(No Model.)

W. NEWBIGGING & G. A. WORZ.

CARPET SWEEPER.

No. 504,846. Patented Sept. 12, 1893.

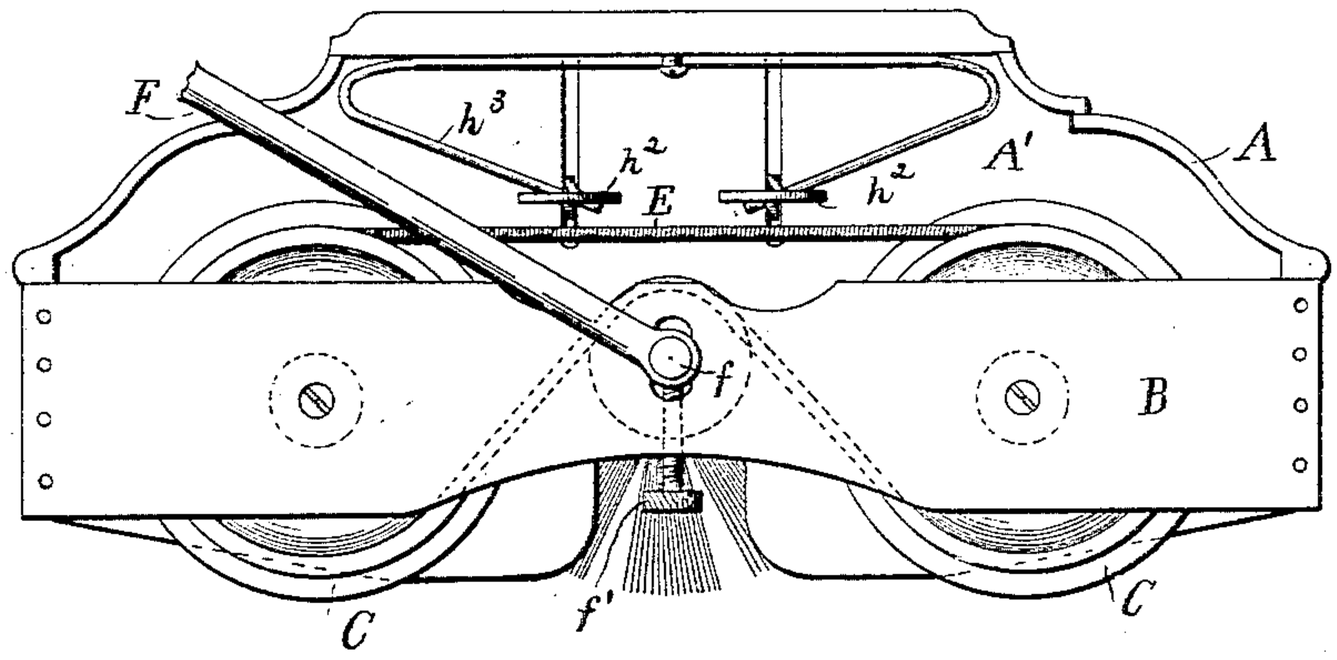

Fig. 1.

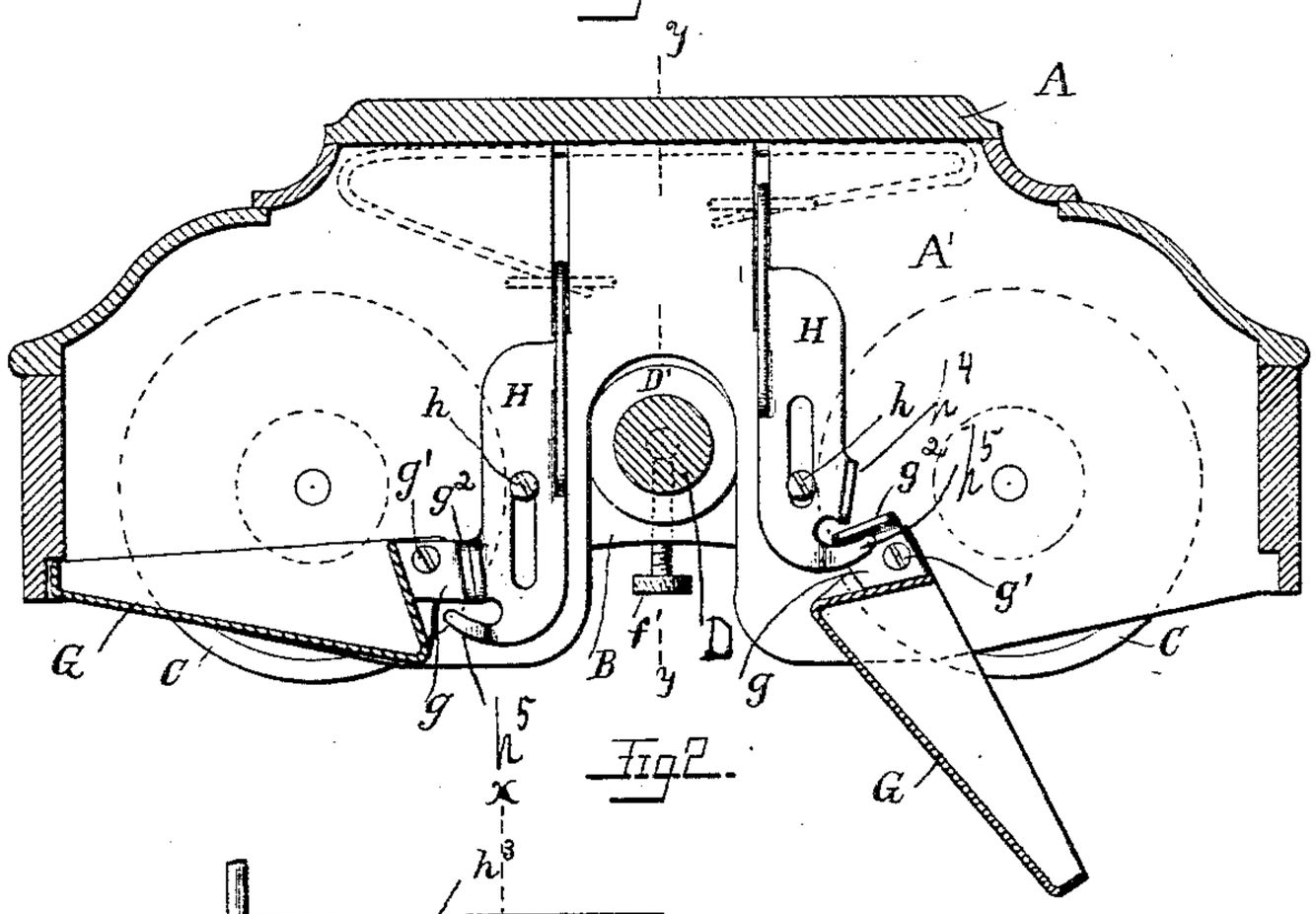

Fig. 2.

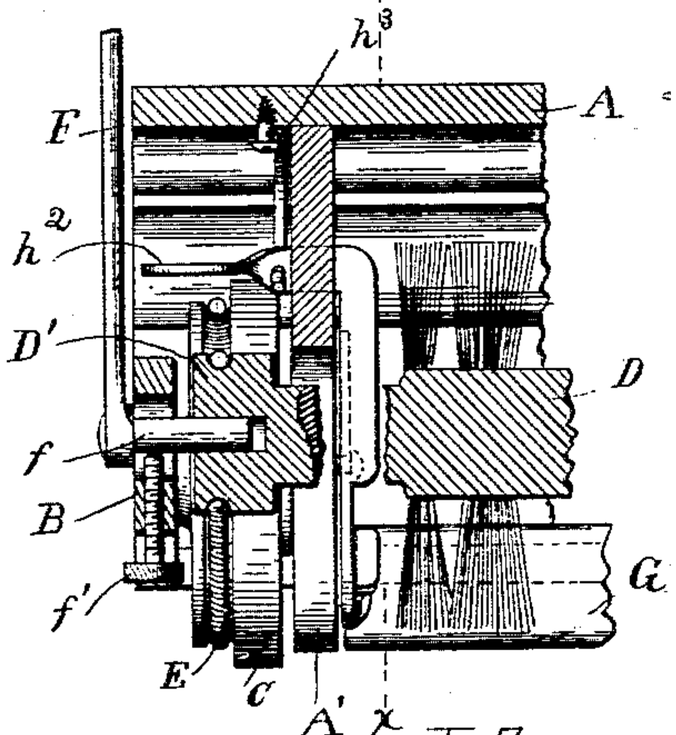

Fig. 3.

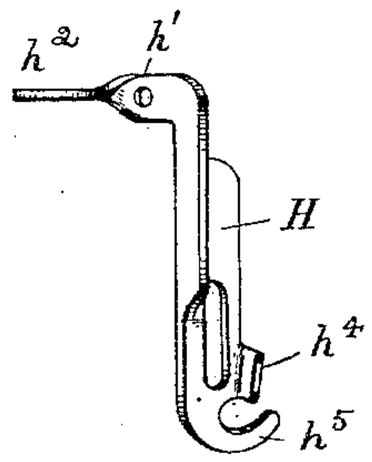

Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM NEWBIGGING AND GUSTAV A. WORZ, OF MILFORD, OHIO; SAID WORZ ASSIGNOR TO THE MILFORD MANUFACTURING COMPANY, OF SAME PLACE.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 504,846, dated September 12, 1893.

Application filed April 17, 1893. Serial No. 470,628. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM NEWBIGGING and GUSTAV A. WORZ, citizens of the United States, and residents of Milford, in the county of Clermont and State of Ohio, have invented certain new and useful Improvements in Carpet-Sweepers, of which the following is a specification.

This invention is an improvement in carpet sweepers, and particularly in the means for operating the dust receptacles, and for adjusting the brush, whereby the machine is made more compact and durable, and consequently less liable to get out of order. The means by which we attain these results are fully illustrated in the accompanying drawings, in connection with which the invention will be first fully described, and then particularly referred to and pointed out in the claims.

Referring to the drawings, in which like parts are indicated by similar reference letters wherever they occur throughout the various views, Figure 1 is an end elevation of a machine with the rubber guard removed. Fig. 2 is a transverse vertical section of the same taken through line *x x* of Fig. 3, looking to the left. Fig. 3 is a detailed view of one end of the machine, taken in longitudinal vertical section through line *y y* of Fig. 2. Fig. 4 is a perspective view of a sliding bar and locking latch for operating the dust receptacle and locking it when in the closed position.

The inclosed case A, the bridge trees B, which extend across the ends of the case to furnish journal bearings for the drive wheels C and brush shafts D, the brush shafts and the case ends A′, are of ordinary construction and need not, therefore, be particularly described. The driving wheels C are grooved and the ends of the brush shaft D are also grooved, in the usual manner, to receive the elastic bands E, which, in this case, are preferably formed of coil spring steel wire. The band passes around the pulleys C, and over a brush shaft pulley D′, so as to exert a downward pressure upon the brush shaft. The pulleys C are journaled upon screw shafts which pass through the bridge trees, and their ends are screwed into the ends A′ of the case. The bridge trees are centrally slotted to furnish bearings for the brush shaft journals *f* which are riveted into the ends of the bail F and pass through the bridge trees and into the ends of the brush shaft. The brush shaft is vertically adjustable by means of set-screws *f′*, which pass through the bridge trees from below; and the journals of the shaft rest upon their upper ends. The brush may be removed and replaced by springing the bail F outward to withdraw the journal pins *f* from the bearing in the ends of the brush shaft.

The dust pans G are formed of sheet metal, and at their inner ends have lugs *g*, turned at right angles to the inner edge of the pan to receive screws *g′*, by which the pans at their inner ends are pivoted upon the inner faces of the end partitions A′. The lugs *g*, at one end of the pan are turned at a right angle, or parallel to the inner wall of the pan, forming lips g^2, which are engaged by the hook projections of the sliding bars H. These bars are formed substantially as shown in perspective view Fig. 4. The main bar is longitudinally slotted to receive a guide screw *h*, which passes through the slot into the end A′. The upper portion is turned at a right angle to the main web, and is then bent at a right angle to form the arms *h′*, the ends h^2 of which are formed into thumb pieces and twisted at a right angle to the arms *h′*. The arms *h′* traverse slots in the case ends A′, and their portions projecting outside of the case are perforated to receive the ends of the bow spring h^3, which is centrally secured to the under side of the case top. The spring h^3 normally forces the bars and holds them in their lowest positions. The bar H has also a lug h^4, which projects at right angles to its body. This lug, when the bar is released, and subjected to the action of the spring h^3, strikes the lip or lug g^2 of the pan, swings the same on its pivot and closes it, as seen on the left hand side of Fig. 2, and the lug h^4 sliding down back of the lug g^2, locks the pan in the closed position until the bar is again elevated, as shown at the right hand side of Fig. 2. The lower hooked end h^5 of the bar H engaging the lower edge of the lip g^2, swings the dust pan open as the

bar H is elevated. The lower edges of the case sides are rabbeted, the upper wall of the rabbet serving as a stop for the dust pan.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a carpet sweeper, the combination of the dust pans pivoted in the end walls of the case and having a projecting lug g^2, the sliding bars H fitted to slide on the inside of said end partition and having arms projecting through slots in said partition and thumb pieces outside to operate said bars, hook ends on said bar to engage the lugs on the pivoted pans, to turn them on their pivots and open the pans when the bars are elevated, and the lugs h^4 to close the pans when the bars are returned to their lower positions, substantially as shown and described.

2. The combination of the sweeper case, the dust pans pivoted at their inner ends to the inner end walls of said case and having inwardly projecting lugs g^2, the bars H fitted to slide upon the case end A′, having hooked ends h^5 and lugs h^4 to engage the lugs g^2 upon the dust pans, and their upper ends bent outwardly to traverse slots in the case end, and the spring h^3 to normally force said bars to the lower positions and lock the dust pans in the closed positions, substantially as shown and described.

3. The combination of the case, the dust pans pivoted therein and having inward projections as g^2, the bars H, pivoted to slide vertically upon the inner end wall of the case and having their lower ends shaped to engage the lugs upon the dust pans and open and close them, and their upper ends formed in thumb pieces to project to the outside of the walls, and the spring h^3 to normally force said bars to their lower positions to close and lock the dust pans, substantially as shown and described.

4. The combination of the case, having ends A′ vertically slotted to pass the brush shaft, and vertically slotted bridge trees to pass the journal pins of said brush shaft, the brush shaft having grooved pulleys upon its ends outside of the case ends, the grooved drive wheels C journaled between the bridge trees and case ends, the elastic belt E passing around the drive wheels and over the brush pulley, the bail F having inwardly projecting journal pins f, passing through the slots in the bridge trees and furnishing bearings for the brush shaft, and the set screws f' in the lower edges of the bridge trees for the purpose of adjusting the position of the brush shaft, substantially as shown and described.

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