.  
CARPET SWEEPER.

No. 555,863.

Patented Mar. 3, 1896.



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# UNITED STATES PATENT OFFICE.

WILLIAM T. HESS, OF GRAND RAPIDS, MICHIGAN.

## CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 555,863, dated March 3, 1896.

Application filed March 21, 1895. Serial No. 542,646. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM T. HESS, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Carpet-Sweepers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in carpet-sweepers, and has for its object to provide a sweeper embodying certain improved features of adjustability of the pans and brush whereby the sweeper will automatically adapt itself to the surface upon which it is being used.

I have illustrated a carpet-sweeper constructed in accordance with my invention in the accompanying drawings, in which—

Figure 1 is a plan view partly broken away. Fig. 2 is a transverse section of Fig. 1 with the inner end wall removed. Fig. 3 is a detail sectional view showing one of the driving-wheels and the manner of mounting the same. Fig. 4 is a transverse section. Fig. 5 is an enlarged detail of the end of the sweeper, and Fig. 6 is a detail of the levers for dumping the pans. Fig. 7 is detail of a modified form of yoke.

The frame or casing of the sweeper is shown at 1 and may be of the ordinary form with the exception of the changes made necessary by my improvements. It is provided with the supplemental inner end walls 1', which are slotted at 2, and through the slots extend the axle 3 of the roller 4 carrying the brushes. Interposed between the ends of the brush-roller and the casing are the brush-driving wheels 4<sup>a</sup>, secured to the axle 3 and held in contact with the supporting and driving wheels 5, arranged in pairs at each end of the casing. These wheels are journaled in the laterally-bent ends of the spring 6, which passes through the hub of the wheels. The springs are held in position by means of the staples 7, which enter the outer end casing. Thus the driving-wheels are held in contact with the brush-wheels 4<sup>a</sup> during the various positions of the same.

The escutcheon 8, provided with a spherical cavity into which fits the ball 9, having the extension forming the handle 10, is se-

cured at the center of the top of the casing, and through an opening passing eccentrically through this ball 10 is secured the loop 11, formed in the center of spring-bail 11<sup>a</sup>, the ends of which are slotted to receive the axle 3 of the brush-roll. By moving the handle 10 of this eccentric either to one side or the other the brush-roll is either raised or lowered. The pans or receptacles for holding the dust are shown at 12 and are of peculiar construction, as will be hereinafter described. From the inner end of these pans the pins 13 project on each side through the slots 14 in the lower end of the yoke 15, arranged on the inside of the casing, and these yokes extend upward and are provided with an opening through which the axle 3 passes, thus forming a pivotal connection whereby the yoke may be rocked or tilted to depress the forward pan and raise the rear one when the sweeper is operated. The extreme upper ends of the yokes are connected by a pivot 16 above said axle with the bail 17, having a socket 18 for the reception of the handle 19.

The escutcheon is slotted at 20, and in this slot are pivoted the arms 21, the lower ends of which are normally pressed toward each other by the springs 22; the upper ends being forced apart. Connected to the lower ends of these arms are the dumping-rods 23, pivoted at their lower end near the center of the outside rim of the pan. The upper ends of these arms extend outside the casing and are surmounted by knobs 21<sup>a</sup>, which act as handles to be grasped in dumping the pans. The bottoms of the pans are of novel construction, the inner part of each running toward the outer part at a sharp inclination for about one-fourth of the width of the pans and then retreating and then again rising at a less inclination, forming the pockets or recesses 24 and 25 for the reception of the sweepings and from which they may be dumped with facility.

It will be understood that it will be possible for the pan in front of the brush to ride over any obstruction, such as cigar-stumps, by tilting on its pivoted end secured to the dumping-rod, the inner end being guided by the pin 13 moving in the slots 14 of the yoke, and again resume its normal position by the time the brush strikes the obstruction. The brush-

roller and the pans will be moved vertically simultaneously by the adjustment of the eccentric, as this will raise or lower the brush-roll and the yoke hanging on the axle thereof.

5 The pressing of the knobs 21<sup>a</sup> toward each other against the tension of the springs 22 will depress the rods 23, and they in turn will depress the outer side of the pan, thus emptying the same, as the dust will at once fall out  
10 of the before-described pockets or recesses.

Instead of having an opening through the yoke for the brush-roll axle, this yoke may be formed as shown at *x* in Fig. 7, where an opening-bearing *y* is provided.

15 I claim as my invention—

1. A carpet-sweeper comprising the casing, the brush-roll vertically movable therein, the yokes connected with the brush-roll axle, and the pans having their outer edges pivotally  
20 supported from the casing and their inner edges connected to the yokes, substantially as described.

2. A carpet-sweeper comprising the casing, the brush-roll vertically movable therein, the yokes connected with the brush-roll axle, the pans having their outer edges pivotally supported from the casing and their inner edges  
25 connected to the yokes, and means for varying the elevation of the brush, substantially as described.

3. A carpet-sweeper comprising the casing, the brush-roll vertically movable therein, the yokes engaging the brush-roll axle, the pans having their inner edges connected to the yokes by a sliding pivot, and the dump-rods  
30 connected with the casing and pivoted to the pans at their outer edges, substantially as described.

4. A carpet-sweeper comprising the casing,  
40 the pans carried thereby, the vertically-mov-

able brush-roll, the bail connected to said brush-roll, and the handle journaled in the casing and eccentrically connected with the bail whereby the rotation of the handle will adjust said bail vertically, substantially as  
45 described.

5. A carpet-sweeper comprising the casing, the pans, the brush-roll vertically movable in said casing, the handle having a ball journaled in a spherical cavity in the top of the casing,  
50 and the bail having slotted ends engaging the brush-roll and a central loop eccentrically connected with the ball whereby the rotation of the ball adjusts the bail vertically, substantially as described.

6. In combination with the casing and the brush rotating therein, the yoke connected with the axle of the brush, the pans having their inner edges connected with said yoke by a sliding pivot, and the dump-rods secured  
60 to the casing and pivotally connected to the outer edges of the pan and forming normally the bearings upon which the pans pivot as the front edges rise and fall during the operation of the sweeper, substantially as described.

7. In combination, the casing, the brush-roll, the yokes pivoted on the brush-roll axle, the pans supported at their inner ends by said yokes, means carried by the casing for pivotally supporting the outer edges of said pans  
70 and the handle-bail connected to the yokes whereby the yokes are rocked to raise and lower said pans, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM T. HESS.

Witnesses:

L. T. GIBSON,  
F. M. JEFFORDS.