(Model.)

C. A. HAMMETT.

CARPET SWEEPER.

No. 498,431. Patented May 30, 1893.

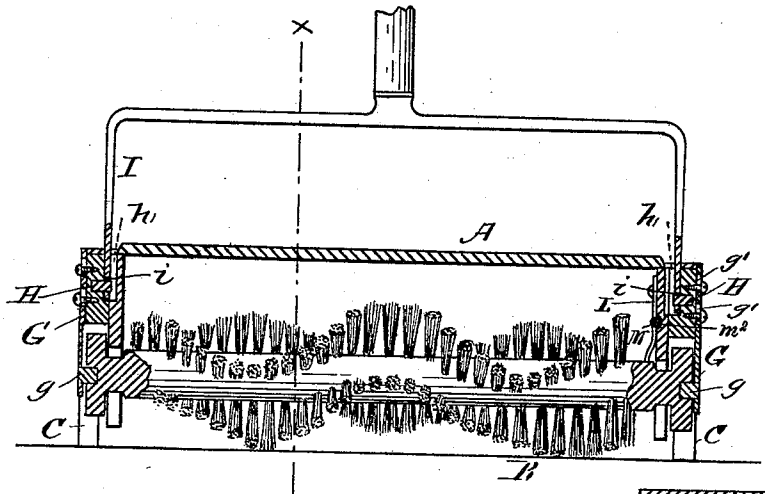


Fig. 1.

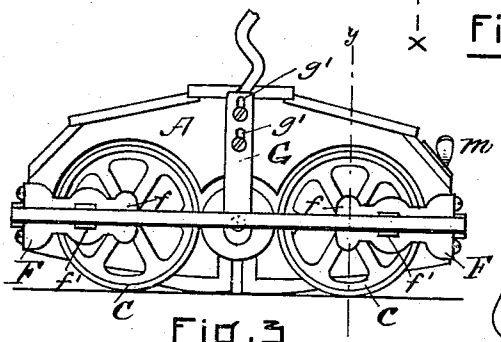


Fig. 3.

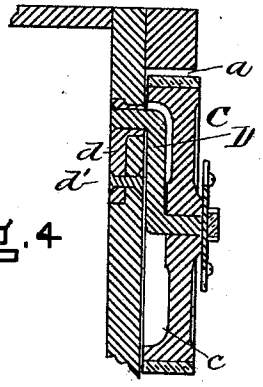


Fig. 4.

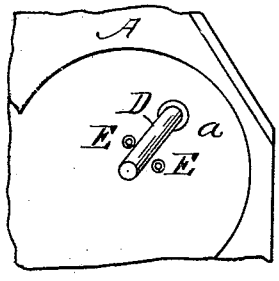


Fig. 5.

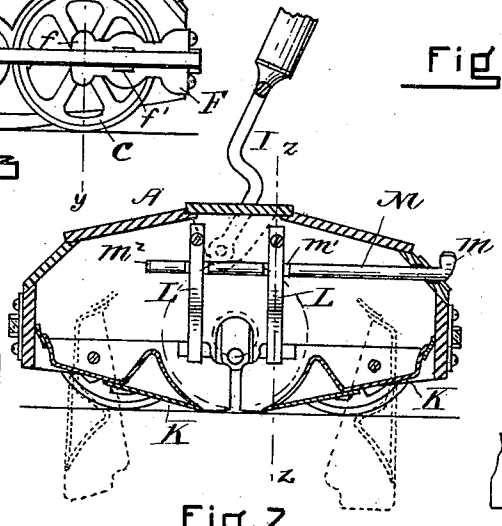


Fig. 2.

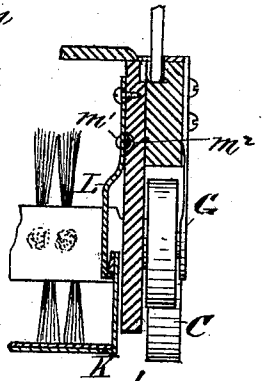


Fig. 6.

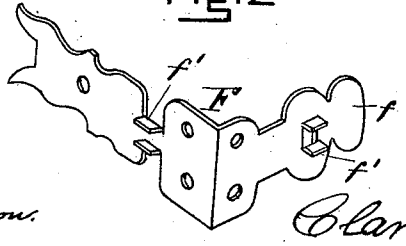


Fig. 7.

WITNESSES

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UNITED STATES PATENT OFFICE.

CLARENCE A. HAMMETT, OF NEWPORT, RHODE ISLAND.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 498,431, dated May 30, 1893.

Application filed October 31, 1891. Serial No. 410,467. (Model.)

To all whom it may concern:

Be it known that I, CLARENCE A. HAMMETT, a citizen of the United States, residing at Newport, in the county of Newport and State of Rhode Island, have invented certain new and useful Improvements in Carpet-Sweepers, of which the following is a specification.

My invention relates to mechanical carpet-sweepers in which a rotating brush is caused to revolve over the surface to be swept, and the dirt thus removed is caught in a pan or pans arranged adjacent to the brush, and its object is to improve the construction of such devices as is hereinafter more fully set forth.

In the accompanying drawings Figure 1 shows in longitudinal vertical section a carpet-sweeper embodying my improvements. Fig. 2 is a vertical section on line *x x* of Fig. 1. Fig. 3 is an end elevation, and Fig. 4 a partial section, enlarged, on the line *y y* of Fig. 3. Fig. 6 is a similar section on the line *z z* of Fig. 2. Fig. 5 is a partial end view of the case, with the wheel removed. Fig. 7 is an enlarged perspective of the angle plate.

My present invention relates particularly to improvements in the devices whereby the wheels upon which the sweeper is run, and which in turn cause the brush to rotate, are formed and connected with the box; also to certain particulars in the construction of the box and handle; to the device for hanging the brush in the box, and to the devices for releasing the pans to empty them.

In the accompanying drawings A represents the box or frame of the sweeper, B the brush, and C the wheels. In devices of this character it is common to so arrange the wheels relatively to the shaft of the brush that the former shall drive the latter by friction. To permit of this friction being obtained when the sweeper rests upon the floor and its weight is carried upon the wheels, it has been customary to attach the wheels to the frame by means of an eccentrically pivoted hanger. In the device shown in the drawings I employ such a hanger and it is represented at D. This hanger is pivoted to the side of the frame A and within a recess *a* therein of a depth substantially equal to the width of the wheel, so that they shall be substantially flush with the ends of the box. The hanger is located within the web of the wheel, which is made hollow as shown at *c* (see Fig. 4) so as to allow it to come up snugly to the frame and still leave room for the hanger between them, thereby reducing the total width of the sweeper for a given width of brush, with the accompanying advantage of decreased width of parts, &c. The pivotal attachment of the hanger (see Fig. 4) is done by means of a plate *d*, set into the wooden wall of the case. This plate is perforated to allow the hanger to pass through it, and the end of the hanger is upset to make it act as a rivet, while a second rivet *d'* passing through another perforation in the plate *d*, serves to hold the same firmly in place.

Inasmuch as the mounting of the wheels upon the pivoted hangers to give them play as described, is likely to produce an objectionable rattle or noise, I obviate this by placing upon the side of the frame stops E (see Fig. 5) of rubber or other suitable noiseless material, by which the wheel may be prevented from striking the sides of the frame itself.

I further provide at the corners of the frame A, angle plates F, having the extension *f*, which forms a stop or guard to hold the wheel in place, and upon these plates I form ears, *f'*, to receive and hold a band of rubber or other suitable soft material (see Fig. 3) to prevent injury to the furniture by being struck by the sweeper.

My improved brush hanging device consists of a pair of plates of spring material as shown at G, (best shown at Figs. 1 and 3) provided with pins *g* to engage with the ends of the shaft of the circular brush. These plates are attached to the frame of the sweeper by screws passing through slots *g'*, so that the brush can be vertically adjusted as it wears.

It is desirable that the handle should be readily detachable from the sweeper so as to save space in packing &c., and for this purpose I have provided as a means of detachable attachment of the handle to the frame of the sweeper, a pair of pins H (see Fig. 1) located in recesses *h* in the sides of the top of the box A, and I construct my handle hook I of resilient material and provide it with

perforations *i* in its ends to receive the pins H, so that by springing the hook over the pins it may be made to engage with them.

The pans K are pivoted to the frame in the usual manner and are normally prevented from falling by means of the spring catches L, shown at Figs. 2 and 6. When it is desired to release the pans to empty out their contents, the springs are moved out by means of a rod M, extending through the frame and provided at its outer end with an operating handle *m*. (See Fig. 2.) This rod is flattened at *m'* opposite the springs, so that when the rod is twisted on its longitudinal axis by means of the handle *m*, the flattened portions bear against the springs and force them out, thus releasing the pan. The rod is supported and turns in a groove m^2 formed in the inner side of the frame A as shown. At Fig. 6 the pan is shown as prevented from falling by the catch L; at Fig. 2 its position when fallen is represented by dotted lines.

I claim—

1. In a carpet-sweeper, the combination of a frame having recesses *a* in its end-pieces, a revolving brush mounted in the frame, perforated plates *d* set in recesses in the inner sides of the end-pieces and secured by rivets *d'*, wheel-hangers D having their inwardly-turned ends journaled in the plates and secured thereto by being upset at their inner ends, wheels journaled upon the hangers and located within the recesses *a*, said wheels being hollowed out on their inner sides for the reception of the wheel-hangers, which work in the hollows and permit the wheels to come close to the ends of the frame, substantially as described.

2. In a carpet-sweeper, the combination of a casing and brush and pivoted pans, depending spring catches L, secured within the casing, and adapted to normally engage and support the pans, and a rod mounted in the casing and adapted to simultaneously release the catches from the pans, substantially as described.

3. In a carpet-sweeper having pivoted pans, the combination with the spring catches L of the releasing rod M, located and adapted to turn in a groove m^2 in the inner side of the frame of the said sweeper, the said rod being provided with a handle *m* and being flattened opposite the springs, whereby when the rod is twisted on its longitudinal axis the springs will be forced out to release the pans as set forth.

In testimony whereof I have hereunto subscribed my name this 28th day of October, A. D. 1891.

CLARENCE A. HAMMETT.

Witnesses:
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GEORGE CRANDALL.