

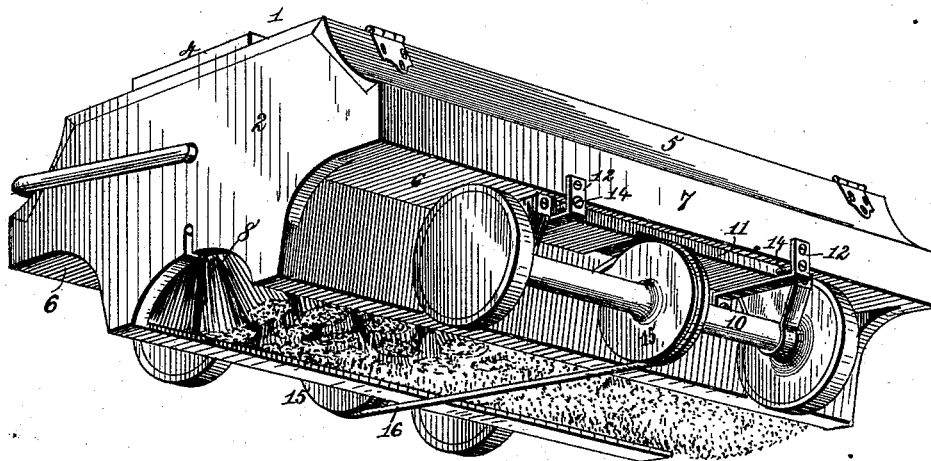
(No Model.)

W. J. DREW.  
CARPET SWEEPER.

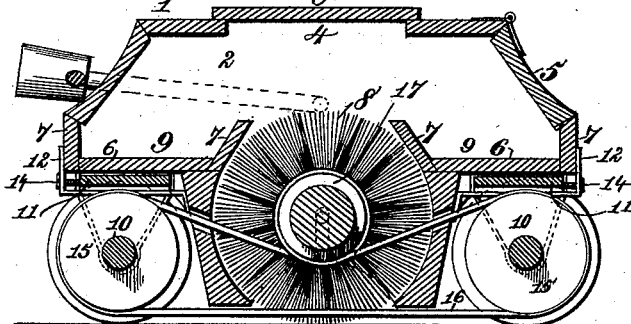
No. 343,572.

Patented June 15, 1886.

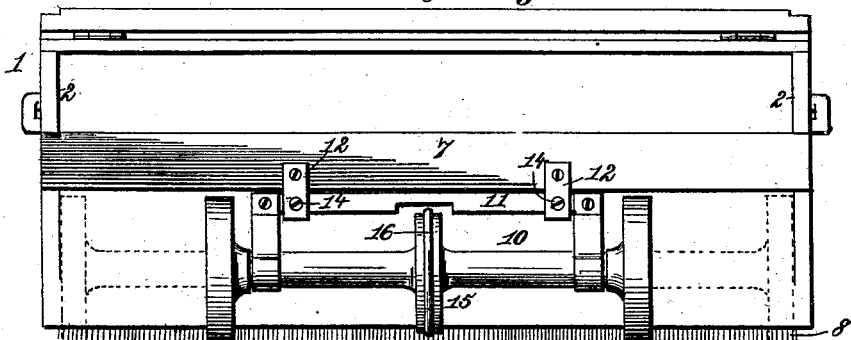
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses.

*Robert Everett.*

*J. A. Rutherford*

Inventor

*Walter J. Drew.*

By *James L. Norris.*

*Atty.*

# UNITED STATES PATENT OFFICE.

WALTER J. DREW, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO THE  
BISSELL CARPET SWEEPER COMPANY, OF SAME PLACE.

## CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 343,572, dated June 15, 1886.

Application filed May 5, 1885. Serial No. 164,464. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER J. DREW, a citizen of the United States, residing at Grand Rapids, Kent county, Michigan, have invented new and useful Improvements in Carpet-Sweepers, of which the following is a specification.

This invention has for its object to provide a novel construction of carpet-sweeper case, traction or drive wheels, and operating-belt mechanism, whereby the revolving brush may extend the entire length of the sweeper casing and the dust-pans be located above the traction or drive wheels.

To such ends my invention consists in the novel construction and combination of parts hereinafter described and claimed, reference being made to the accompanying drawings, illustrating my invention, in which—

Figure 1 is a perspective view taken from the under side of the sweeper and showing the arrangement of all the parts. Fig. 2 is a transverse vertical section taken near the center of the sweeper. Fig. 3 is a front elevation showing the elevated dust-pan and the lid thereof raised.

The reference-numeral 1 designates the casing or frame of a carpet-sweeper, which is in the present instance constructed of two end walls, 2, made narrower at the bottom than at the top, the longitudinal boards attached to the lower portions of the end walls and forming a chamber between them for the reception of the brush, the top board, 4, constituting the top of the sweeper-casing, and the continuous door 5, hinged to the edges of the top and shutting down upon the inclined edges of the upper portion of the end walls. To these end walls are also secured horizontal boards 6 and front and rear edges or strips, 7, which parts constitute shallow pans or receptacles 9, located at both sides of the central space occupied by the rotary brush 8. By this construction the dust-pans are elevated to such a height as will allow traction or driving wheels to be placed underneath them, as is clearly seen in Fig. 1. These traction-wheels are arranged in pairs at each side of the casing, and are mounted on revolving axles 10, having their bearings in brackets or hangers depending from an adjust-

able plate or bar, 11. The latter is fitted in keepers 12, arranged beneath the elevated dust-receptacles and secured to the sweeper-frame. Set-screws 14, passing through the keepers, are screw-tapped into the plates or bars 11, and are used for adjusting the same, for a purpose hereinafter set forth. The axles of the traction-wheels are each provided with a central sheave or grooved pulley, 15, and the central portion of the brush-shaft is also formed or provided with a grooved sheave or collar, 17, as clearly shown in Fig. 2. A belt, 16, passes over the pulleys 15 on the axles of the traction-wheels, and is wound around the central sheave or collar on the brush-shaft. In this manner it is evident that the rotary motion given to the axles of the traction-wheels is transmitted to the brush 8 by means of the belt and central pulleys. The brush extends the entire length of the sweeper-casing, there being no space at the ends of the brush shaft or roller occupied by traction or driving wheels, which in some machines shorten the sweeping capacity of the brush and render it impossible to sweep near or close to the base of a room. The traction-wheels may be arranged near the center of the casing, as is shown in the drawings, or else, as is seen in dotted lines in Fig. 3, such wheels can be arranged just inside the end walls, but flush with the latter, so as not to strike and injure furniture.

Instead of using only a pair of traction-wheels at each side of the casing, such wheels may be increased, as is obvious; but in every instance they are arranged beneath the dust pans or receptacles, in order to allow the brush to run up close to the base-boards of rooms. The tension of the belt is adjusted by means of the set-screws 14, which have heads resting against the brackets 12, and are screw-tapped into the bars 11, which carry the bearings for the traction-wheel shafts, so that by rotating the screws in the proper direction the bars are drawn outwardly, and I am enabled to always maintain the brush in proper working order; and since the driving-belt completely encircles the sheave on the brush-shaft it is obvious that all liability of such belt slipping is effectually avoided.

What I claim is—

1. The combination of a sweeper-casing having front and rear elevated dust-pans and longitudinal boards arranged to form an intervening chamber, a brush located in said chamber  
5 and between the dust-pans, and traction or drive wheels located directly beneath the front and rear dust-pans and belted to the brush-shaft, substantially as described.

2. In a carpet-sweeper, the combination,  
10 with the casing having elevated dust-pans, of the rotary brush extending the entire length of said casing and having a central sheave or collar, the traction-wheels having their axles provided with central sheaves, and the endless belt  
15 passing around the different sheaves, substantially as described.

3. In a carpet-sweeper, the combination of the adjustable bars having hangers, the axles carrying traction-wheels journaled in said hangers and provided with central sheaves,  
20 the rotary brush having a central sheave, and the belt encircling the latter and passing around the outer sheaves, with the casing having keepers for the adjustable bars, substantially as described.

25 In testimony whereof I affix my signature in presence of two witnesses.

WALTER J. DREW.

Witnesses:

STEWART P. KEELING,  
W. H. MIDDLETON.