No. 773,581. PATENTED NOV. 1, 1904.

E. C. MURDICK.

CARPET SWEEPER.

APPLICATION FILED DEC. 11, 1903.

NO MODEL.

Fig. 2.

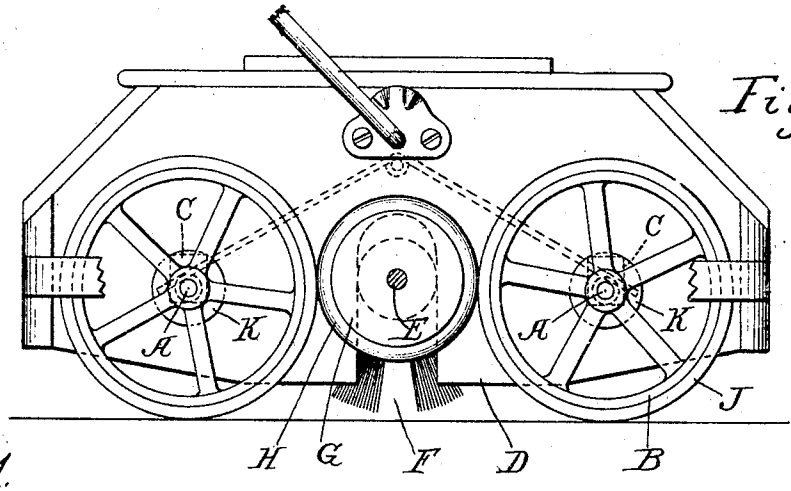
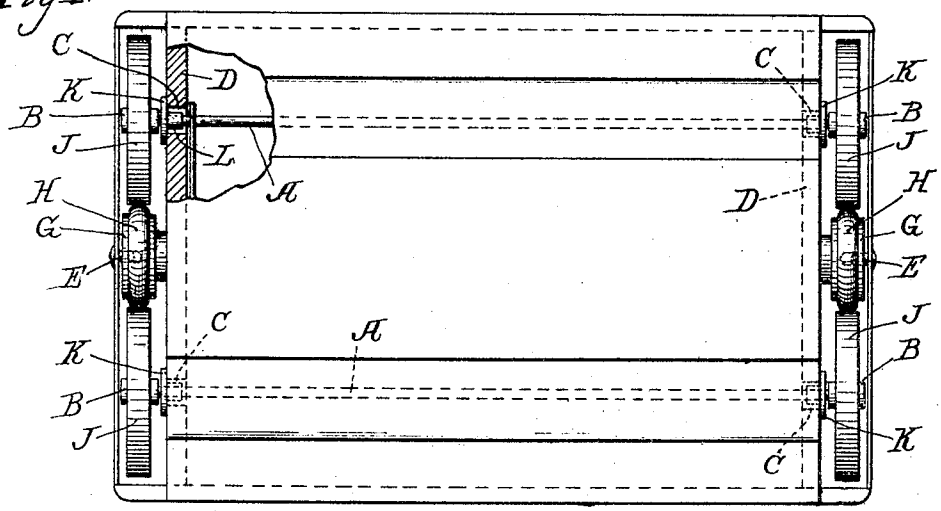


Fig. 1.



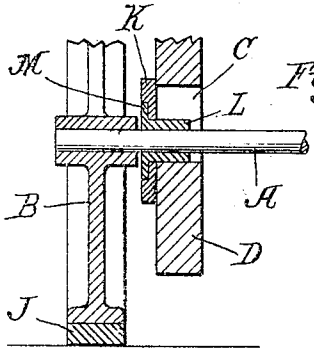


Fig. 4.

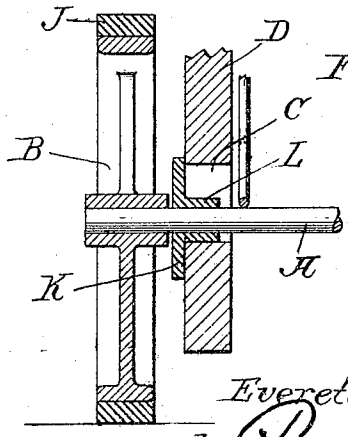


Fig. 3.

Witnesses,
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by Parker Carter
Attorney's.

No. 773,581. Patented November 1, 1904.

UNITED STATES PATENT OFFICE.

EVERETT C. MURDICK, OF MARION, INDIANA, ASSIGNOR TO PHILIP MATTER AND BENJAMIN F. BURKE, COPARTNERS DOING BUSINESS AS NATIONAL SWEEPER COMPANY, OF MARION, INDIANA.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 773,581, dated November 1, 1904.

Application filed December 11, 1903. Serial No. 184,726. (No model.)

To all whom it may concern:

Be it known that I, EVERETT C. MURDICK, a citizen of the United States, residing at Marion, in the county of Grant and State of Indiana, have invented a certain new and useful Improvement in Carpet-Sweepers, of which the following is a specification.

My invention relates to carpet-sweepers, and has for its particular object to provide means which will not interfere with the broom action of the carpet-sweeper, but will minimize or obviate the shock and jar of the mechanism and the noise incident to the motion of the sweeper-axles due to the broom action of the machine.

I have illustrated my invention in the accompanying drawings by skeleton or diagrammatic views which do not purport to give all of the elements of the sweeper, but which do show enough to enable one to understand the nature of my invention.

Figure 1 is a plan view of a portion of the running-gear. Fig. 2 is an end view of the same with parts shown in dotted lines, and Fig. 3 a detail sectional view. Fig. 4 is a detail sectional view.

Like parts are indicated by the same letter in all the figures.

A A are the axles, on which are mounted the wheels B B, on which the body is yieldingly or movably supported. These axles pass through vertical slots C C in the inner end pieces D D. These slots or openings may be of any size or shape. They are such as to limit the motion of the case, but preferably so as to give it free motion in all directions on the axle.

E is the brush-axle, on which is mounted the brush-roll F and which carries the roller G, which preferably has the elastic band H on its periphery. This band engages elastic bands J J on the wheels B B. The parts are so mounted and related to each other that the tendency of the sweeper-body is to remain at the highest point, the axles A A being against the bottom of the slots or openings in the end pieces, through which they pass. As soon as pressure is applied to the sweeper the body moves downwardly, the axles A A and wheels B B move upwardly relative to the body, and this of course forces the brush deeper down into the nap of the carpet which is being swept. The body is constantly changing position, and the result is that there is a constant striking of the axles A A against the sides of the slots or openings through which they pass.

K is a washer associated with and, if desired, integral with the tube L. The washer K is interposed between the wheel B and the end piece D, while the tube L surrounds the axle A and lies inside the slot or opening C. Thus it is impossible for the axle to strike the end piece at any point. The washer serves to hold the tube L in position and also to separate the wheel from the end piece.

The parts may be made of any desired material; but the tube L is preferably of some elastic sound-deadening material, and I prefer rubber or some of its compounds. The tube K may preferably be made of relatively firm material, as of some fibrous material. A structure of this kind is shown in Fig. 4, where the washer K is shown as separate from and not integral with the tube L. This tube preferably has a large head-like portion M, which lies in a corresponding recess in the washer K. Thus the tube is held in position and all the parts in relation to each other, and the two parts of the cushioning device may be made of different material.

The use and operation of my invention are sufficiently revealed by the foregoing description, and it is not necessary to develop the matter further. It ought to be stated, however, that the size, relation, and proportion of the several parts can be greatly altered, and, indeed, they often are greatly different from what is shown in the drawings. I do not wish, therefore, to be limited to the particular arrangement shown; but my drawings are to be taken as diagrammatic and illustrative of the particular form or application of my invention.

It will be understood, of course, that there is one of these cushioning devices at each end of each axle.

I claim—

1. In a carpet-sweeper the combination of a case and sweeper-roll with supporting-wheels and axles therefor, said axles passing through openings in the ends of the case, and cushioning devices one for each end of each axle surrounding the axle within such opening, the greatest diameter of the cushioning device being shorter than the diameter of such opening.

2. In a carpet-sweeper the combination of a case and sweeper-roll with supporting-wheels and axles therefor, said axles passing through openings in the ends of the case, and cushioning devices one for each end of each axle comprising a washer-like part which lies between the wheel and the case, and a tubular part which surrounds the axle and lies within, but is smaller than the opening.

3. A cushioning device for carpet-sweepers comprising a washer-like part recessed on one side with a tubular portion having a head which lies in such recess, the tubular part projecting beyond the other side of the washer.

4. A cushioning device for carpet-sweepers comprising a washer-like part recessed on one side with a tubular portion having a head which lies in such recess, the tubular part projecting beyond the other side of the washer, the tubular part of elastic, the washer of fibrous material.

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