G. B. DEACON.

CARPET SWEEPER.

APPLICATION FILED JUNE 26, 1912.

1,079,694.

Patented Nov. 25, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

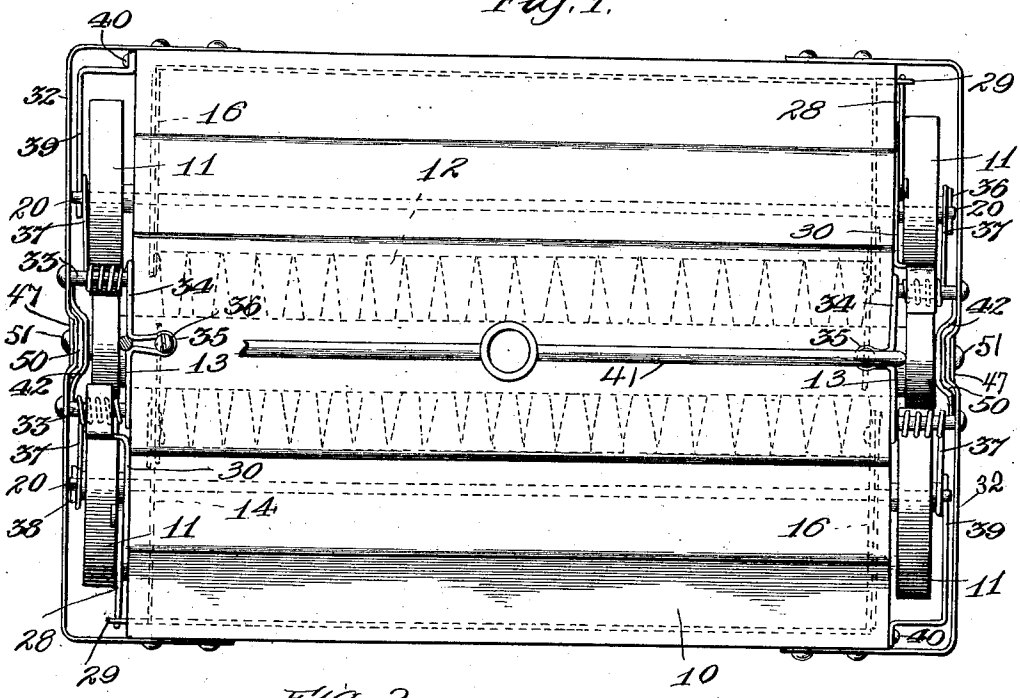
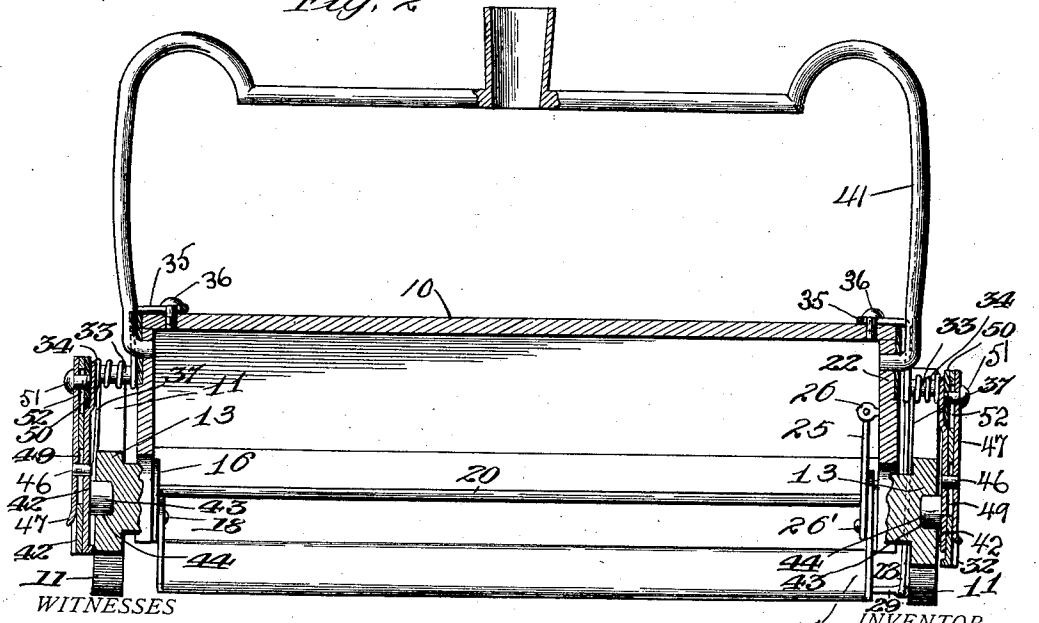


Fig. 2.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 3.

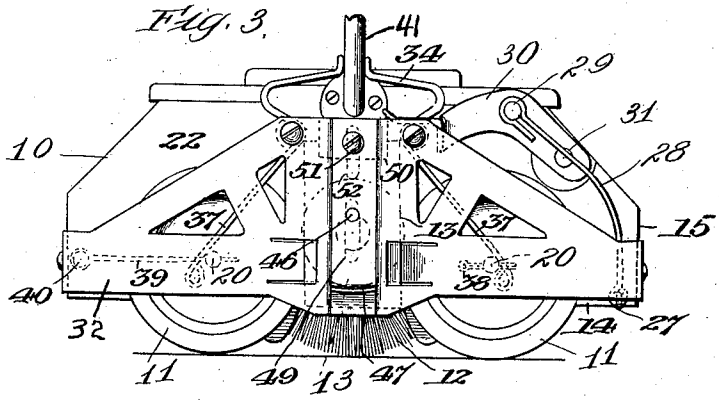


Fig. 4.

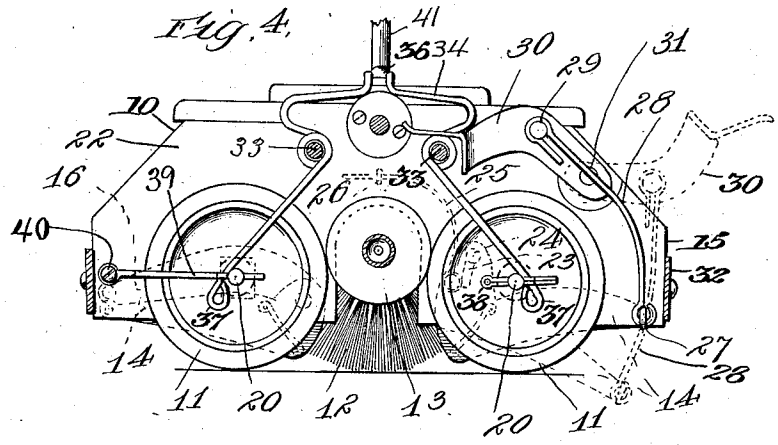


Fig. 5.

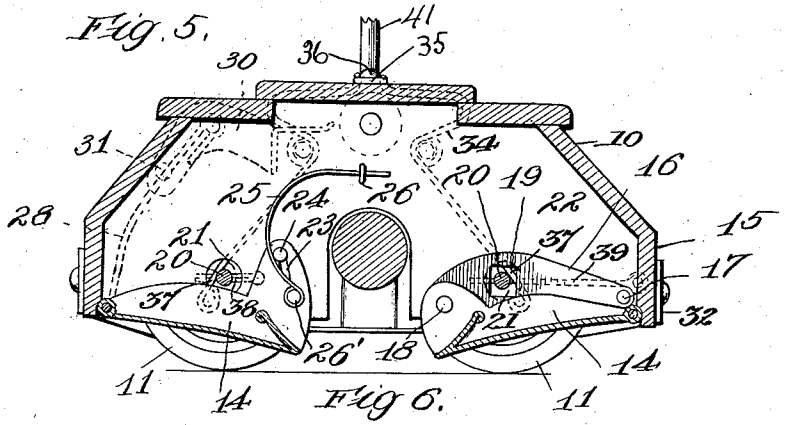
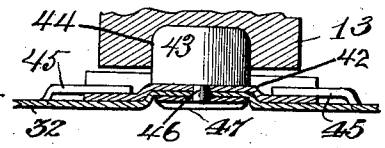


Fig 6.



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GEORGE B. DEACON, OF LONDON, ONTARIO, CANADA.

CARPET-SWEEPER.

1,079,694. Specification of Letters Patent. Patented Nov. 25, 1913.

Application filed June 26, 1912. Serial No. 706,123.

To all whom it may concern:

Be it known that I, GEORGE B. DEACON, a subject of the King of Great Britain, and a resident of the city of London, in the county of Middlesex, in the Province of Ontario, Canada, have invented certain new and useful Improvements on Carpet-Sweepers, of which the following is a specification.

This invention relates to improvements in carpet sweepers.

An object of the invention is to provide a sweeper in which the brush thereof may be readily and accurately adjusted vertically and retained in the desired proximity to the floor.

With these general objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings forming a part of this application and in which like numerals of reference designate corresponding parts throughout the several views: Figure 1 is a plan view of the improved sweeper with the handle thereof removed, and the bail partly broken away. Fig. 2 is a central vertical longitudinal section thereof. Fig. 3 is an end elevation of the sweeper. Fig. 4 is an end elevation thereof with the outer guard removed. Fig. 5 is a vertical transverse sectional view showing one inner end of the sweeper, and Fig. 6 is a detail horizontal sectional view through an end of the brush showing the trunnion arrangement therefor.

Referring more in detail to the drawings, the casing 10 is illustrated as being mounted upon four traction wheels 11 in the usual manner, while the central longitudinally positioned brush 12 is rotated through the frictional contact of said traction wheels upon intervening pulleys 13 at the opposite ends of said brush.

Two dust receptacles 14 of identical construction are hinged beneath the opposite longitudinal edges of the casing and the description of one thereof will suffice for both. The dust receptacles are hinged between the opposite end walls of the casing, the hinging arrangement at the opposite ends of each receptacle being of different construction. The two receptacles are oppositely-arranged so that the opening device for each is positioned at opposite ends and sides of the casing.

Inside of the casing and upon one end thereof at a point adjacent the outer side wall 15, there is pivoted the flat link 16 at the point 17 while the opposite end of said link is hinged as at 18 to one of the end walls of the receptacle 14. The said link 16 is provided with an opening 19 therethrough for accommodating the axle 20 of the traction wheel 11, which axle in turn passes through an enlarged perforation 21 in each end 22 of the casing. The opposite end of the receptacle is provided with the slot 23 for receiving the pin 24 upon the inner side of the opposite end wall of the casing whereby said opposite end of the receptacle is pivotally-mounted. For giving resiliency to the receptacle mounting, a spring 25 has its upper free end threaded through an eyelet 26 upon the inner face of the end wall of said casing while the opposite end of the spring is pivoted to the pin 26′ upon the receptacle. For opening and closing the receptacle upon said hinges positioned at its opposite ends, there is provided the projecting end pin 27 which is connected by a link 28 and the pin 29 to the operating lever 30 which latter in turn is pivoted to the outside of the casing end at a point 31. The operation of this construction is clearly shown in Fig. 4 of the drawings.

An outer bracket 32 incloses the wheels and mechanism at each casing end. The top of each guard is firmly positioned parallel to the casing end by means of the posts 33. A material element of the invention about to be described consists of the peculiarly-bent spring 34 which has its central portion formed in a loop 35 retained upon the top at the end of the casing by the screw 36. In opposite directions from said loop, the spring extends along the casing end slightly projecting therefrom and after encircling the opposite posts 33 is bent downwardly with its opposite free ends 37 contacting the tops of the extended traction wheel axles 20, the cotter pins thereof being positioned outwardly of said point of contact and thereby acting to retain the spring ends thereon. It will be noted that one end of the traction wheel axle is provided with the usual cotter pin 38 while the opposite end thereof has a spring member 39 secured to the casing end at the point 40 and extending through said axle end. The position of said spring ends being clear, it will be evident that the downward and inward tendency thereof tends to force the traction wheel axles in that direc-

tion which is made possible by reason of the enlarged perforations through the casing ends adapted for the reception of the axle. The bail 41, pivoted in the usual manner to the opposite ends of the casing, is resiliently contacted by the said spring member 34 in the movement of the bail and handle at either side of the direct vertical position and, when positioned vertically, the same is more securely held in place by the reception of the bail ends in the open sides of said loops 35 as will be apparent from the drawings.

The mechanism designed for the vertical adjustment of the sweeper brush will now be described.

A brush axle plate 42 provided with the boss 43 adapted for reception within the annular socket 44 of the brush end is slidably-mounted adjacent the inner face of the end guard 32 while being placed beneath opposite struck down lips 45. For the purpose of allowing said axle plate 42 to have vertical adjustment, the same is secured by the rivet 46 to an outer slide plate 47 within the vertical groove 48 of the end guard. It is evident that a vertical movement of said plate 47 will carry the end of the brush vertically, it being noted that for the accommodation of the rivet 46, the end guard is provided with a short vertical slot 49. For holding said brush end and its plate in the desired adjusted position, a channel piece 50 is positioned interiorly of the guard 32 and connected to the slide plate 47 by means of an adjustable set screw 51, the latter being accommodated in its vertical movement by the slot 52 of the guard, through which slot the set screw extends. It will therefore be evident that upon loosening the set screw 51, the end plate may be vertically moved, thereby adjusting the height of the axle boss and the brush.

While the forms of the invention herein shown and described are what are believed to be preferable embodiments thereof, it is nevertheless to be understood that minor changes may be made in the matter of form, proportion and minor details of construction without departing from the spirit and scope of the invention as set forth in the appended claims.

Having fully described my invention and in what manner the same is designed for use, what I claim as new and desire to secure by Letters Patent of the United States is;—

1. A device of the class described comprising a sweeper casing, a guard surrounding one end of said casing, a brush spindle provided with a socket in the end thereof, an axle plate, an inwardly extending boss upon said axle plate and positioned within said socket, said axle plate positioned interiorly of said guard, a slide plate secured to said axle plate and positioned exteriorly of said guard within a slotted vertical depression of the guard, both said axle plate and slide plate being vertically movable, a channel member positioned within said guard, and an adjustable set screw passing through the slot of said depression and extending through said slide plate and threaded into said channel member.

2. A device of the class described comprising a sweeper casing, a guard surrounding one end of said casing, a brush spindle provided with a socket in the end thereof, an axle plate, an inwardly-extending boss upon said axle plate and positioned within said socket, said axle plate positioned interiorly of said guard, and a slide plate secured to said axle plate and positioned exteriorly of said guard within a vertical depression of the guard, both said axle plate and slide plate being vertically movable.

3. A device of the class described comprising a sweeper casing, a guard on the end of said casing, a brush spindle provided with a socket in the end thereof, an axle plate, an inwardly-extending boss upon said plate and positioned within said socket, said plate positioned interiorly of said guard, said guard being provided with a vertical depression in the outer face thereof and having a vertical slot in the bottom of said depression, a slide plate positioned in said depression, and a pin positioned through said slot and connecting said axle plate and slide plate.

4. A device of the class described comprising a sweeper casing, a guard thereon, a brush spindle provided with a socket in the end thereof, an axle plate, an inwardly-extending boss upon said plate and positioned within said socket, said plate positioned interiorly of said guard, said guard being provided with a vertical depression in the outer face thereof and having two vertical slots in the bottom of said depression, a slide plate positioned in said depression, a pin positioned through one of said slots and connecting said axle plate and slide plate, a channel member positioned within said guard, and an adjustable set screw passing through the other of said slots and extending through said slide plate and threaded into said channel member.

In testimony whereof, I have signed in the presence of the two undersigned witnesses.

GEORGE B. DEACON.

Witnesses:
P. J. EDMUNDS,
E. BEDFORD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."