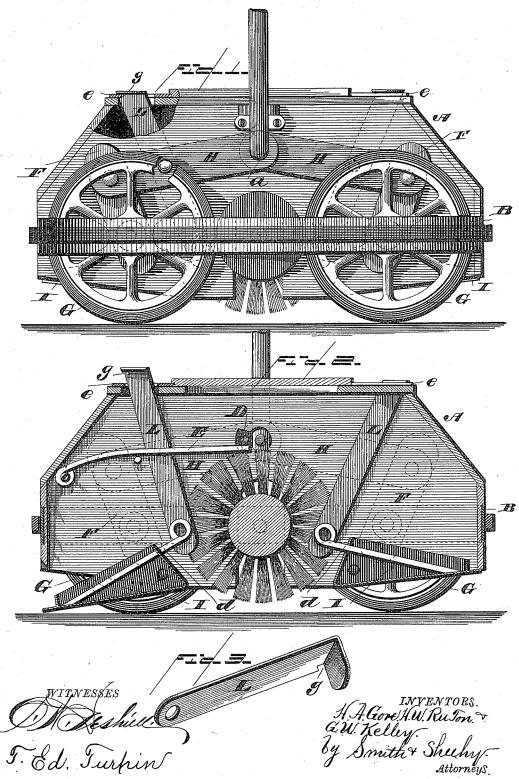
(Model.)

H. A. GORE, H. W. RU TON & G. W. KELLEY. CARPET SWEEPER.

No. 383,806.

Patented May 29, 1888.



UNITED STATES PATENT OFFICE.

HENRY A. GORE, HIRAM W. RU TON, AND GEORGE W. KELLEY, OF GOSHEN, INDIANA; SAID KELLEY ASSIGNOR TO EDWARD W. WALKER, OF SAME

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 383,806, dated May 29, 1888.

Application filed July 8, 1887. Serial No. 243,741. (Model.)

To all whom it may concern:

Be it known that we, HENRY A. GORE. HIRAM W. RU TON, and GEORGE W. KELLEY, citizens of the United States, residing at Goshen, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Carpet-Sweepers; and we do declare the following to be a full, clear, and exact description of the invention, such as will 10 enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to improvements

in carpet-sweepers.

The object of the invention is to provide a 15 cheap and simple means whereby the brush may be brought more forcibly against a carpet or floor during its revolving movement by pressing upon the case or handle, as will be presently explained.

The improvements will be fully understood from the following description and claims, when taken in connection with the accompa-

nying drawings, in which-

Figure 1 is a side elevation of a carpet-25 sweeper constructed according to our improvements, having the casing partly broken away to show the pan-latching levers. Fig. 2 is a cross-sectional view of the same, and Fig. 3 is a perspective view of one of the levers re-30 moved.

Referring by letter to the said drawings, A indicates the case of our carpet-sweeper, which may be of the form usually employed, having a cushion or rubber band around it, as shown, 35 for preventing injury to the walls or furniture in a room. This case is also provided in its end walls with an open-bottom recess for the reception of the rotatable brush, which I have shown as having its supports in lug-journals 40 on the lateral horizontal metallic strips B, which are secured to the side walls of the case. These end walls are also provided at opposite points with transverse slots, which are designed to receive the journal ends of 45 the bail to which the handle is attached, and the slots are sufficiently large to permit a limited play of the said journal ends of the bail. In some cases we make fast to the journals of the bail a small plate having a lug, D, against 50 which one end of a spring, E, presses up-

wardly, so as to keep the journals of the bail up in the slots of the case, when the friction between the drive-wheels and brush-shaft will be lessened, as will be presently explained. The opposite ends of this spring may be se- 55 cured to the inner side of the said walls of the case at any suitable point. We do not, however, wish to confine ourselves to the form of spring shown nor the precise manner of connecting it with the journals of the bail, as it 60 is obvious that the lug above described might be omitted from the plate and the spring brought to bear directly against the under side of the journals, so as to normally keep them raised in the slots of the case.

F indicates hangers, in the lower ends of which are journaled the driving wheels G. The hangers are designed to assume an inwardly inclined position, as shown, and have pivoted to their upper ends levers H, which 7c are also pivoted about midway of their length to the side walls of the case. These levers H are each provided with an eye, a, in their inner overlapping ends, which are designed to register, as more fully shown in Fig. 1, to 75 receive the journal ends of the bail, which also pass into the slots in the case, as before

mentioned.

It will be observed by this construction that the peripheries of the driving wheels by the 80 weight of the case alone are kept in frictional engagement with the periphery of a fixed disk or roller on the brush-shaft, and that when the case is moved the brush will be rotated, so as to remove the dust from a floor or carpet and 85 drive it into the pans, from which it is afterward discharged, as will be presently explained. It will also be observed that the greater the friction between the drive wheels and the roller of the brush-shaft the more forci- 90 ble will be the rotation of the brush, and as the wheels are fulcrumed on movable hangers the closer will become the relation between the floor and brush, and consequently the

cleaner will be the sweeping.

We wish to here remark that we are aware that it is not new to provide drive-wheels with springs whereby they may be allowed to move and increase and decrease their frictional contact with the brush shaft; but we have found 100

by experience that such devices are not desirable, for the reason that they soon become impaired and do not effect a positive engagement

of the parts.

It will be seen that when the bail is pressed upon, its journals, passing through the eyes in the levers H, will force them downwardly, which movement will lift their opposite ends, and, bringing the hangers with them, and at 10 the same time the lower ends of the latter slightly inward, will cause the drive-wheels to take a similar course and increase their frictional engagement with the brush shaft or roller thereon.

I indicates the dust-pans, which are of the 15 ordinary construction and are journaled in the side walls of the case in the usual manner, so as to tilt by gravity when a catch has been released, although they may be opened by means 20 of a spring. These pans are provided with rearwardly-extending arms d, and to the outer ends of these are loosely attached latching-levers L, which pass up through slots in the roof of the case, as shown, and have a head or 25 other suitable stop at their outer ends. In the slots we place a metallic plate, as at e, which are designed to engage a notch, g, in the edge of the latches L when the said latches have been depressed, which movement will 30 close and lock the pans, the arms d having sufficient spring to take up all lost motion and always keep the pans tightly closed. When it is desirable to open the pans, it is only necessary to release the notched portions of the latches from the plates in the slots, when they will be 35 moved upwardly by the weight of the pan in its tilting movement.

Having described this invention, what we

claim is-

1. The combination, with a sweeper - case 40 and its rotatable brush, of driving-wheels journaled on hangers pivoted to levers, which levers connect the hangers with the journals of the handle-bail, the said levers being pivoted to the end walls of the casing, substantially 15

as specified.

2. In a carpet-sweeper, the combination, with the main case having slots in its top wall, as shown, of the slotted plates e, placed over the said slots of the case, the dust-pans pivoted at 50 their rear portion in the said case and having rearwardly-extending arms, d, and the sliding latches L, pivoted at their lower ends to the said arms of the pans, and their upper ends projecting through the slots and provided with 53 notches g in their forward edges to engage with the slotted plates e, substantially as shown and described.

In testimony whereof we affix our signatures

in presence of two witnesses.

HENRY A. GORE. HIRAM W. RU TON. GEORGE W. KELLEY.

Witnesses:

WM. M. PULLING, Jos. L. Mishler.