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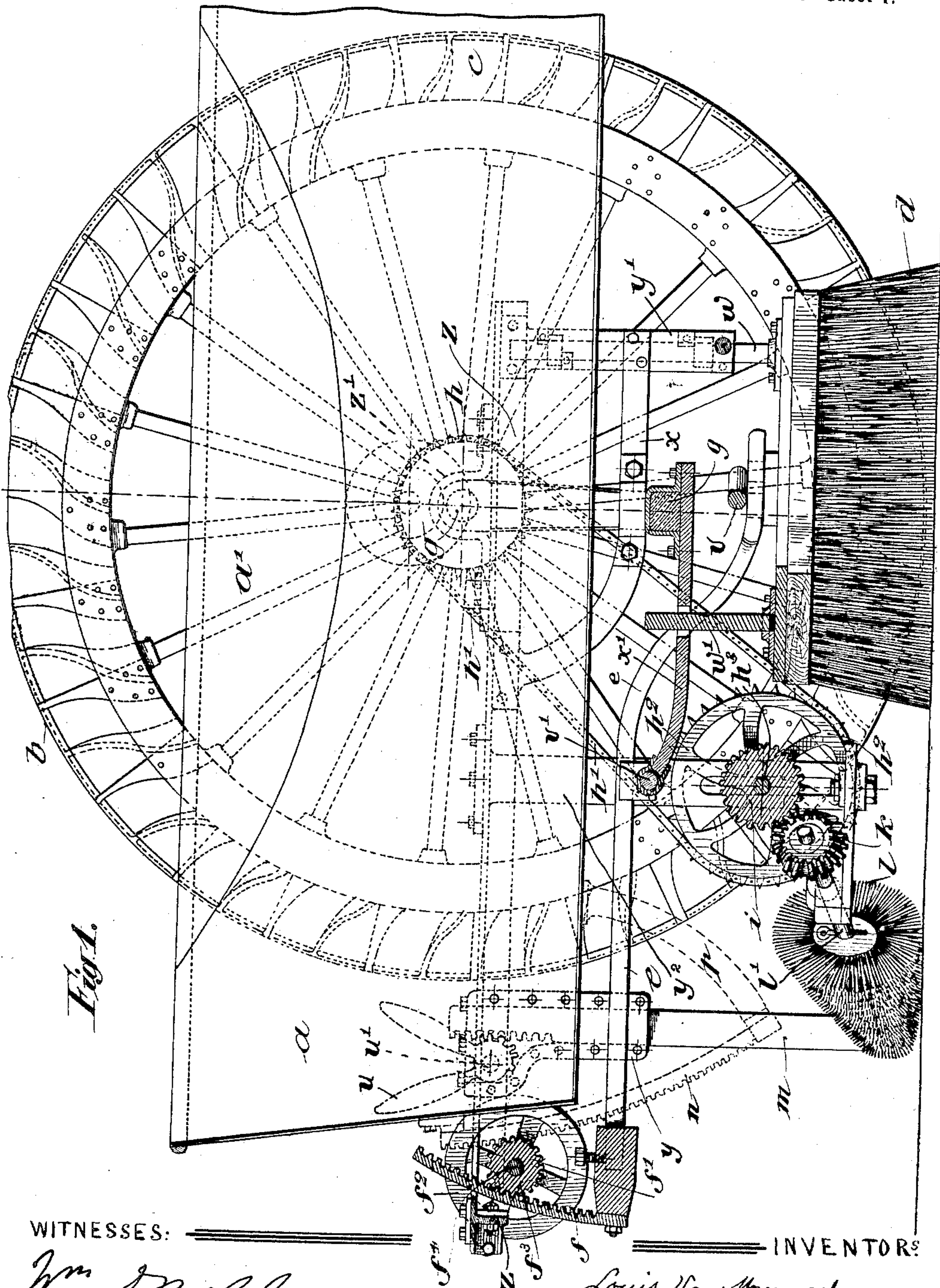
Patented July 30, 1901.

L. VAN WESEMAEL & F. S'JONGERS.  
ROAD SWEEPING AND COLLECTING CART.

(No Model.)

(Application filed July 18, 1900.)

3 Sheets—Sheet 1.



WITNESSES:

*Wm. S. Bell.*  
*James B. Newton.*

INVENTORS:

*Louis Van Wesemael,*  
*and Francisus S'Jongers,*  
*by Garbner & Steward, attys.*



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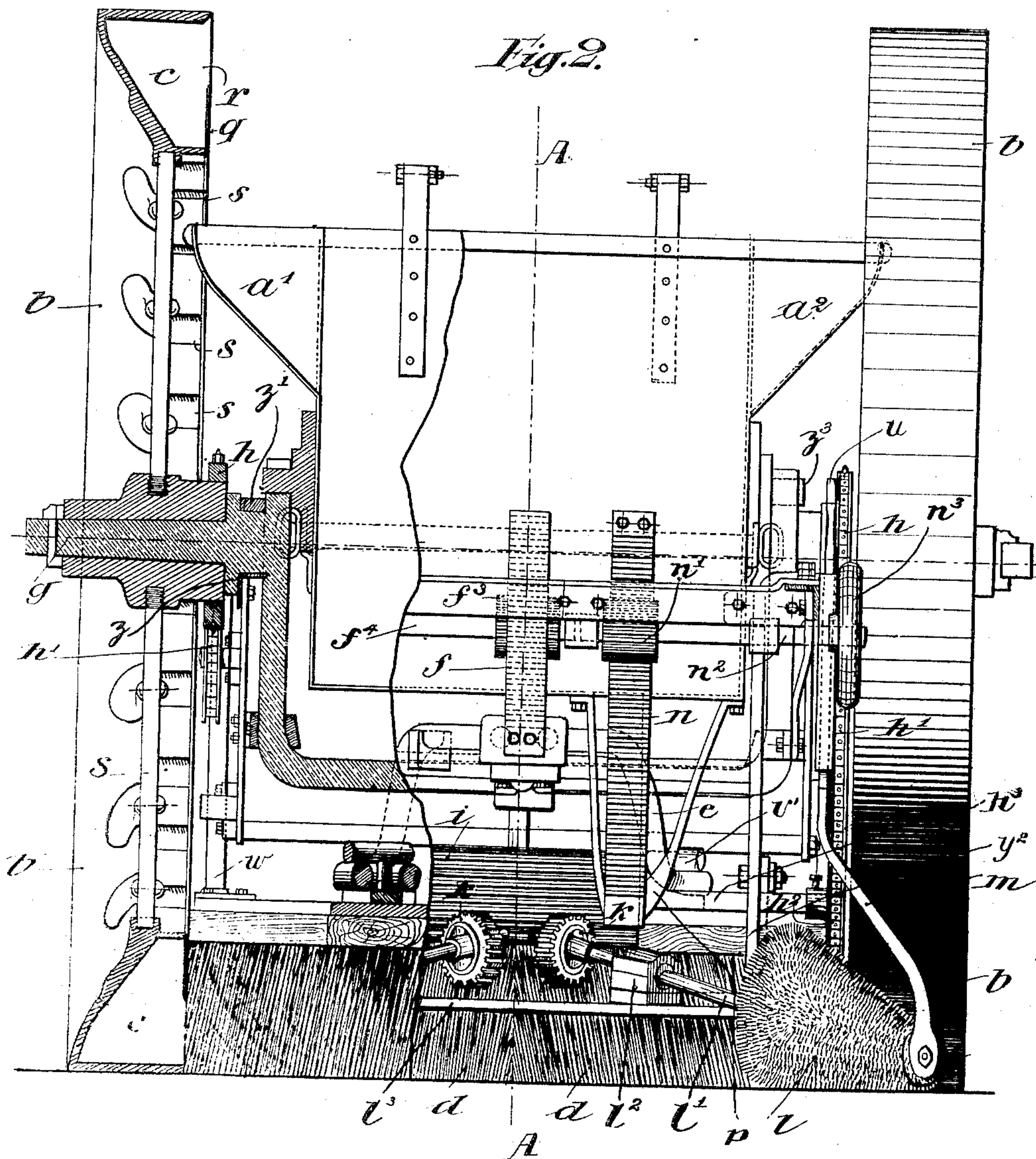
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WITNESSES:

Wm. Drell  
James P. Newton.

INVENTORS:

Louis Van Wesemael,  
and Franciscus S'jongers  
by Garbner Stewart, Atty.

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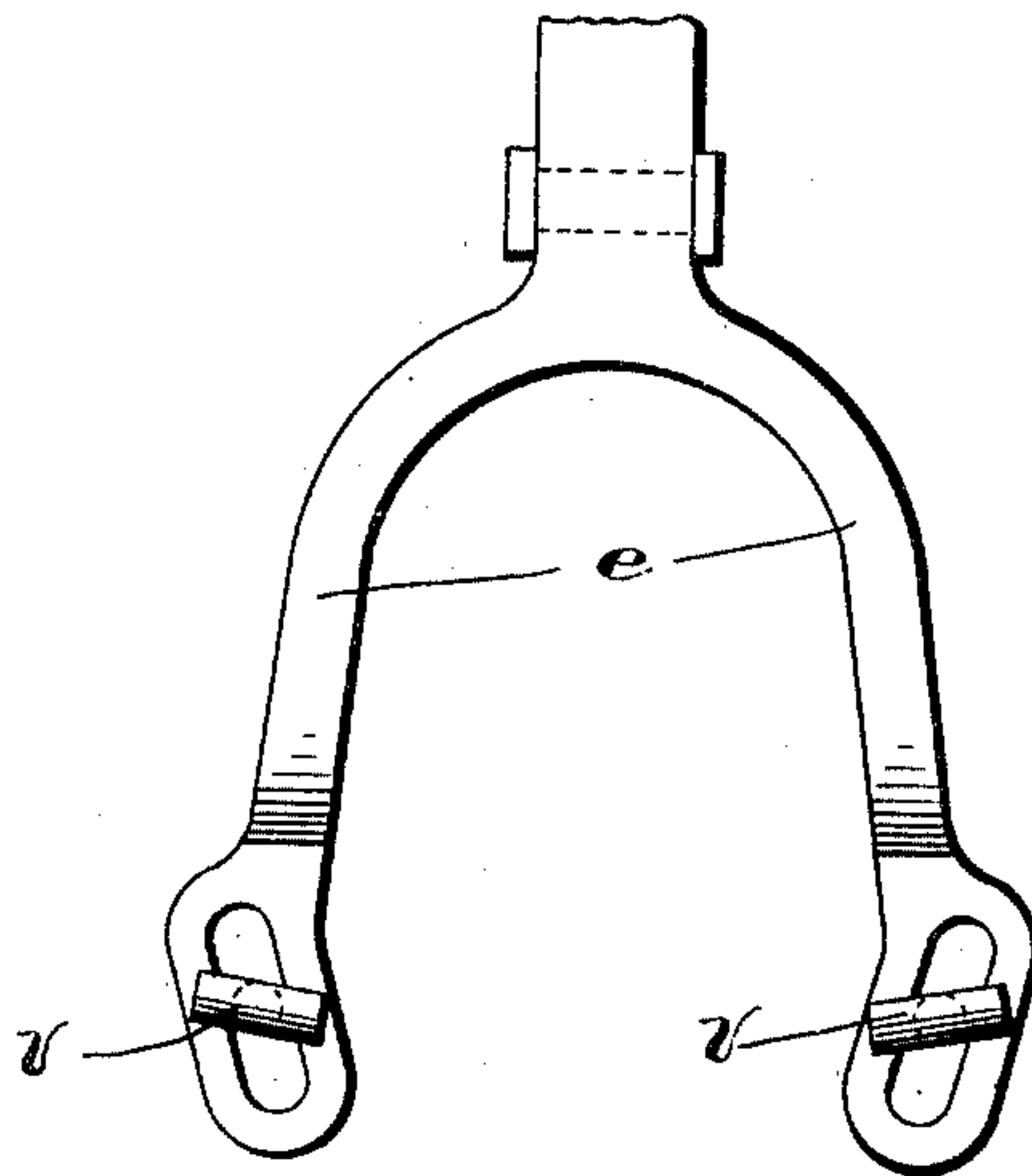
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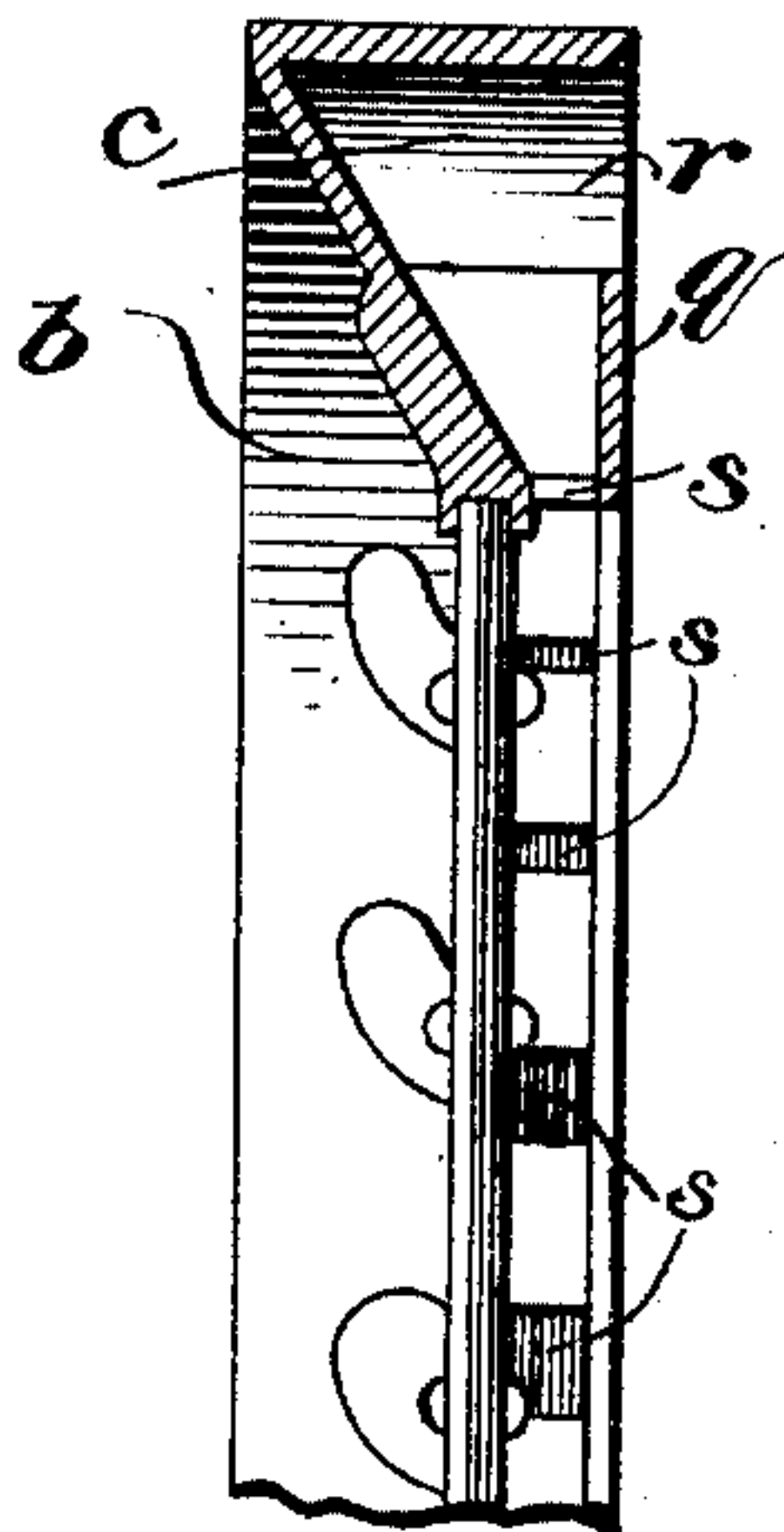
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3 Sheets—Sheet 3.

*Fig. 3.*



*Fig. 4.*



WITNESSES.

*H. W. Walmley.*

*James W. Bevan*

INVENTORS

*Louis Van Waesemael,*  
*Franciscus S'Jongers,*

*by Gartner & Otterward*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

LOUIS VAN WESEMAEL AND FRANCISCUS S'JONGERS, OF ANTWERP, BELGIUM.

## ROAD-SWEEPING AND COLLECTING CART.

SPECIFICATION forming part of Letters Patent No. 679,488, dated July 30, 1901.

Application filed July 18, 1900. Serial No. 24,054. (No model.)

*To all whom it may concern:*

Be it known that we, LOUIS VAN WESEMAEL and FRANCISCUS S'JONGERS, manufacturers, citizens of Belgium, residing at 24 Rue Reyn-

5 ders, Antwerp, in the Kingdom of Belgium, have invented certain new and useful Improvements in Road-Sweeping and Collecting Carts, of which the following is a clear description.

10 This invention relates to street-cleaning apparatus, and it has reference particularly to that kind of apparatus of this nature in which there is provided, in combination with sweeping means, means for collecting the refuse.

15 The invention consists in the improved sweeping and collecting machine constructed substantially as will be hereinafter described, and finally embodied in the clauses of the claim.

20 Referring to the accompanying drawings, wherein corresponding letters of reference designate like parts, Figure 1 is a side view of our improved machine, portions thereof being shown in longitudinal central vertical section. Fig. 2 is a front view of said machine, a portion thereof appearing in section, such section being taken vertically in the plane of the axle of the machine; and Figs. 3 and 4 are detail views respectively illustrating a portion of a fork-shaped lever for adjusting certain brushes of the machine and in section a portion of one of the wheels of the vehicle.

30 In said drawings, *a* designates the body of the machine, the same constituting a refuse-collecting receptacle.

35 *g* denotes the axle of the vehicle, the main portion thereof being substantially U-shaped, while the extremities thereof extend laterally in opposite directions, forming the spindles for the wheels *b* of the machine. The body is supported upon the axle at each juncture of its U-shaped portion with a spindle portion thereof by trunnions *z*<sup>3</sup>.

40 *z* designates a metallic framework, which consists of two side portions and an end portion connecting said side portions at one end, said framework being suspended from the spindle portions of the axle by bow-pieces *z*<sup>1</sup>, which are bolted or otherwise secured to the framework. Extending downwardly from the framework are guides *y* *y*<sup>1</sup> and supports

*y*<sup>2</sup>, the rear guide *y*<sup>1</sup> and the supports *y*<sup>2</sup> being firmly secured to the framework and the axle, respectively, by braces *xx*<sup>1</sup>, respectively. It should be remarked that the brace *x* is secured to and rests upon the axle, which thus at an additional point offers support for the framework. 55

*d* designates a pair of brushes which are arranged convergently, approximately meeting at one end, the apex of the angle thus formed being of course disposed adjacent the forward portion of the machine. These brushes are designed to sweep between the wheels *b* and to throw the refuse with which they meet outwardly. They carry vertical uprights *w* *w*<sup>1</sup>, the upright *w* being movable in the guides *y*<sup>1</sup>, while the upright *w*<sup>1</sup> penetrates the brace *x*<sup>1</sup>, and thus keeps the forward ends of the brushes against undue lateral movement. 60 65 70

*e* designates a bifurcated lever, which engages at its rear end hooks *v*, carried by the brushes *d*, while its forward end is provided with a curved rack *f*, whereby it is raised and lowered, the lever being fulcrumed upon a bar *v*<sup>1</sup>, to which the brace *x*<sup>1</sup> is connected and which connects the supports *y*<sup>2</sup>. In order to actuate the rack *f*, a pinion *f*<sup>3</sup>, carried upon a revoluble shaft *f*<sup>4</sup>, which is suitably journaled in the framework, is provided, engaging said rack. At the outer end of this shaft a hand-wheel *f*<sup>2</sup> for turning it is mounted. 75 80

*n* denotes another rack, which is secured to the forward end of the box or body *a* of the machine and by braces *p*, the rack being curved in an arc whose center is the axis of movement of the box. This rack engages a pinion *n*<sup>1</sup>, which is mounted upon another revoluble shaft journaled in the framework in alinement with the shaft *f*<sup>4</sup> and carrying a hand-wheel *n*<sup>3</sup> for operating it at its outer end. By this means the box may be tilted to discharge its contents. 85 90

In the supports *y*<sup>2</sup> are journaled sprocket-wheels *h*<sup>2</sup>, over which pass sprocket-chains *h*<sup>1</sup>, which also pass over other sprocket-wheels *h*, mounted on the hubs of the wheels *b*. On the shaft *h*<sup>3</sup>, which carries the sprocket-wheels *h*<sup>2</sup>, is mounted a fluted roller *i*, with which engage pinions *k* on the inner ends of revoluble shafts *l* of rotary brushes *l*, said shafts being journaled in bearing-blocks *l*<sup>2</sup>, 95 100



which are carried by a bar  $l^3$ , connecting the lower ends of the supports  $y^2$ , and said shafts being sustained at their outer ends by supports  $m$ , which are formed with rack-teeth at their upper ends and are movable in the guides  $y$ . In order to adjust the brushes  $l$ , a handle  $u$ , pivotally mounted in the framework and having a toothed segmental portion  $u'$ , which engages the rack of each support  $m$ , is provided. The brushes  $l$  are designed to sweep the refuse inwardly out of the path of the wheels and into the path of the brushes  $d$ .

Each wheel  $b$  has considerable breadth, and its peripheral portion is formed with a series of chambers or buckets  $c$ , whose outer walls incline from the tread of the wheel inwardly. The bottom of each bucket is formed with a discharge-opening  $s$ , and its inner wall  $q$  does not extend clear to the tread of the wheel, but stops short of the same, thus forming an opening  $r$  adjacent the tread, through which and into the buckets the brushes  $d$  may throw the refuse. As the refuse is gathered by the buckets and when the latter have assumed their elevated positions as the wheels revolve the buckets are successively brought over chutes  $a'$   $a^2$ , which project outwardly from the upper portions of the box or body portion well under the discharge-openings  $s$  of said chutes. By having the outer wall of each bucket inclined, as above described, the refuse in being discharged from the bucket is given an inward direction, which, with the chute  $a'$  or  $a^2$ , insures the refuse being deposited in the box.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a street-sweeping machine, the combination, with the frame, of guides extending downwardly from said frame, brushes, uprights carried by said brushes and movable in said guides, a lever fulcrumed in said frame and engaging said brushes at one end, a receptacle carried by said frame, means for conveying the refuse swept by said brushes to said receptacle, shafts journaled in said frame,

a rack-and-pinion connection between said receptacle and one of said shafts, and another rack-and-pinion connection between the other shaft and said lever, substantially as described.

2. In a street-sweeping machine, the combination, with the frame, of guides extending downwardly from said frame, brushes, uprights carried by said brushes and movable in said guides, a lever fulcrumed in said frame and engaging said brushes at one end, a receptacle carried by said frame, aligned shafts journaled in said frame, pinions mounted on the adjacent ends of said shafts, hand-wheels mounted on the outer ends of said shafts, and racks engaging said pinions, one of said racks being carried by the receptacle and the other being carried by the lever, substantially as described.

3. In a street-sweeping machine, the combination, with the frame, of guides extending downwardly from said frame, brushes, uprights carried by said brushes and movable in said guides, a lever fulcrumed in said frame and engaging said brushes at one end, a receptacle carried by said frame, aligned shafts journaled in said frame, pinions mounted on the adjacent ends of said shafts, hand-wheels mounted on the outer ends of said shafts, racks engaging said pinions, one of said racks being carried by the receptacle and the other being carried by the lever, rotary brushes arranged obliquely in front of said first-named brushes, another shaft journaled in said frame, a sprocket-and-chain connection between said wheels and said last-named shaft, and gearing connecting said obliquely-disposed brushes and said last-named shaft, substantially as described.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

LOUIS VAN WESEMAEL.  
FRANCISCUS S'JONGERS.

Witnesses:

P. HOFKENS,  
FEL. JANSSEN.