(Model.)

H. W. RU TON & H. A. GORE.

CARPET SWEEPER.

No. 397,204. Patented Feb. 5, 1889.

Fig. 1.

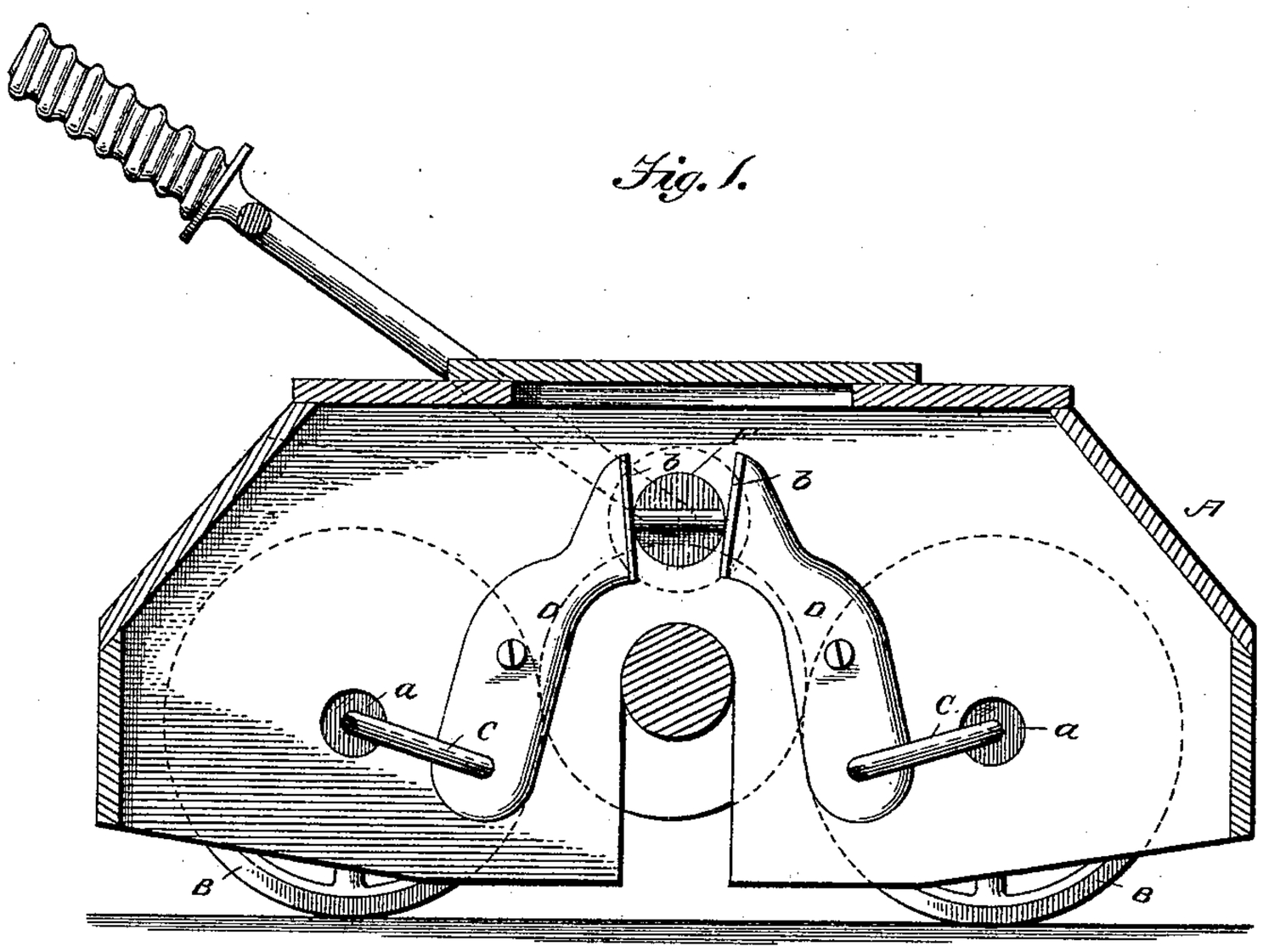


Fig. 2.

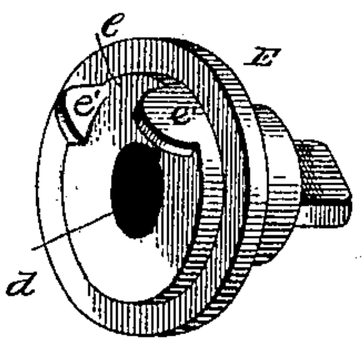
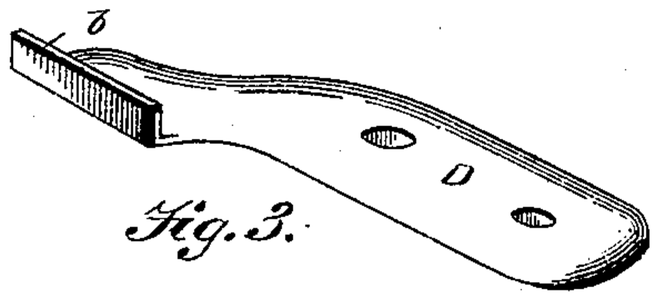


Fig. 3.



Witnesses:
D. E. Dunpin

Inventor:
H. W. Ru Ton & H. A. Gore.
By. Smith & Sheehy
Attorneys

UNITED STATES PATENT OFFICE.

HIRAM W. RU TON AND HENRY A. GORE, OF GOSHEN, INDIANA.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 397,204, dated February 5, 1889.

Application filed August 14, 1888. Serial No. 282,729. (Model.)

To all whom it may concern:

Be it known that we, HIRAM W. RU TON and HENRY A. GORE, 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 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, and the novelty will be fully understood from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1 is a transverse sectional view of the carpet-sweeper with our improvements applied. Fig. 2 is a perspective view of our improved cam for manipulating the compound levers, and Fig. 3 is a perspective view of one of the levers.

Referring by letter to the said drawings, A indicates a carpet-sweeper case or frame, which may be of any ordinary or approved construction, having the usual attachments for sustaining the brush.

B indicates the driving-wheels, which are journaled on one end of an angular rod, C, which passes through the aperture *a* in the end walls of the case, and having their opposite ends loosely connected to allow a free movement in any direction with pivoted levers, as will be presently explained.

It should be here observed that the apertures *a* are sufficiently large to permit of this free movement of the rods or journals C, so that the driving-wheels may be raised and lowered with respect to the case or frame.

D indicates levers, which are pivoted, respectively, to the end walls of the case and at opposite sides of the brush. These levers D, which are preferably of an angular form, have their free ends approximately plain, as at *b*, to be engaged by a cam or eccentric, as will be presently explained. By this construction it will be seen that by forcing the free ends of the levers D apart the opposite ends will be moved in an opposite direction to each other, which will carry with them the rod or journal C, and consequently depress the driving-wheels, which are attached to the said rods and in close contact with the brush-pulley. This movement will bring the brush up to bear lightly upon the floor or carpet, which is desirable in sweeping lightly. It will be seen that the levers are so arranged that the weight of the sweeper on the floor will keep the levers, cam, driving-wheels, and brush-pulley in close contact, and by slightly raising or lowering the handle there would be a corresponding movement of the brush. To positively manipulate these levers D, we have provided the device shown in Fig. 2 of the drawings, which we shall denominate the "cam," and which is designed to co-operate with the bail of the handle in acting upon the said levers. In the present illustration we have shown this cam as being separate from the bail and having a central annular recess, *e*, in the outer side to receive the bail; but we do not wish to limit ourselves to this manner of construction, as it is obvious that the ends of the bail may be made in the shape of a cam or eccentric, and pass through the end walls of the case, in which case the said bail end should be adapted to engage the plain faces *d* of the angular levers D to move them apart. In the construction illustrated this cam E, as we have termed it, is formed so as to rotate in an aperture, F, in the case, and has a flattened or elongated extension on the inner end to come in contact with the upper ends of the levers D, and when partially rotated will move the said levers so as to distend the drive-wheels, and when the elongated portion has been moved in a vertical plane will allow the said free ends of the levers to approach one another and consequently raise the driving-wheels. This cam E is also provided on its outer side with two lateral lugs, *e' e'*, which are designed to receive between them the entering portion of the bail, so that the same may be moved in the manipulation of the levers.

While we have illustrated the levers as arranged upon the inside of the case, yet it is obvious that any mechanic might place them on the outside to serve equally as well and vary the shape of such levers without departing from the spirit of our invention.

In operation it will be seen that when it is desirable to sweep heavy, so to speak, the handle is raised toward a perpendicular. In

this position the driving-wheels are allowed to rise with respect to the case as the free ends of the levers are allowed to approach each other; but when sweeping lightly the handle is usually let down in about the position shown in Fig. 1 of the drawings, as it may be grasped by one hand only. This movement causes the cam to come into action, forcing the free ends of the levers apart and throwing the opposite ends upwardly and outwardly, which, through the medium of the rods or journals C, depress the wheels and consequently increase the space between the brush and floor.

Having described our invention, what we claim is—

1. The combination, in a carpet-sweeper, of levers pivoted to the end walls of the case, and having one end connected with the driving-wheels by means of angular rods or journals, and a cam adapted to engage the opposite ends of the said levers to move the driving-wheels, substantially as specified.

2. The combination, with a sweeper-case, of the cam, such as E, having a central aperture and lugs, the handle-bail engaging said aperture and lugs, and pivoted levers connected with the journals of the driving-wheels and adapted to engage the said cam, whereby the driving-wheels may be moved with respect to the case, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

HIRAM W. RU TON.
HENRY A. GORE.

Witnesses:
E. E. MUMMERT,
W. H. HOFFMAN.