(No Model.)

J. W. ROOP.

CORNER AND BASE CARPET SWEEPER.

No. 490,589. Patented Jan. 24, 1893.

Fig. 6.

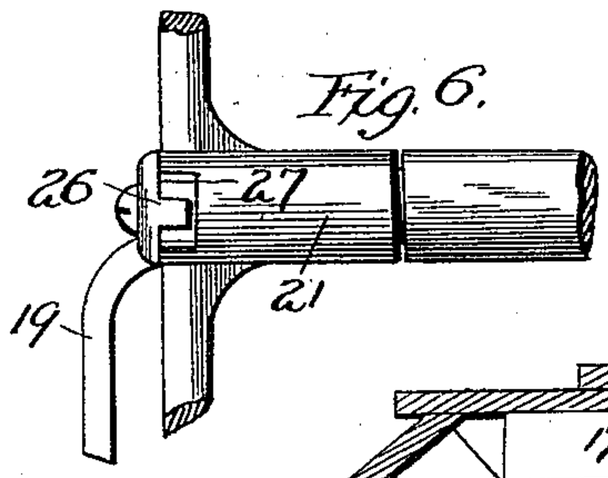
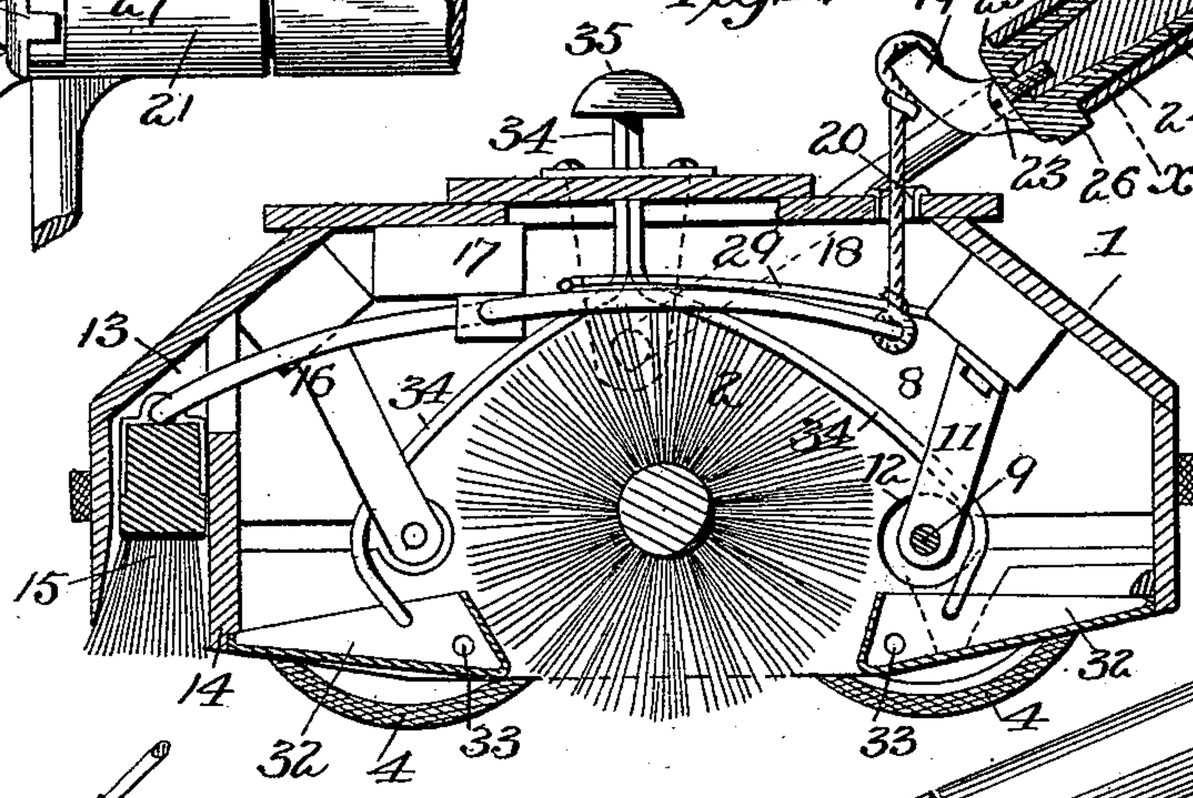


Fig. 1.



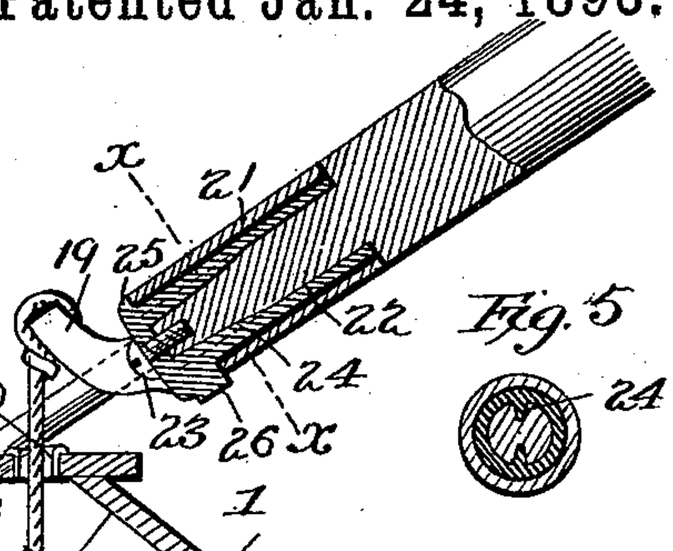


Fig. 5

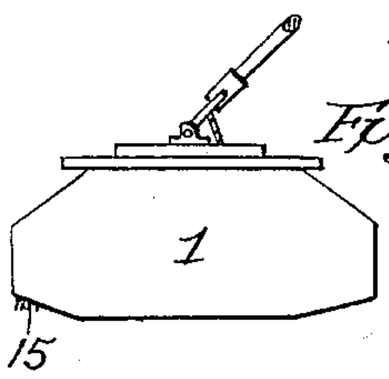


Fig. 7.

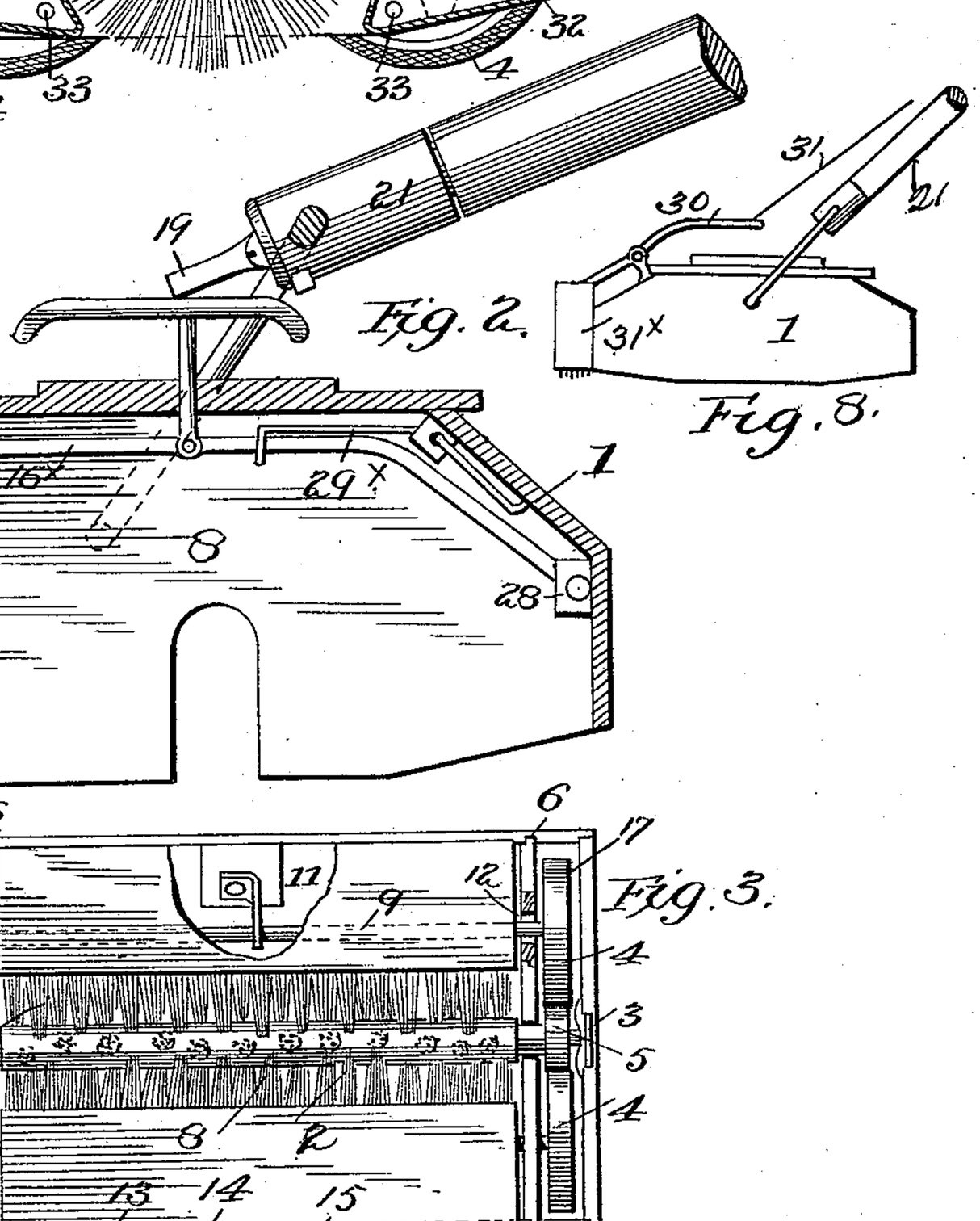


Fig. 8.

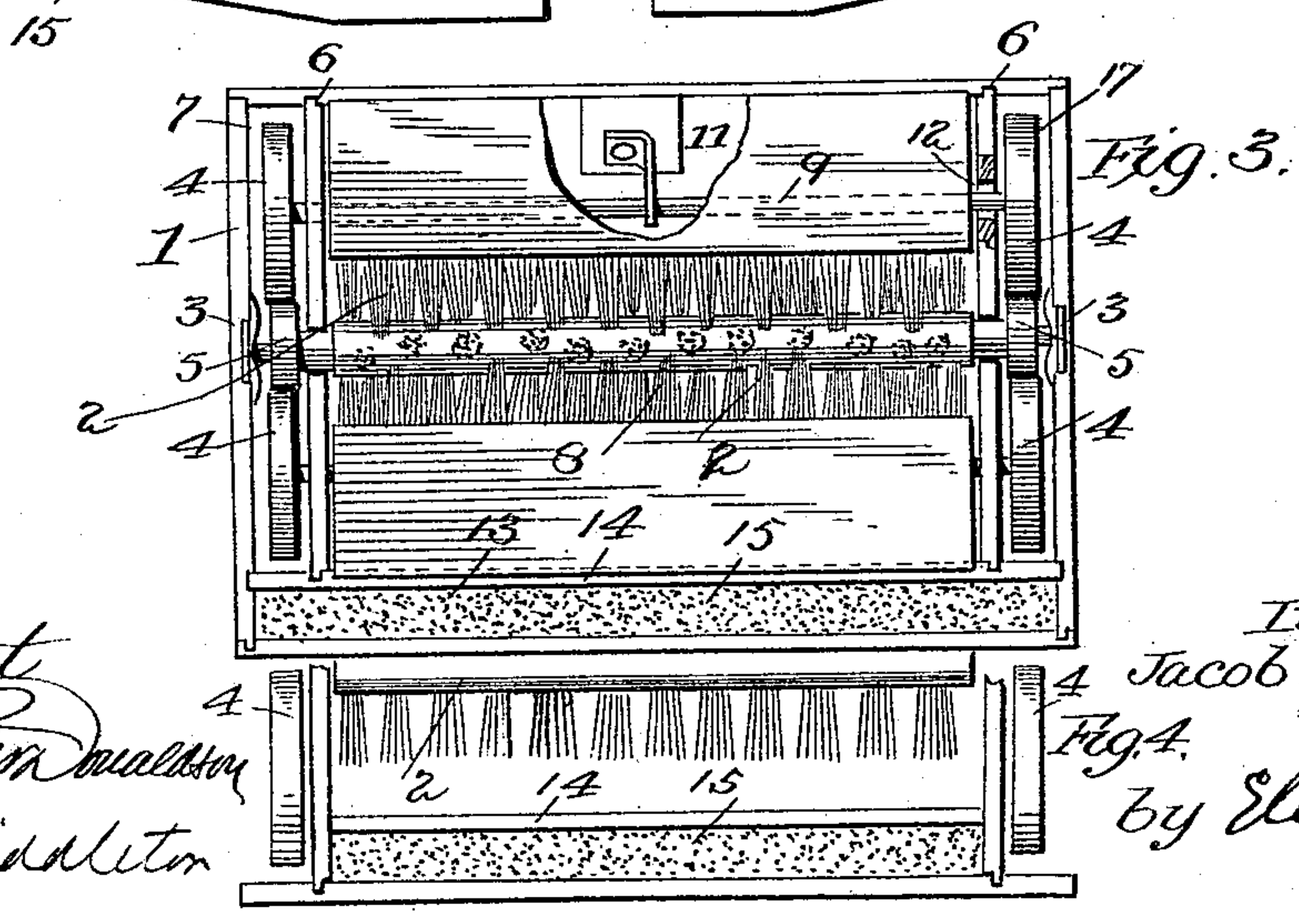


Fig. 3.

Fig. 4.

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JACOB W. ROOP, OF HARRISBURG, PENNSYLVANIA.

CORNER AND BASE CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 490,589, dated January 24, 1893.

Application filed October 22, 1891. Serial No. 409,481. (No model.)

To all whom it may concern:

Be it known that I, JACOB W. ROOP, a citizen of the United States of America, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Corner and Base Carpet-Sweepers, of which the following is a specification.

My invention relates to carpet sweepers and may be designated as a corner or base sweeper, it being adapted to remove and collect the dust in corners, and along the surbases of the room, as well as generally throughout the room.

The invention embodies the feature of a supplemental collecting means adapted to act in front of the main brush or other collecting device of the sweeper, and one application of the principle of my invention includes the use of a supplemental brush extending across the front of the sweeper within a chamber which is supplemental to the main chamber, this feature being an improvement upon Patent No. 436,689, granted to J. O. Boggs September 16 1890:

The invention may be said to consist of a sweeper having a main chamber with suitable collecting means, and a supplemental chamber forward of the main chamber, having in connection therewith means for removing or collecting the dust from the corners or along the base of the walls of the room.

The invention consists further in the various devices and combinations of devices hereinafter specifically mentioned and pointed out in the claims.

In the accompanying drawings—Figure 1 is a central transverse section through the sweeper case, showing the handle partly in section. Fig. 2 represents a similar view of the case with the main collecting means omitted, showing another manner of operating the supplemental collecting means. Fig. 3 is a bottom plan view. Fig. 4 is a similar view of a portion of the sweeper showing a modification of the casing. Fig. 5 is a section on line *x*—*x* of the handle Fig. 1. and Fig. 6 is a detail plan view of the under side of the handle. Fig. 7 is a view showing a modification of the handle pivot. Fig. 8 is a view of a further modification.

It will be understood that the invention may be embodied in different forms and is adaptable to various shapes and structures of the casing. The case shown at 1. is of substantially ordinary form, and within it is the main brush 2, having bearings at the points 3, 3. This brush is revolved by the traction wheels 4, which may be of any well known construction adapted to bear upon the collars 5, of the brush shaft. They may be located within the casing as shown in Fig. 3, in which case partitions 6, extend across the main casing forming wheel chambers 7, which are separated from the main chamber 8, in which the dust is collected. The wheels may be carried on shafts 9, extending entirely across the casing, as shown in Figs. 1 and 3, or they may be supported in any suitable manner.

In front of the main collecting brush and dust chamber a supplemental chamber 13 is formed by a partition 14, Figs. 1, and 2. Within this supplemental chamber a brush 15 is located which is a representative element for any device which may be used in connection with the supplemental chamber for acting upon or collecting the dust forward of the main chamber.

It is my object to operate this collecting means in a simple manner, and in the present embodiment of my invention I employ the handle of the sweeper for this purpose. The brush consists of bunches of bristles inserted in a bar which is fitted to the walls of the chamber to be guided in its vertical movement thereby. It is operated by a lever 16 pivoted at 17 and having its rear end connected by a cord, rope, or chain 18, to a finger 19,, carried by the handle. The lever is within the casing and the cord extends through an opening 20 in the top thereof. The handle is swiveled in the yoke socket 21 to have rotary movement. Its end is reduced and has secured thereto a thimble 22, by means of a screw 23 extending through its head and by means of interior ribs which enter grooves 24 in the end of the handle. The head of the thimble has a flange 25 which bears upon the lower edge of the yoke socket and holds the handle against being withdrawn while at the same time it permits rotary movement thereof. The finger 19 is carried by the handle thimble. The swiveling action of the handle is limited by a stop 26, on the thim-

ble which engages the end of a notch 27 of the yoke socket. From this it will be seen that by rotating the handle the finger 19 is turned up or down and this through the connections described will raise or lower the supplemental brush in the supplemental chamber. No additional supporting means is necessary for the brush other than the lever and the guiding walls of the chamber 13. The swiveled connection described and the means for limiting the rotary movement insure the proper action of the parts and prevent the wear at this point. In Fig. 2 the lever $16^{\times}$ is pivoted at the rear side of the casing at 28 and is pressed down by a bar extending up through the casing which in turn is pressed upon by the finger 19. The action of the brush is precisely the same, but the operating means are such that the depression of the finger is required instead of the elevation. A spring $29^{\times}$ bears upon the lever to hold the brush up normally. In both of these forms the operating means is within the casing and the connections there to extend through openings in the top. Instead of this the lever may be arranged outside of the casing as shown at 30, Fig. 8, and this also may be operated by drawing a cord 31 attached thereto.

It will be understood that the supplemental chamber may be formed as the casing is constructed, or it may consist of an attachment to any existing casing. This idea is illustrated at $31^{\times}$, in Fig. 8. The supplemental brush having any suitable covering or casing. The invention may be cheaply produced, the levers consisting simply of heavy bent wire and all the parts being of inexpensive material. The front wall of the supplemental chamber, or the chamber as a whole may be formed of thin sheet metal in which case the supplemental brush will fit into the corner or base, or in order to accomplish this same result and make the brush extend beyond, slightly, the front wall, the walls of the chamber may be inclined so that the brush will project and thus fit closely in the corner. This is shown in Figs. 1 and 2. The handle yoke may be pivoted to the top of the casing, but I prefer that it shall be journaled at the ends as this tends to avoid rocking of the sweeper when it is pushed along. When the yoke is pivoted in this manner I prefer to operate the levers 16 $16^{\times}$ by a depression of the finger 19, as were the cord used in this arrangement it would tend to limit the upward movement of the handle toward vertical position, and while I have shown such an arrangement of the cord in Fig. 1, it will be understood that this is for convenience only.

Dust pans 32, extend longitudinally of the casing in front and rear of the brush and are pivoted at 33 near their sides, their outer edges finding bearings against the casing, and the partition 14 formed with a shoulder to receive the edge of the front pan. These pans are operated to discharge the collected dust by means of a yoke 34, the arms of which converge above the brush 2, and extend through the casing to a knob 35. the downward pressure of which causes the turning of the pans so that their outer edges will be away from the casing to leave openings for the discharge of the dust.

I do not wish to limit myself to the precise form of the supplemental collecting means, nor to the particular manner in which this is moved and controlled.

The supplemental brush may extend beyond the ends of the main brush as in Fig. 3. where the concealed wheels are used, or as in Fig. 4 said brush may be only as long as the main brush in which form the wheels are outside the casing.

Having thus described my invention what I claim is—

1. In combination the main casing with its main chamber and collecting means, a supplemental chamber forward of the main chamber, and supplemental collecting means in connection therewith, substantially as described.

2. In combination the main chamber, the supplemental chamber, the supplemental collecting means in connection therewith, and the operating means therefor connected to the handle, substantially as described.

3. In combination the casing, the supplemental chamber and the movable collecting means within the chamber, with means for operating it, substantially as described.

4. In combination the casing, the supplemental chamber, and the supplemental collecting brush movable therein and guided by the walls thereof, and operating means for the brush, substantially as described.

5. In combination the casing, the supplemental chamber formed by the partition 14, and the supplemental collecting means in connection with said chamber, and the operating means therefor.

6. In combination the casing, the supplemental chamber having inclined walls, the brush guided thereby and the operating means for the brush.

7. In combination, the casing with the main and supplemental collecting means, the yoke having the socket provided with a notch, the swivel handle to turn in said socket, having a wearing thimble, carrying a stud to engage the yoke notch and a finger 19, and the connection from the figure to the supplemental collecting means, substantially as described.

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

JACOB W. ROOP.

Witnesses:
S. W. FLEMING,
B. E. TAYLOR.