

No. 663,551.

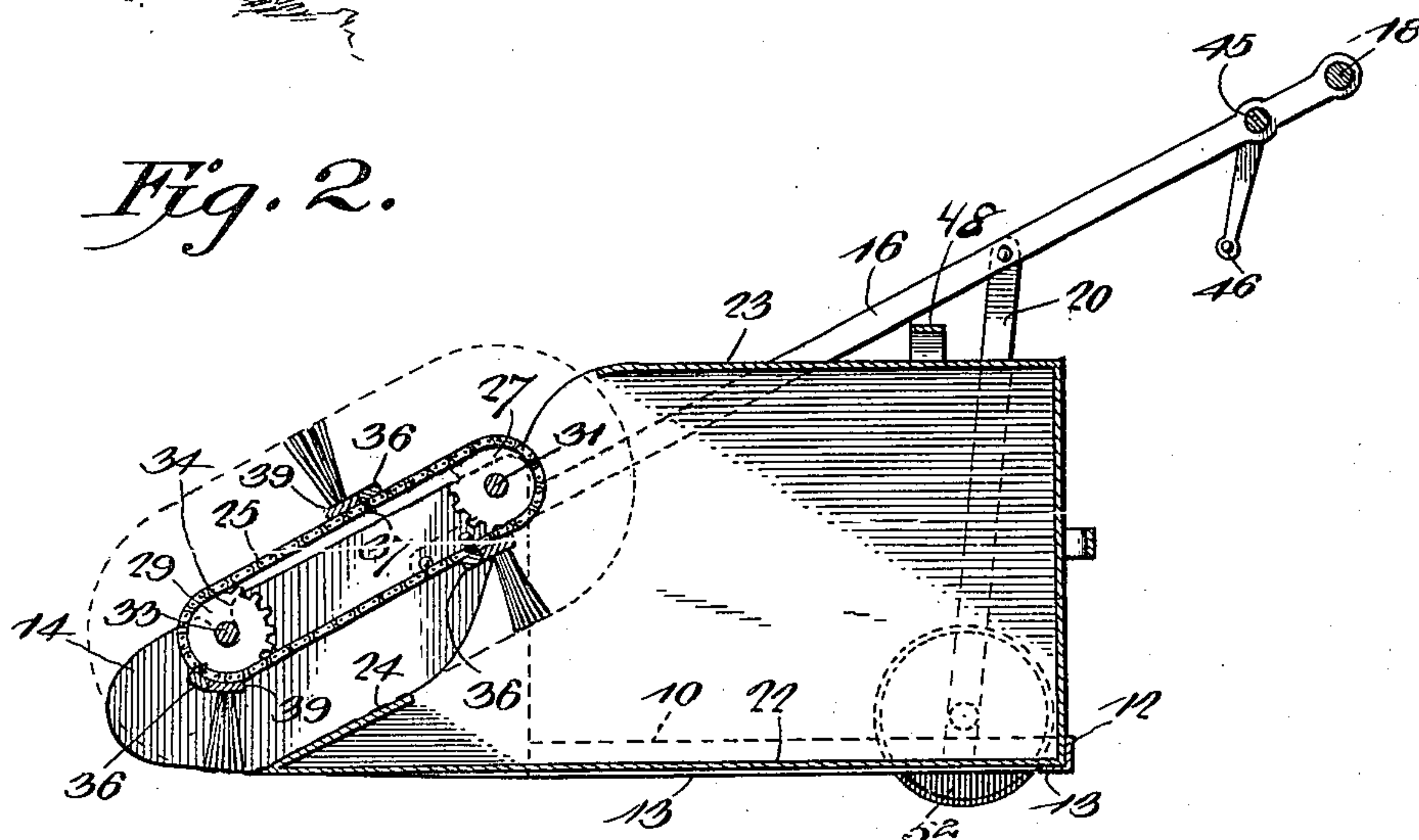
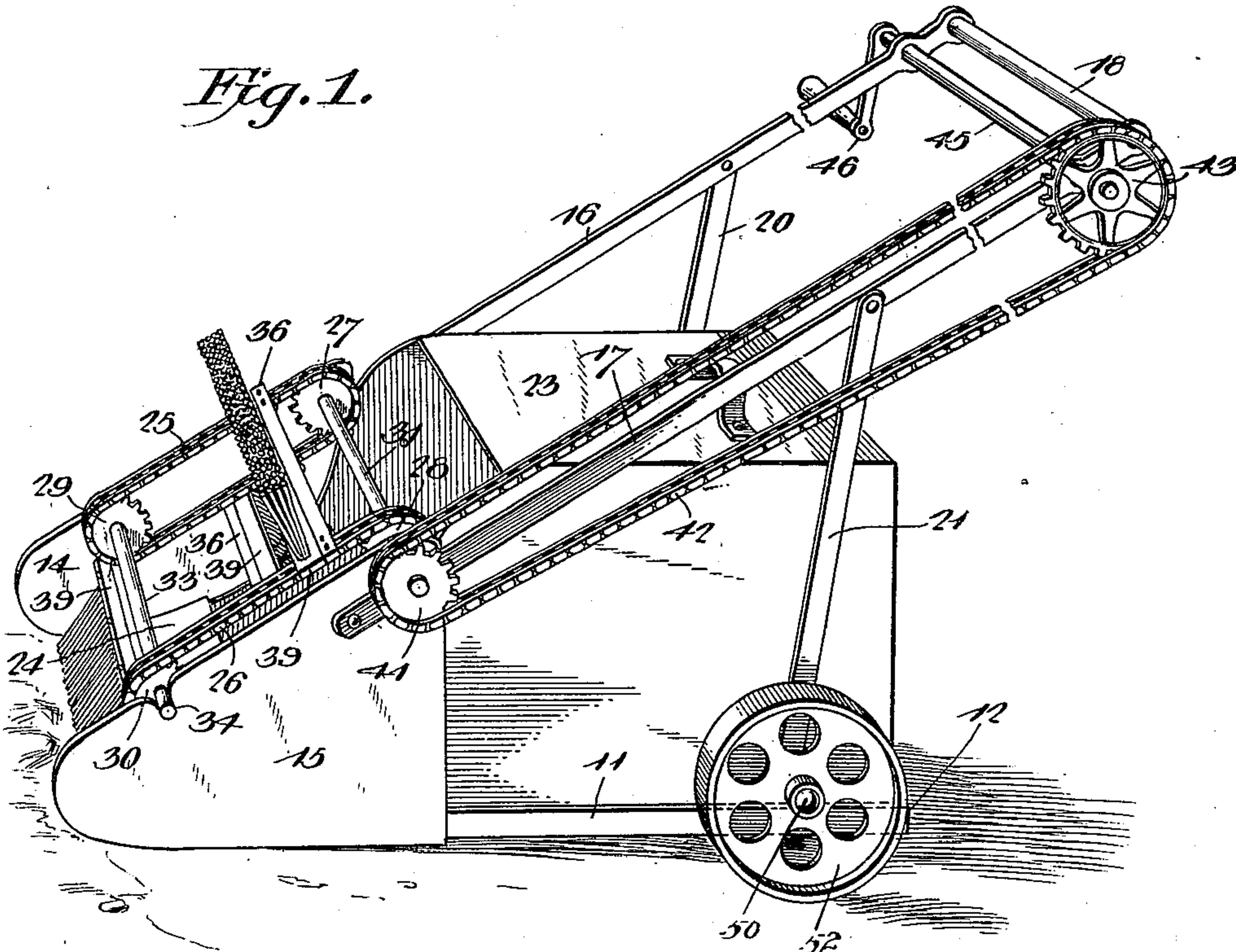
**Patented Dec. 11, 1900.**

**J. C. McCOLLUM.**  
**HAND STREET SWEEPER.**

(Application filed Mar. 23, 1900.)

(No Model.)

**2 Sheets—Sheet 1.**



Witnesses  
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Geo. H. Chandler  
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No. 663,551.

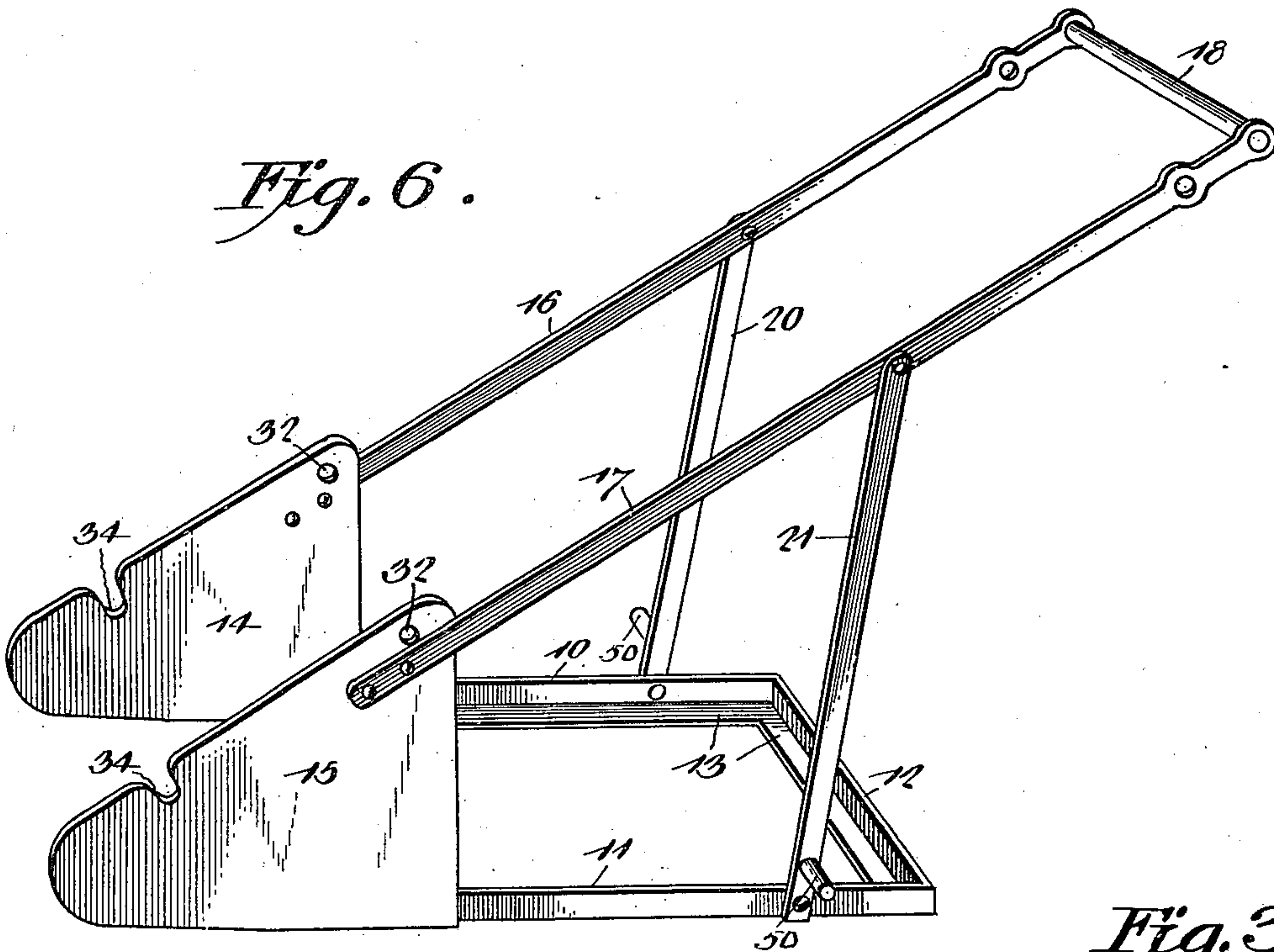
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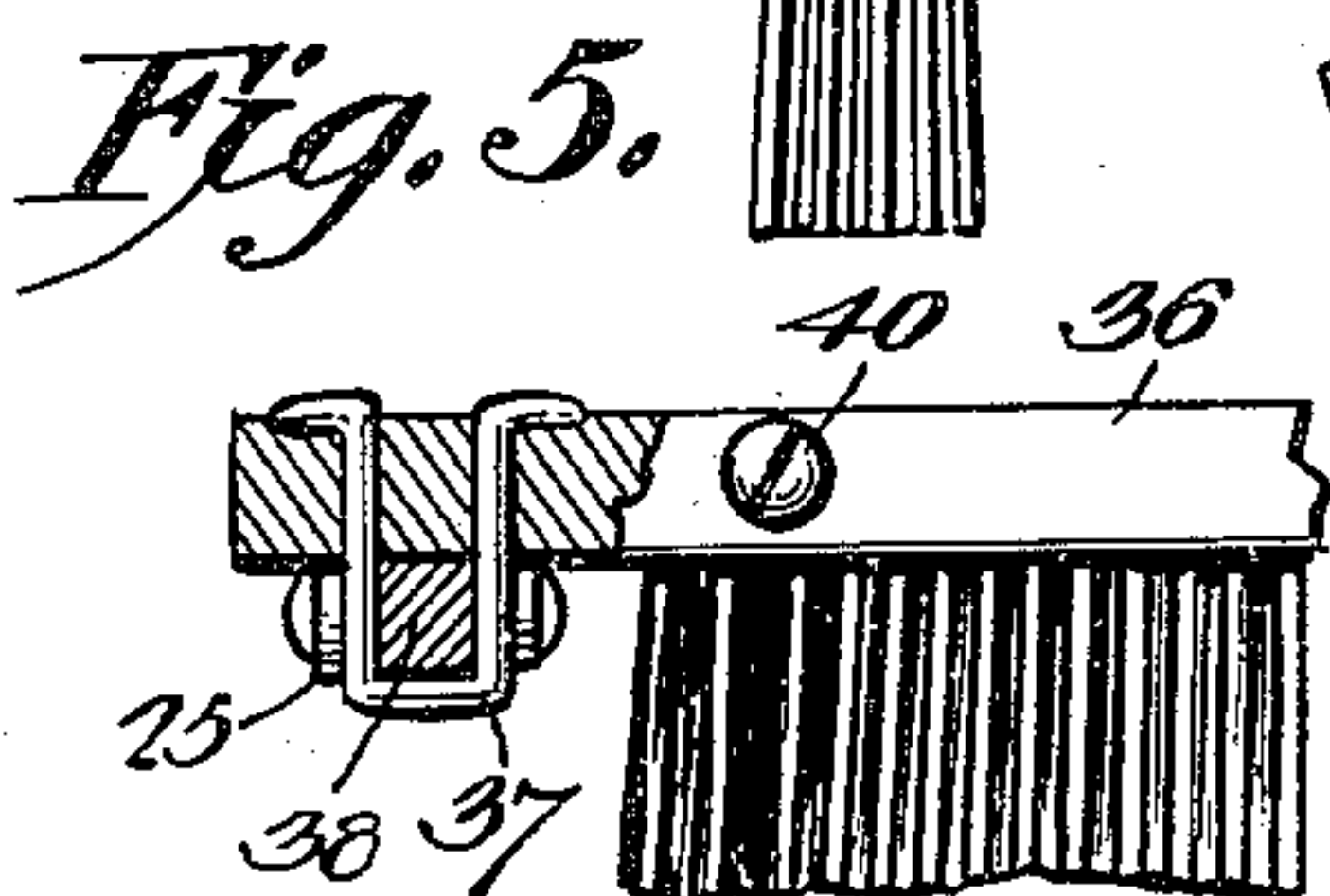
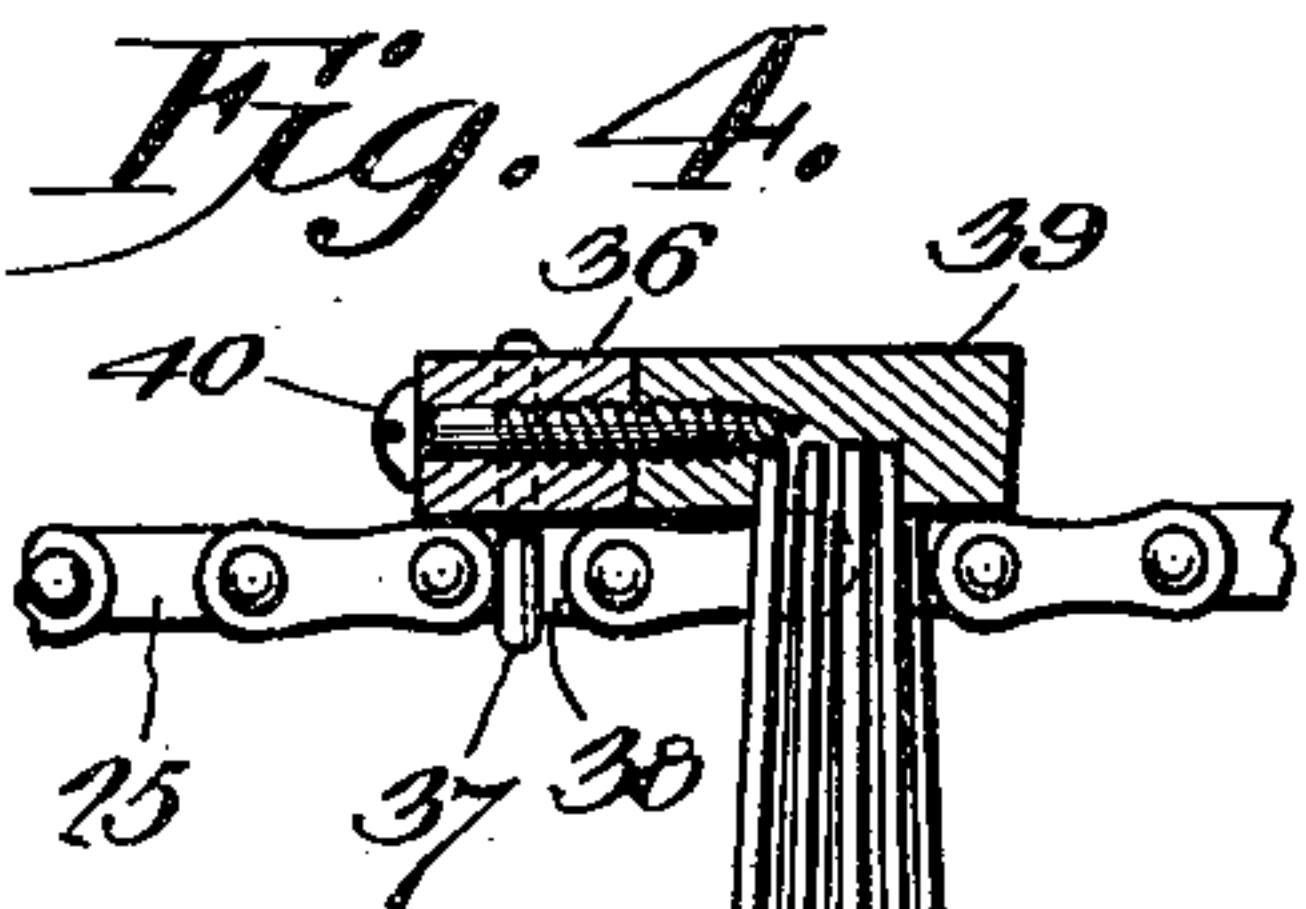
(Application filed Mar. 23, 1900.)

(No Model.)

2 Sheets—Sheet 2.



*Fig. 3.*



Witnesses

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# UNITED STATES PATENT OFFICE.

JAMES C. McCOLLUM, OF LOS ANGELES, CALIFORNIA, ASSIGNOR OF ONE-HALF TO SILVANUS WHITE, OF SAME PLACE.

## HAND STREET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 663,551, dated December 11, 1900.

Application filed March 23, 1900. Serial No. 9,961. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES C. McCOLLUM, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Hand Street-Sweeper, of which the following is a specification.

This invention relates to sweepers in general, and more particularly to the class employed for sweeping streets, the invention having specific reference to hand street-sweepers.

One object of the invention is to provide a simple and effective construction in which the receptacle will be removably held, so that it may be easily dumped, and in which, furthermore, the dirt will be collected and moved to the receptacle with a minimum of effort on the part of the operator.

A further object of the invention is to provide a construction in which the brushes will be bodily movable, so as to maintain engagement with the dirt until it is deposited in the dirt-receptacle.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the complete sweeper in operation. Fig. 2 is a central vertical section of the complete sweeper. Fig. 3 is a perspective view showing the dirt-receptacle detached. Fig. 4 is a detail section through a brush-head and showing the manner of attaching the brushes to their carrying-belt. Fig. 5 is a detail section taken through the carrying-belt and a portion of a cross-bar and showing the manner of attaching the bar to the belt. Fig. 6 is a perspective view showing the frame in which the parts are mounted.

Referring now to the drawings, the sweeper comprises a frame including two parallel sills 10 and 11, which are connected at their rear ends by a cross-piece 12 and which sills and cross-piece have inwardly-directed flanges 13 at their lower edges which form a rest to receive the dirt-receptacle, as will be hereinafter explained.

To the front end of each sill is secured a triangular plate 14 and 15, respectively, these plates lying parallel and having their lower

edges in the same plane with the under faces of the sills.

To the outer faces of the plates 14 and 15 are attached rods or bars 16 and 17, which extend rearwardly in a common plane parallel with the upper edges of the plates and are connected at their rear ends by a handle 18. The bars 16 and 17 lie parallel, as shown, and depending therefrom are uprights 20 and 21, having their lower ends connected with the sills 10 and 11, respectively, the connections of said uprights being about above the cross-piece of the sills.

Upon the flanges 13 and within the inclosure of the frame just described is disposed a receptacle for the dirt, and this receptacle is substantially rectangular and has one end cut slantingly to present a compound curve, as shown, so that what is the under side of the receptacle projects beyond the upper side. This cut-away end of the receptacle is open, except for a short distance from the lower side or bottom of the receptacle, this portion being covered by a plate 24, as shown, and which forms a scoop or scraper for the apparatus.

When the receptacle is in place in the frame, it fits snugly between the plates 14 and 15, so that the dirt will be prevented from passing laterally from the plate 24 and will be forced rearwardly and upwardly into the receptacle. In order to thus engage the dirt and force it over the plate 24, a series of bodily-movable brushes are provided. These brushes are mounted upon parallel belts in the form of chains 25 and 26, which are mounted upon sprockets 27, 28, 29, and 30. The sprockets 27 and 28 are fixed upon a shaft 31, which is journaled in bearings 32 in the plates 14 and 15, adjacent the upper corners thereof, while the sprockets 29 and 30 are fixed upon a shaft 33, which is journaled in slots 34 in the upper edges of the plates 14 and 15 and adjacent their forward ends. This arrangement of the shaft 33 permits the shaft to rise and fall slightly under different conditions and permits the ready removal of the shaft.

Upon the belts 25 and 26 are mounted cross-bars 36, these cross-bars being mutually parallel and connecting corresponding points of the chains. The cross-bars are attached to



the chains at each end through the medium of a staple 37, which is passed upwardly to inclose a link 38 of the chain and then through the cross-bar, the extremities of the staple being clenched, as shown in Fig. 5 of the drawings. The brushes employed are of the usual style, comprising wooden heads 39, in which are mounted stiff bristles which have a combined brushing and scraping action, and these brushes are attached to the cross-bars by passing screws 40 transversely through the bars and into the sides of the heads, as shown in Fig. 4 of the drawings. In the present instance there are shown three brushes, and these brushes are so positioned that when their belts are operated they will engage the ground in advance of the plate 24 and will then move bodily over the plate to scrape and brush the dirt upwardly and over the edge of the plate into the receptacle.

To provide for operating the belts to move the brushes, the shaft 31 has an additional sprocket 41 at one end exteriorly of the plate 15, and with this sprocket is engaged a chain 42, which is carried by a sprocket 43 upon a crank-shaft 45, which is journaled in the bars 16 and 17. The crank-shaft is provided with a crank 46 for rotating it.

With this construction the apparatus is moved with the lower end of the plate 24 against the dirt, so that the dirt is scooped up on the plate, after which the crank 46 is operated to move the brushes in their orbit and engage the dirt to move it over the upper edge of the plate. When the receptacle has been filled, it is removed from the frame and may be immediately dumped and returned, or a second receptacle may be substituted for it. To facilitate application and removal of the receptacle, a handle 48 is secured to the upper side or top 23 thereof.

It will be of course understood that in practice various modifications of the structure may be made and that any suitable propor-

tions and materials may be used without departing from the spirit of the invention.

In order to support the rear portion of the apparatus, stub-shafts 50 are secured to the uprights 20 and 21 and on these shafts are journaled supporting-wheels 52.

What is claimed is—

1. A sweeper comprising a frame, a receptacle removably mounted in the frame and having its forward portion tapered to form a scoop for engagement with the ground, parallel shafts journaled in the frame above the scoop, sprockets on the shafts, chains on the sprockets, brushes carried by the chains for bodily movement over the scoop, and means for rotating the sprockets to operate the brushes.

2. A sweeper comprising a frame, a receptacle mounted in the frame, sprockets mounted in the frame, chains engaged with the sprockets, slats disposed transversely of the chains and attached thereto, staples passed around the chains and engaged with the slats, and brushes having their heads attached to the slats and adapted for movement therewith bodily in operative relation to the receptacle.

3. A sweeper comprising a frame including spaced plates and sills connected therewith, a handle connected with the plates and sills, a receptacle having a tapered end disposed between the plates, a scoop carried by the tapered end and disposed transversely between the plates, and a brushing apparatus mounted in the frame and adapted for bodily movement over the scoop-plate to move the dirt thereover and into the receptacle.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES C. McCOLLUM.

Witnesses:

J. W. ARNOLD,  
D. P. McCOLLUM.