

No. 631,837.

Patented Aug. 29, 1899.

A. G. WILKINS.  
CARPET SWEEPER.

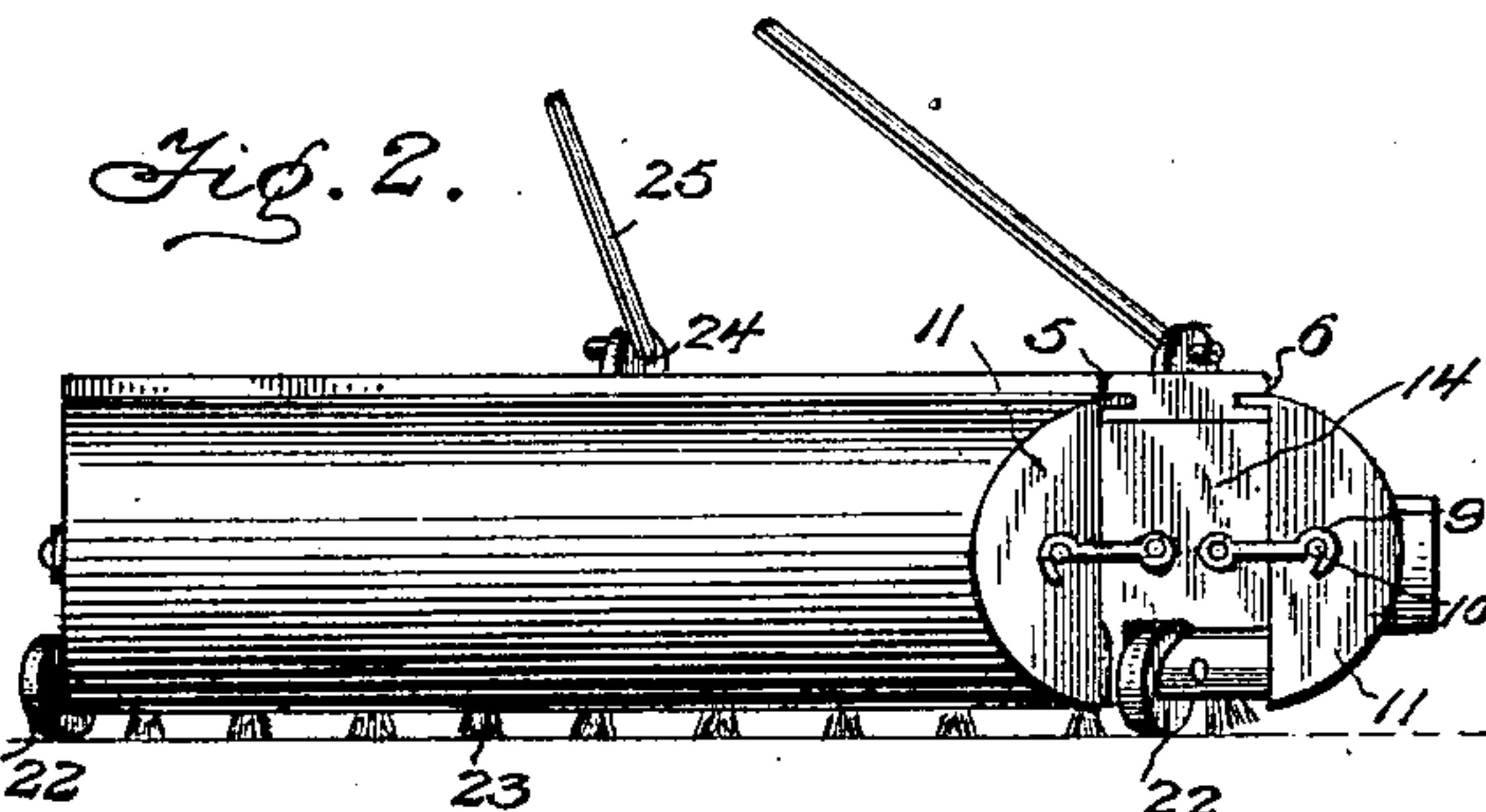
(Application filed May 11, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Fig. 2.



WITNESSES

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INVENTOR

*Alexander G. Wilkins*  
*by his Atty*  
*Mason Finch Lawrence*



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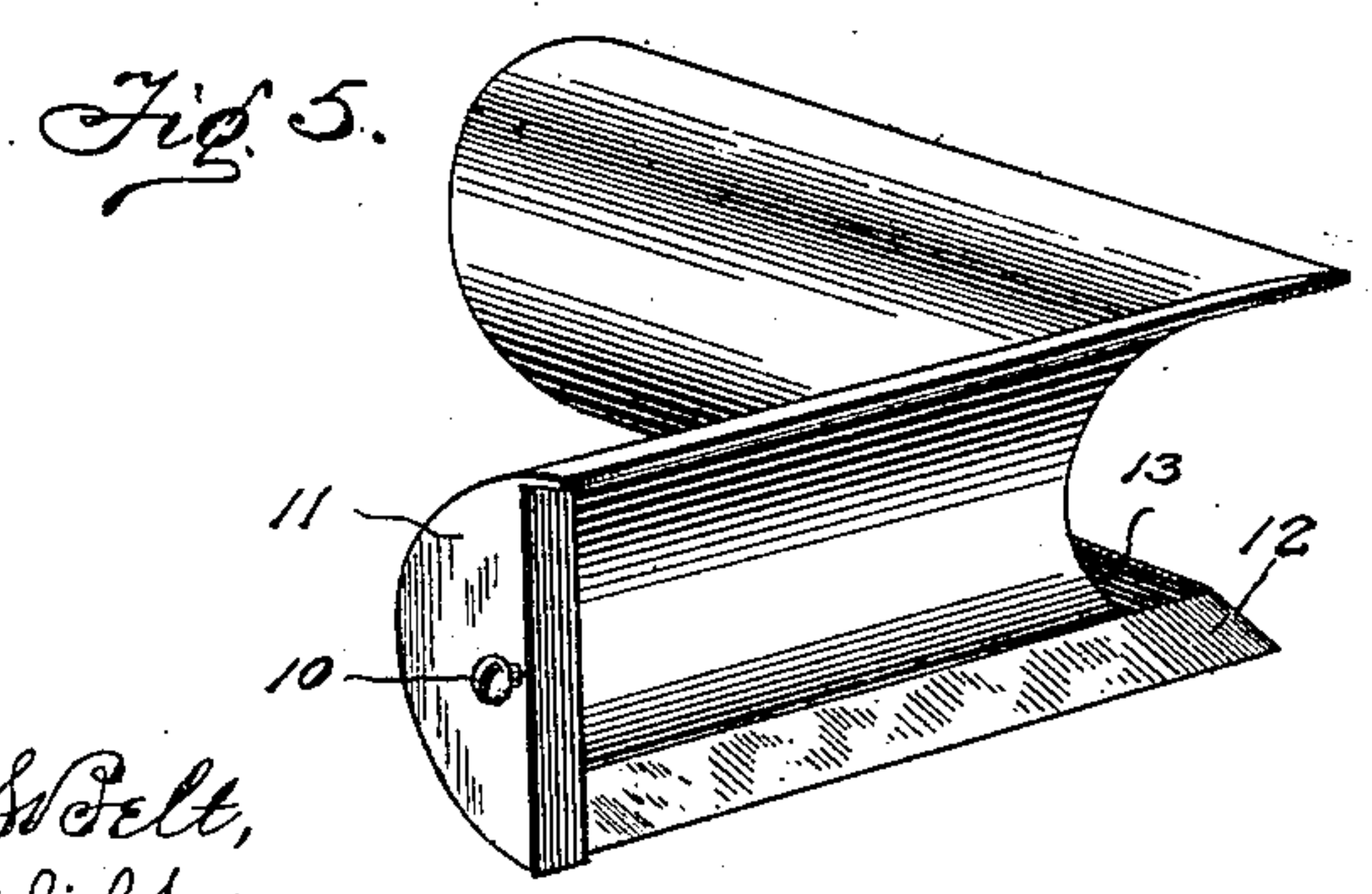
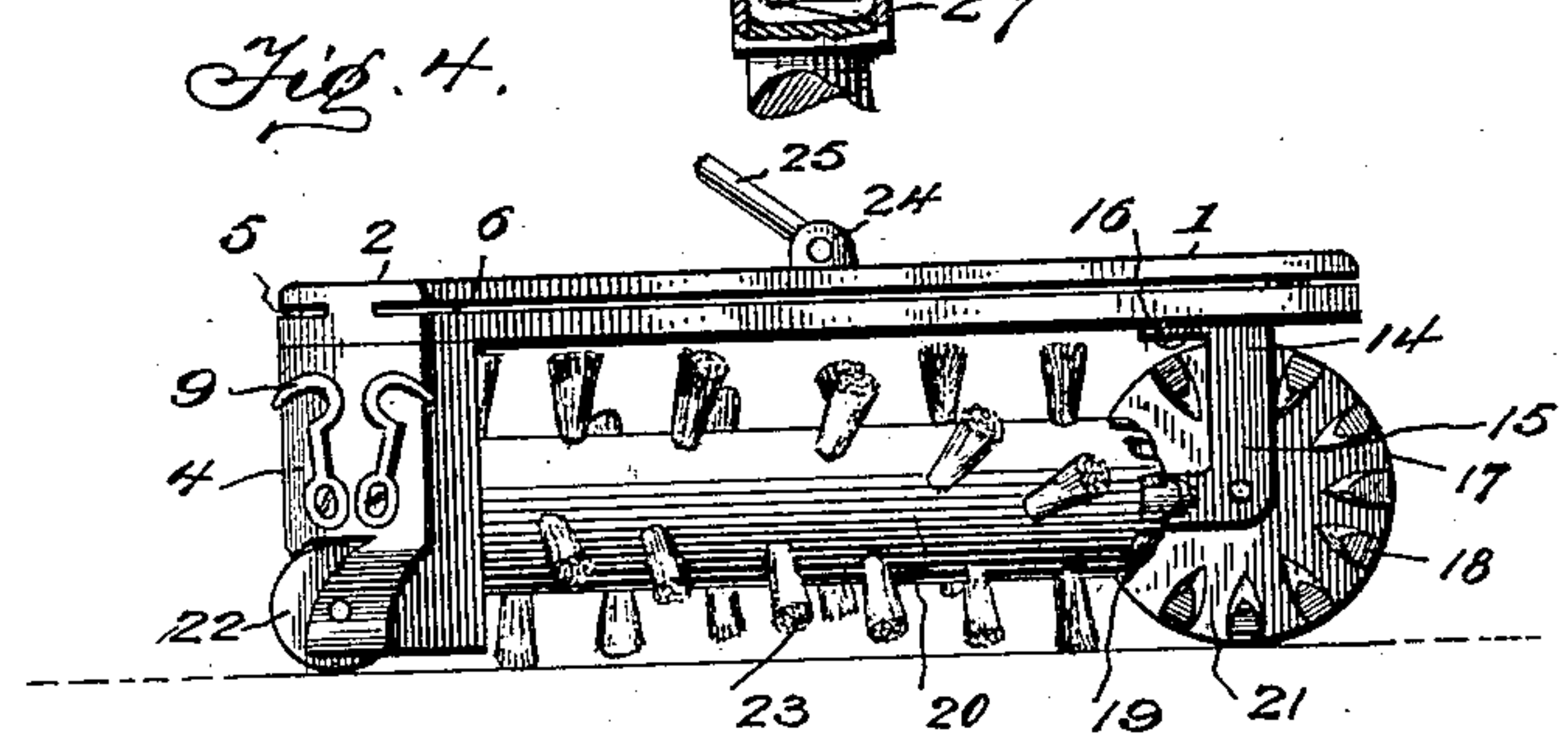
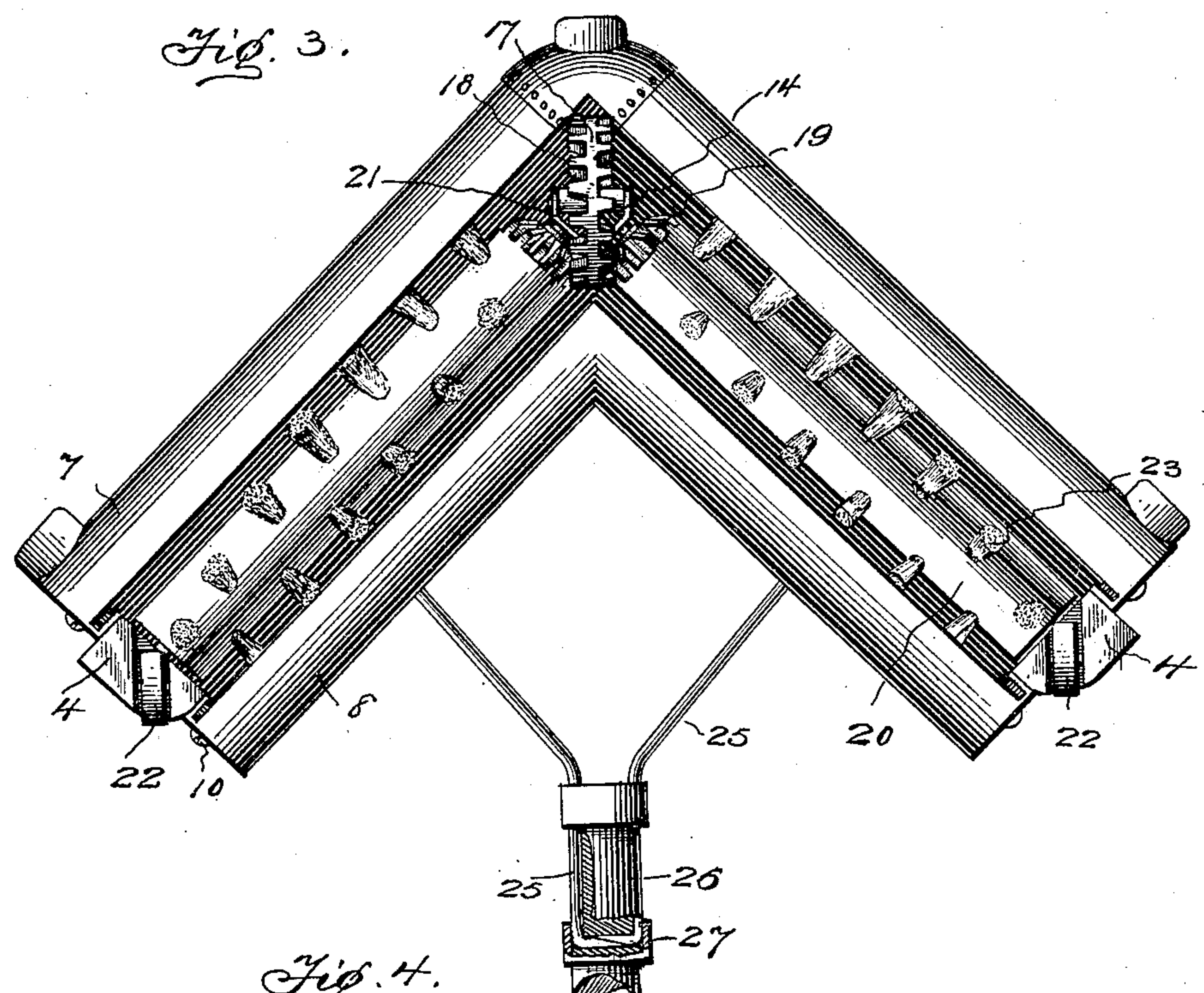
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# UNITED STATES PATENT OFFICE.

ALEXANDER G. WILKINS, OF MEADVILLE, PENNSYLVANIA.

## CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 631,837, dated August 29, 1899.

Application filed May 11, 1899. Serial No. 716,402. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER G. WILKINS, a citizen of the United States, residing at Meadville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in Carpet-Sweepers; and I do hereby 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.

My invention relates to improvements in carpet-sweepers; and it consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a room, showing the manner of using my improved carpet-sweeper. Fig. 2 is a view looking at the same from the end. Fig. 3 is an inverted plan view of the sweeper. Fig. 4 is a side elevation of the sweeper with the dust pans or receptacles removed, and Fig. 5 is a perspective view of one of the pans or dust-receptacles removed from the frame.

1 in the drawings represents a rectangular frame having portions 2 and 3, which extend at angles to each other, preferably at right angles. This frame is provided at its inner or near ends with vertical standards 4 4, forming supporting ends to the frame. The frame is provided on its opposite vertical faces with narrow grooves or kerfs 5 6, into which are inserted the upper edges of the dust receptacles or pans 7 8, and hooks 9 9 are provided on the outer surfaces of the ends 4 4, which hooks are adapted to engage headed projections or studs 10 10 on the ends of the dust-receptacles 7 8 and hold the said receptacles on the frame and in position within the grooves or kerfs 5 6. This construction and arrangement admits of the ready insertion and removal of the dust-receptacles. The dust-receptacles 7 8, as clearly shown in Figs. 1, 3, and 5, correspond practically to the size of the frame 1 and are rectangular in general contour and practically semicircular in cross-section. The dust-receptacles are two in number and are arranged on opposite sides of the frame and practically inclose the same, except at the bottom, where it is left open, as

clearly shown in Fig. 3, through which opening the brushes operate and through which the dust and dirt are swept by the brushes into the receptacles 7 8. The said receptacles 7 8 are provided with closed ends 11 and with an upturned flange 12, forming a pocket 13, which extends along the entire lower edge of the said receptacles for receiving and retaining the dust and dirt.

On the under side of frame 1, at its farther end, is provided a bracket 14, which bracket is practically U-shaped in form and forming downwardly-depending arms 15 and laterally-extending securing-arms 16, through which screws are passed for fastening the bracket to the under side of the frame. By this construction and arrangement the bracket is not only secured to the frame, but the frame is strengthened thereby, for the reason that the lateral extensions 16 extend across the joint in the frame which is formed between the meeting edges of the frame at this point.

Within the bracket 14 is journaled a wheel 17 by means of pins extending transversely through said bracket. The said wheel 17 is provided with gear-teeth 18 on its opposite faces, which gear-teeth mesh with beveled teeth 19, provided on the ends of the brush-shafts 20. The bracket 14 is also formed with inwardly-extending projections 21, which are apertured to receive the journal ends of the brush-shafts. The other ends of the brush-shafts are journaled in the ends or standards 4 4 of the frame 1, so that the brush-shafts are capable of a full revolution and can be readily operated by the toothed wheel 17. As will be seen from Fig. 4 of the drawings, the toothed wheel 17 comes in direct contact with the floor and that said wheel and the brush rollers or shafts 20 receive their movement in this manner as the sweeper is moved back and forth over the floor. Rollers 22 22 are journaled in the lower ends of the standards or ends 4 4, which rollers run in parallel lines with the driving toothed wheel 17. If desired, the toothed wheel 17, as well as the rollers 22 22, may be covered with rubber; but I do not wish to limit my invention to the same.

The bristles 23 are arranged along the rollers or shafts 20 in a spiral manner for the purpose of operating against the edges of the dust pans or receptacle 7 8 similar to the ac-



tion of a lawn-mower, whereby the dirt and dust are thrown into the pans or receptacles in a uniform manner and are not liable to be carried around a second time by the brushes.

5 By arranging the brushes in a spiral manner the friction in operation is reduced by reason of a more regular and uniform contact.

By my construction and arrangement of two brush-shafts running at angles to each other and operated by a toothed wheel which comes directly in contact with the floor, I have found that it can accomplish very thorough sweeping, and by reason of the peculiar twist given to the ends of the brushes they will cover a large amount of carpet without injuring the same. The action of the driving toothed wheel will impart a flexible flipping action and give a natural dirt-lifting snap to the brushes.

20 It will be observed that my improved sweeper is neat in appearance and no unsightly wheels are exposed and that it is exceedingly simple in construction and operation and easy to handle and keep clean.

25 When it is desired to remove the dust pans or receptacles for emptying out the dust or dirt it is simply necessary to unfasten the hooks 9 9 from the headed projections 10 10 and withdraw the upper edges of said dust-receptacles out of the kerfs 5 6 of the frame 1, and after the dirt has been emptied the said receptacle can be as readily returned and secured in place. Apertured projections or eyes 24 are provided on the top of the frame 1, into which wires 25, connected to an operating-handle 26, are sprung. These wires may be attached to the handle in any suitable manner; but a preferred construction is to provide the staff of the handle with kerfs, in which the inner ends of the wires extend and are seated and hold the same in place by means of rings 27 slipped over the same.

I have shown the forward end of the housing or dust-receptacle as rounded and provided with a rubber bumper and also said housing provided with bumpers near its outer end. By means of this construction and arrangement there will be little liability of the furniture or washboard being injured in any way by the carpet-sweeper coming in contact with the same.

Where a single shaft is employed, instead of two shafts arranged at angles to each other, the sweeper moving straight along and the brushes arranged on straight lines, the brushes will be given a direct or up-end lift and the bristles will be brought in a more wearing manner on the nap of the carpet, than when the shafts are arranged at angles and the bristles are arranged in a spiral manner, so that the said sweep is given to the brushes across the edges of the dust-receptacle, and I have found that a sweeper constructed on this principle will do better work with less friction and injury to the carpet than those employing a single brush-shaft.

Another feature of my construction is that

different-sized wheels can be employed and be geared to the shafts to run as rapidly as desired, the shafts carrying a small number of bristles and at the same time doing as much work as usual, with the saving of bristles over the old construction.

Another feature of my construction is that it will sweep closer to the corners than the ordinary construction, and this can be particularly well accomplished by turning the rear end of the sweeper close in to the corner and drawing it back and forth. Bristles on the ends of the shafts will sweep very close to the wall.

I do not wish to limit my invention to the exact details of construction, combination, and arrangements of parts as shown and described, as the same might be varied without departing from the spirit of my invention.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A portable carpet-sweeper comprising a suitable frame and carrying rigid straight brush-shafts which extend at angles to each other, means for revolving said brush-shafts and dust-collecting receptacles carried by the frame of the machine and partially surrounding the brush-shafts on top and on the outer side and arranged to receive the dirt swept up by the brushes, substantially as described.

2. A portable carpet-sweeper comprising a suitable frame carrying straight rigid brush-shafts which extend at angles to each other, a toothed wheel which comes in contact with the floor and engages the said shafts for revolving the same, dust-receptacles carried by the frame of the machine and partially surrounding the brushes on top and on the outside and arranged to receive the dirt swept up by the brushes, substantially as described.

3. A portable carpet-sweeper comprising a suitable rectangular frame having portions which extend at angles to each other straight rigid shafts carrying brushes, the inner ends of said shafts being provided with beveled teeth and a toothed wheel which comes in contact with the floor and engages directly and positively the beveled teeth on the brush-shaft for revolving the same, dust-receptacles partially surrounding the brush-shafts and brushes on top and on the outer side and arranged to receive the dirt swept up by the said brushes, substantially as described.

4. A carpet-sweeper comprising a suitable rectangular frame having portions which extend at angles to each other and carrying brush-shafts which also operate at angles to each other, the inner ends of said shafts being provided with beveled teeth and a toothed wheel which comes in contact with the floor and the teeth of which engage the beveled teeth on the brush-shafts, a bracket for supporting the toothed wheel which bracket extends across the connecting-joint of the frame and also forms a bearing for the outer ends of the brush-shafts, a dust-receptacle ar-



ranged on the frame partially surrounding the brush-shafts so as to receive and retain the dust swept up by the brushes, substantially as described.

5 5. A carpet-sweeper comprising in its construction a suitable frame, straight rigid brush-shafts carried by said frame and arranged at angles to each other, brushes arranged on the shafts in such a manner as to  
10 strike the edges of the dust-receptacles in a shearing manner, means for revolving the

brush-shafts and dust-receptacles which partially surround the brush-shafts and arranged to have the brushes operate against the same and brush the dirt into said receptacles, substantially as described. 15

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

ALEXANDER G. WILKINS.

Witnesses:

GEORGE DELP,  
ARCHIE HENRY.