

B. FIGER.  
Carpet-Sweeper.

No. 199,632.

Patented Jan. 29, 1878.

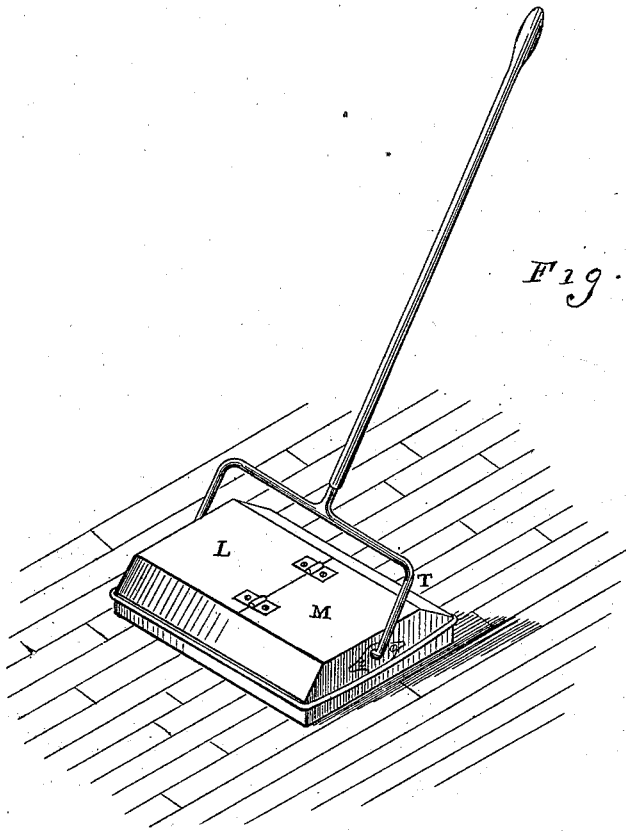


Fig. 1

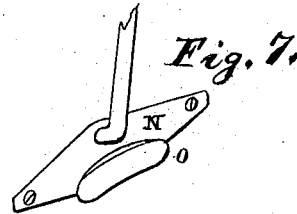


Fig. 7.

Fig. 5.

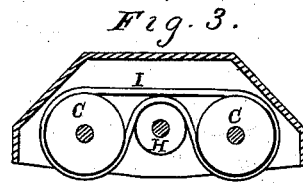
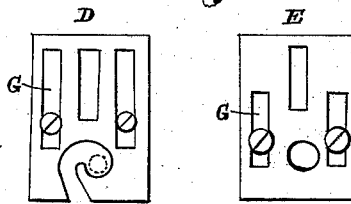


Fig. 3.

Fig. 2.

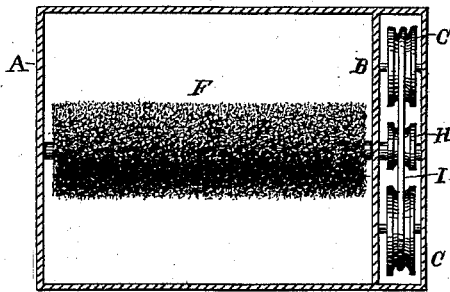


Fig. 4.

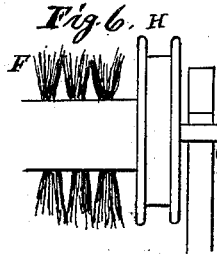
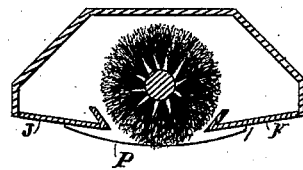


Fig. 6. H

Witnesses  
*Ans. L. Boone*  
*Frank A. Brooks*

Inventor  
*Benedict Figer*  
*by Newey & Co.*  
*Attys*

# UNITED STATES PATENT OFFICE.

BENEDICT FIGER, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN CARPET-SWEEPERS.

Specification forming part of Letters Patent No. **199,632**, dated January 29, 1878; application filed October 26, 1877.

*To all whom it may concern:*

Be it known that I, BENEDICT FIGER, of the city and county of San Francisco, and State of California, have invented an Improved Carpet-Sweeper; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings.

My invention relates to certain improvements in that class of carpet-sweepers in which a revolving brush is mounted inside of a case, so as to sweep the floor when the case is moved over it.

My improvement consists of novel devices for securing the brush in the box or case, by which it can be readily detached, so as to be taken out for the purpose of cleaning the brush or sweeper.

My invention further consists of a novel application of the india-rubber band, which is used for protecting the furniture in the room from being marred by contact with the case in which the brush or sweeper is contained, all as hereinafter fully described.

Referring to the accompanying drawings, Figure 1 is a perspective view. Fig. 2 is a longitudinal section, and Figs. 3 and 4 are vertical cross-sections. Figs. 5, 6, and 7 are detail views.

A represents the box or case in which the brush F is mounted. Across one end of the box I place a partition, B, and in each end of the space thus formed I place two vertical pulleys, C, with bearings in the end of the box and in the partition B.

In the middle of each end of the box A, I secure bearing-plates D and E, to support the ends of the brush F. These plates I make, as shown in Fig. 5, with long vertical slots G each side of the center, and I secure these plates to the ends of the box by screws passing through these slots.

The brush F has a gudgeon, R, in either end, and on one end of the brush I secure a small wheel or pulley, H, inside of the gudgeon.

The bearing-plate D, I form with a hook or J shaped slot or groove, as shown, instead of the circular hole represented in the opposite plate E.

When the brush is to be placed in the box, the end opposite from that with the pulley on

it is first placed in the socket in the plate E. The opposite end with the pulley H on it is then placed in the hook-shaped slot in the plate D.

The pulley H rests upon the elastic belt I, and when the gudgeon is depressed into its bearing at the lower end of the J-shaped slot, the belt is carried downward between the pulleys C and tightened, so that its tension will not only keep the journal in place, but will transmit the desired rotary motion to the brush.

The partition B, I cut away, to allow the brush being put in place. The bottom of the box I make preferably of tin, zinc, or other suitable sheet metal, and formed of two pieces, J and K, one on each side of the brush, thus leaving a space in the middle of the bottom of the case, through which the brush projects and comes in contact with the floor.

The pieces of metal J K, forming the bottom, are bent upward on their inner sides, so as to prevent the dirt which is carried by the brush over these edges into the box from escaping.

The top of the box I form in two parts, M and L, one of which is made fast to the box, while the part M is hinged, so as to form a lid, which can be raised to permit the dirt to be taken out from the top of the box.

Each of the plates N, in which the handle-arms are pivoted, on each end, outside of the box, I form with a projecting saddle or seat, O, as shown in Fig. 7. I then place a round rubber band entirely around the box, about its middle, so that it will fit in a groove which surrounds the box, and in the projecting saddle O. These projecting saddles support the band outside of the arms T, so as to prevent them from coming in contact with the furniture. By this device the rubber band prevents the box or the metallic arms of the handle from striking against any furniture that may be in the room where the sweeper is in operation.

The pulleys C in the end of the box project from the bottom a little distance, and I place a shoe or runner, P, on the bottom of the box, at the opposite end, which is of the same thickness as the projection of the pulleys C. The box is thus raised from the floor, and rests upon the belt on the pulleys at one end, and

the shoe at the opposite end. The brush also protrudes through the bottom of the box, so as to be in contact with the floor.

When it is desired to remove the dirt from the box, the lid M on the top of the box can be opened, and the dirt removed through this opening. The brush can be removed by inverting the box and pressing downward on the brush at the end which is secured in the hook-shaped slot, thus throwing it out of the slot, when the tension of the rubber belt will throw it up, so that it will be free from the plate and can be easily taken out.

As the bristles on the brush wear away by the constant friction of use, the plates D and E, which furnish bearings for the brush, can be lowered, and the brush kept in contact with the floor until it is entirely worn out.

By my invention I secure a perfectly noiseless and thorough-working carpet-sweeper, creating no dust, and constructed of few parts, and in such a manner that the brush can be made to perform thorough work until it is entirely worn out.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The adjustable plates D and E, with their vertical slots G, the plate D being provided with a hook-shaped slot, in combination with the brush F and its pulley H, the brush being held in the plates D and E, and retained in the hook-shaped slot by the belt on the pulleys C and H, substantially as and for the purpose above described.

2. The projecting saddles O, attached to the end plates N, in combination with the rubber band I, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

BENEDICT FIGER. [L. S.]

Witnesses:

CHARLES D. COLE,

J. H. BLOOD.