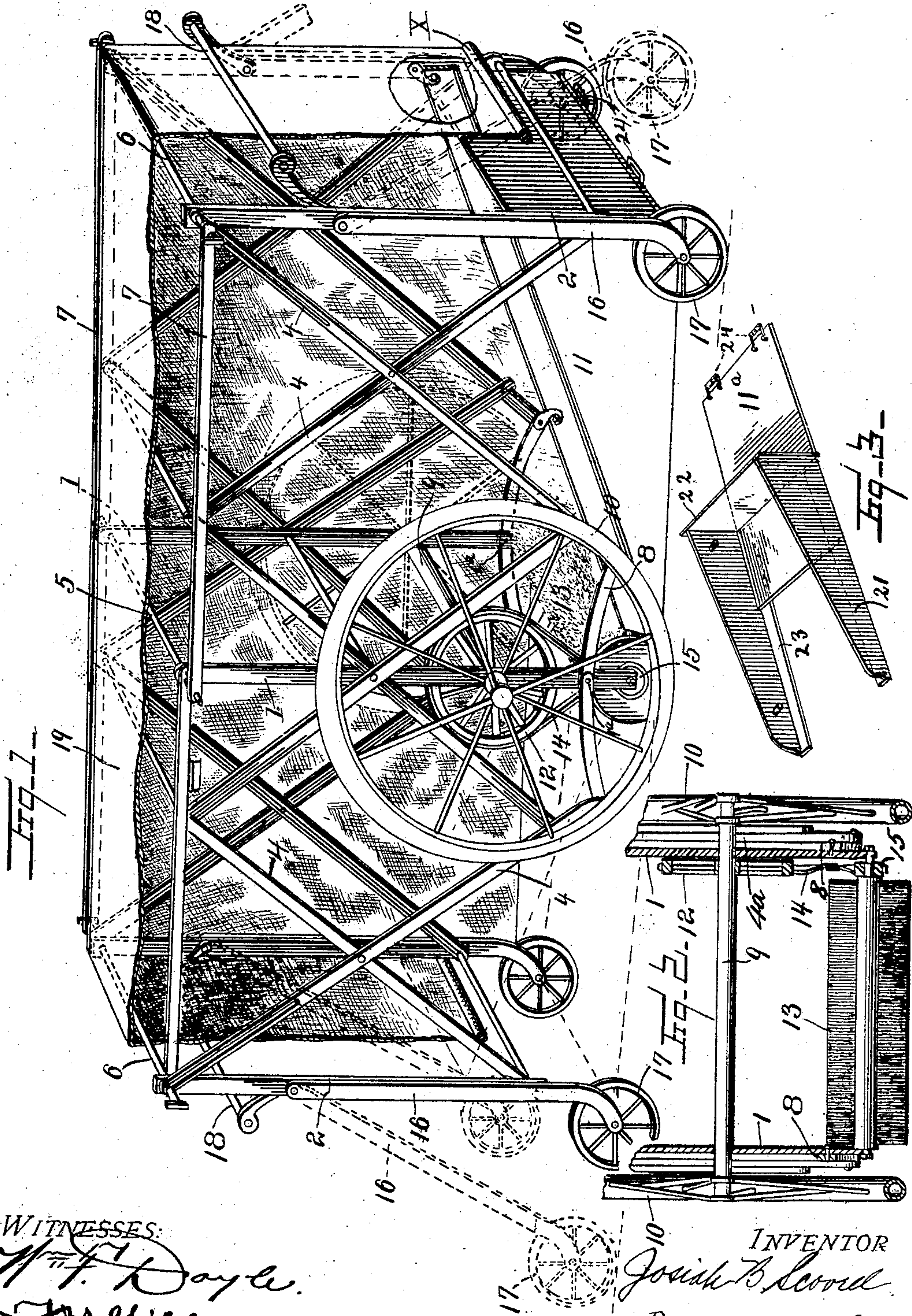


No. 848,571.

PATENTED MAR. 26, 1907.

J. B. SCOVELL.  
SWEEPER.

APPLICATION FILED FEB. 8, 1904.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOSIAH B. SCOVELL, OF DULUTH, MINNESOTA.

## SWEeper.

No. 848,571.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed February 8, 1904. Serial No. 192,651.

*To all whom it may concern:*

Be it known that I, JOSIAH B. SCOVELL, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in 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.

This invention relates to new and useful improvements in collapsible trucks and actuated means carried thereby which may be used for sweeping, combined with a conveniently-disposed receptacle carried by the truck within which receptacle will be deposited the sweepings from the actuated means.

The invention comprises certain features of novelty in detail construction and arrangement of parts, as hereinafter described, and specifically pointed out in the claims.

In the annexed drawings similar letters of reference indicate corresponding parts in all the views, wherein—

Figure 1 is a perspective view illustrating my improved machine, with a portion of the mantle or covering therefor removed. Fig. 2 is a detached fragmentary transverse sectional view taken substantially midway the length of the machine shown in Fig. 1, and Fig. 3 is a detached detail view of the pan hereinafter described.

Referring to the drawings, 1 1 indicate the central standards of the collapsible frame, which central standards are vertically disposed.

2 2 are end standards which are connected with the central standards 1 by means of intermediate pivotally-connected and foldable arms 4, which arms are connected with the central standards and end standards in any convenient manner to form substantially lazy-tongs, whereby the frame may be folded when desired.

Connecting the standards 1 is a transversely-connected rod 5, projecting through openings in said standards at the upper ends thereof, as shown in Fig. 1. Similar transversely-extending rods 6 6 connect the end standards 2 2 to prevent lateral separation thereof at the upper ends. When the frame is distended, as shown in Fig. 1, longitudinally-extending bars 7 are connected with the rods 5 and 6 in any convenient manner,

as by hooking thereon or by having said rods project through said longitudinally-extended bars 7, whereby the said frame will be held in its extended position. Connected respectively with the lower portion of central standards 1 at 1<sup>a</sup> and the diagonal arms 4 are intermediate sectional braces 8, which serve as means for connecting the lower ends of said pivoted arms 4, the arms 4 being pivotally connected with said intermediate braces 8. Extending transversely and projecting through the central standards 1 is a supporting-shaft 9, upon which shaft are carrying-wheels or revoluble supporting members 10, one of which at least shall be connected with said shaft, so that rotation of the wheel will actuate the shaft 9, whereby it will be available as a driving-shaft.

Detachably connected preferably with the brace-bars 8 and with at least one set of the end standards 2 is a pan or receptacle 11. Two receptacles 11 may be provided, one within each end portion of the frame and in convenient proximity to a rotary member, hereinafter referred to. Upon the shaft 9 is a driving-pulley 12, and supported in the lowermost portion of central standards 1 is a rotatable brush 13, which is driven from the pulley 12 by means of an intermediate twisted belt 14, adapted to actuate said brush 13 and extending around a small pulley 15, connected with the shaft upon which brush 13 is supported. Connected pivotally with the end standards 2 are downwardly-extending legs 16, carrying supporting-wheels 17, which preferably project to a lower plane with relation to the frame structure than do the supporting-wheels 10, before referred to, and also connected with said end standards 2 are handle members 18, whereby the device may be guided in operation. The outwardly-movable legs 16, which are provided with the supporting-wheels 17, are employed for the purpose of lifting the carrying-wheels 10 from engagement with the ground when it is desired to place the brush 13 or the rotary knife out of operation, and this is accomplished by moving the members 16 to the position shown in full lines, Fig. 1. When it is desired to place the carrying-wheels upon the ground for the purpose of actuating the driving-shaft 9, the members 16 are moved to the position shown in broken lines, Fig. 1, as it will be obvious that this will permit the whole apparatus to be lowered sufficiently to



cause the carrying-wheels to be placed in an operable position. Over the whole structure is stretched a mantle 19, (shown partly broken away in Fig. 1,) said mantle when the device is used as a sweeper serving as a dust-arresting means, and said mantle is preferably formed of some textile fabric which will permit the passage of air there-through from inner to outer side, yet will prevent to a great extent the egress of dust from the interior of the frame. The mantle 19 may be connected with the frame structure in any desired manner or may be cut and fitted thereto, so as to closely embrace the same; but it is preferred that if connected at least one portion thereof, as shown at X in Fig. 1, may be lifted for the purpose of depositing material in the pan 11, if desired. The mantle or cover is formed, preferably, from a single piece of material and is provided with end portions which are adapted to be positioned upon the frame, as is clearly shown in Fig. 1. The end portions, as shown at X in Fig. 1, are positioned between the handles, while the side portions are dropped over the frame. The side portions are of the same width and are approximately the length of the apparatus, the end portion being of sufficient length to entirely close the end of the apparatus when the cover is positioned thereon. By reason of the slitted edges of the mantle 19 the ends of said mantle will be suspended between the members 16 upon each end of the apparatus whether the members 16 are positioned as shown in full lines, Fig. 1, or moved to the position shown in broken lines. By reason of the slitting of the cover or mantle the members 16 have a free movement independent of the ends X of mantle or cover 19.

The operation of my device is as follows: The frame being distended to the position shown in Fig. 1 and a brush, as 13, secured in position therein the movement of the structure upon the supporting-wheels 10 will rotate said brush 13, through shaft 9, pulley 12, and belt 14, whereby the sweeping-brush will become effective, and by reason of the close proximity of the pan 11 thereto it is evident that the resultant sweepings will be deposited in said pan. When the pan is full or when the sweeping is finished, the pan may be removed and its contents deposited at any convenient point, or the slide-bottom 11<sup>a</sup> may be shifted, as shown in Fig. 4, to dump the contents of the pan. When the apparatus is not in use or when it is desired to ship or store the same, the pan 11 may be taken out, the longitudinally-extending bars 7 disconnected from the transverse rods 5 and 6, and by reason of the lazy-tongs construction of the collapsible frame the whole

apparatus may be folded to occupy a minimum space.

The catch-pan 11 is made up of three major parts, in which 21 are the side members, 22 the end, 23 the inwardly-extending slide-supports, upon which rests the slide-bottom 11<sup>a</sup>, upon which handles 24 are connected for withdrawing the slide to dump the contents of the pan when desired. The supports 23 are preferably formed from the material of which the sides 21 are formed. The side members 21 are connected to the framework in any desired manner.

Having now ascertained the nature of my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an apparatus of the class described, the combination of a collapsible frame, said frame comprising central and end standards, arms connected to said central standards, arms connected to said end standards and connected to said first-mentioned arms, fastening means for holding said frame in an extended position, and wheels secured to and supporting said frame.

2. In a mechanism of the class described, the combination of a collapsible frame, said frame comprising parallel central and end standards, arms connecting said central and end standards, longitudinally-extending bars supported by said central and end standards and being capable of locking the frame in an adjusted position, and wheels secured to and supporting said frame.

3. In an apparatus of the class described, a collapsible frame comprising central and end standards, and arms connected to said central standards, arms connected to said end standards and connected to said first-mentioned arms, fastening means for holding said frame in an extended position, wheels secured to and to support said frame, a rotary brush carried by the frame, and means connected with the wheels for rotating the rotary member.

4. In a mechanism of the class described, a collapsible frame comprising parallel central and end standards, arms connecting said central and end standards, longitudinally-extending bars supported by said central and end standards and being capable of locking the frame in an extended position, wheels secured to and to support said frame, a rotary brush journaled in the central standards, and means connecting the wheels with and to operate the rotary member.

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

JOSIAH B. SCOVELL.

Witnesses:

C. E. BOSTWICK,  
G. L. GORTON.