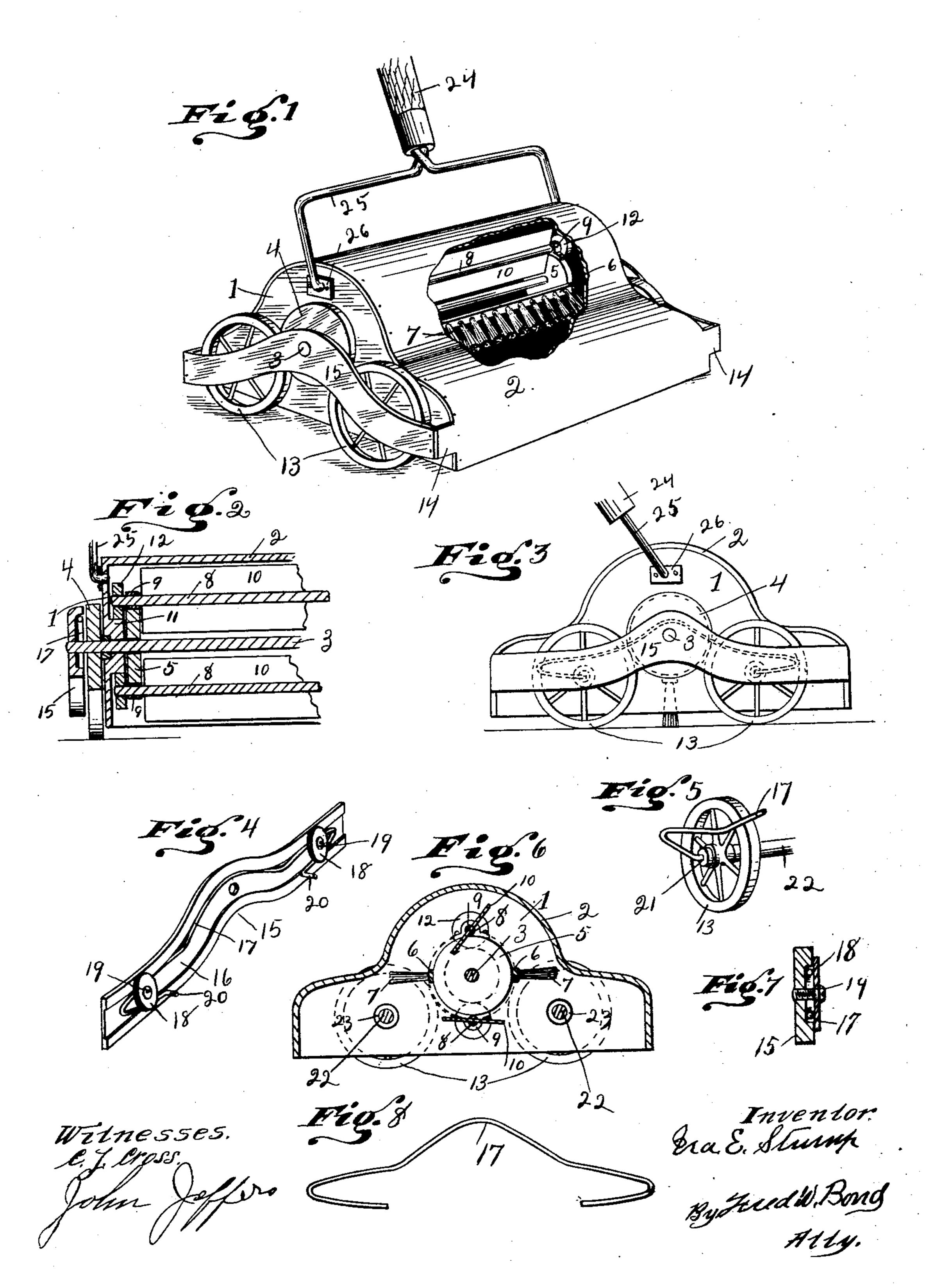
## I. E. STUMP. CARPET SWEEPER.

No. 587,617.

Patented Aug. 3, 1897.



## United States Patent Office.

IRA E. STUMP, OF CANTON, OHIO, ASSIGNOR OF THREE-FOURTHS TO JACOB M. SCHNEIDER, FRED W. BOND, AND JAMES A. JEFFERS, OF SAME PLACE.

## CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 587,617, dated August 3, 1897.

Application filed June 9, 1896. Serial No. 594,874. (No model.)

To all whom it may concern:

Be it known that I, IRA E. STUMP, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Carpet-Sweepers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a perspective view showing a portion of the cover broken away. Fig. 2 is a vertical section showing one end of the 15 sweeper and illustrating the relative positions of the brush-cylinder shaft and fan-shafts. Fig. 3 is an end view showing the spring for holding the traveling wheels in dotted lines. Fig. 4 is a detached view of the end bar, show-20 ing the spring and disks for holding said spring in proper position. Fig. 5 is a view showing one end of one of the traveling-wheel shafts and illustrating a traveling wheel located thereon and a portion of the spring 25 connected to the shaft. Fig. 6 is a transverse section of the sweeper. Fig. 7 is a transverse section of one of the end bars and its different parts. Fig. 8 is a detached view of one of the springs.

The present invention has relation to carpet-sweepers; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claims.

Similar figures of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the end pieces of the sweeper proper, which end pieces may be substantially of the form shown. To the end pieces 1 is securely attached in any convenient and well-known manner the cover 2, said cover being arranged substantially as shown in Fig. 1. To the end pieces 1 or their equivalents is journaled the brush-cylinder shaft 3, to which shaft are securely attached the wheels 4, which wheels are preferably located upon the outer sides of the end pieces 1, as illustrated in Fig. 1. To the shaft 3 are securely attached the disks 5, to which disks are attached the brush-bars

6, said brush-bars being provided with the brushes 7.

To the peripheries of the disks 5 are properly journaled the fan-shafts 8 by means of 55 suitable boxing, such as 9, said shafts being located between the brush-bars 6, substantially as illustrated in Figs. 1 and 6, and revolve in unison with the brush-bars. To the shafts 8 are attached in any convenient and 60 well-known manner the fan-blades 10, said fan-blades being formed of such a width that they will clear the shaft 3 as they rotate with the axillary rotation of the shafts 8, said axillary rotation being imparted to the shafts 65 8, as hereinafter described.

Upon the inner face or faces of the end pieces 1 are located the disks 11, said disks being so arranged that the peripheries of the friction-wheels 12 will press or bear against 70 the peripheries of the disks 11 and impart rotary motion to the wheels 12 and the fanshafts 8, in addition to the rotary motion of said shafts 8 around the brush-cylinder shaft 3.

It will be understood that the disk 11 is 75 fixed to the end piece 1, or, if desired, said disk may be formed integral with the end piece and does not have any rotary motion.

The traveling whoele 12 are leasted sub-

The traveling wheels 13 are located substantially as shown in Figs. 1 and 3, and, as 80 shown, they are so arranged that their peripheries will press or bear against the disks or wheels 4, thereby imparting rotary motion to the disks or wheels 4 and to the brush-cylinder proper as the carpet-sweeper is 85 pushed or pulled over the carpet or other object designed to be swept.

To the extended arms 14 are securely attached in any convenient and well-known manner the bars 15, to which bars is jour-90 naled the brush-cylinder shaft 3. The inner faces of the bars 15 are provided with the grooves 16, said grooves being for the purpose of assisting in holding the springs 17 in proper position with reference to said bars 95 15. For the purpose of preventing the springs from becoming accidentally displaced the disks or buttons 18 are provided, which disks or buttons are held in proper position by means of the screws 19 or their equivalents. 100 The springs 17 are provided with the right-angled portions 20, which right-angled por-

tions are entered into proper recesses 21, formed in the ends of the shafts 22, upon which shafts 22 are loosely mounted the traveling wheels 13. The springs 17 are for the 5 purpose of normally holding the traveling wheels 13 in such a position that they will

press or bear against the wheel 4.

The apertures 23, through which the shafts 22 pass, are formed somewhat larger in di-10 ameter than the diameter of the shafts, thereby allowing the body of the carpet-sweeper, together with its different attachments, to be pressed toward the carpet or other surface over which the sweeper is traveling, thereby 15 producing greater pressure of the brushes

upon the surface being swept.

It will be understood that the fan-blades 10 should be formed of such a width that their edges will not strike the carpet as they 20 are carried around with the brush-cylinder, or, in other words, the end of brushes 7 should be extended a short distance beyond the outer limit of the fan-blades 10. The object and purpose of providing the fan-blades 25 and locating the same as shown is to create a sufficient amount of blast to blow the dust into the dust-receptacles.

In the drawings the dust-receptacles or pans are not illustrated, inasmuch as it will 30 be understood that the ordinary pans are to be provided and should be located in the or-

dinary manner.

It will be understood that by providing the springs 17 the traveling wheels 13 will at all 35 times press or bear against the wheels 4, regardless of the pressure placed upon the sweeper proper by means of the operatinghandle 24. The operating-handle  $\overline{2}4$  is piv-

otally connected to the ends 1 by means of the bail 25, which bail may be substantially 40 of the form shown in Fig. 1. For the purpose of protecting the ends 1 and at the same time providing a means for better connecting the bail 25 metal plates, such as 26, are provided, which metal plates are attached to the 45 ends 1 in any convenient and well-known manner.

Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. The combination of a sweeper-frame, a brush-cylinder journaled therein, means for rotating the brush-cylinder, shafts provided with fan-blades journaled on or near the periphery of the brush-cylinder, and means for 55 imparting an axial motion to said shafts upon the rotation of the brush-cylinder, substantially as described.

2. The combination of a sweeper-frame, fixed disks located upon the inner faces of 60 the frame, a brush-cylinder journaled within the frame and concentrically to the disks, shafts provided with fan-blades journaled on or near the periphery of the brush-cylinder, said shafts being provided with friction- 65 wheels adapted to contact with the fixed disks, whereby the shafts are axially rotated upon the rotation of the brush-cylinder, substantially as described.

In testimony that I claim the above I have 70 hereunto subscribed my name in the presence

of two witnesses.

IRA E. STUMP.

Witnesses:

F. W. Bond, JOHN JEFFERS.