

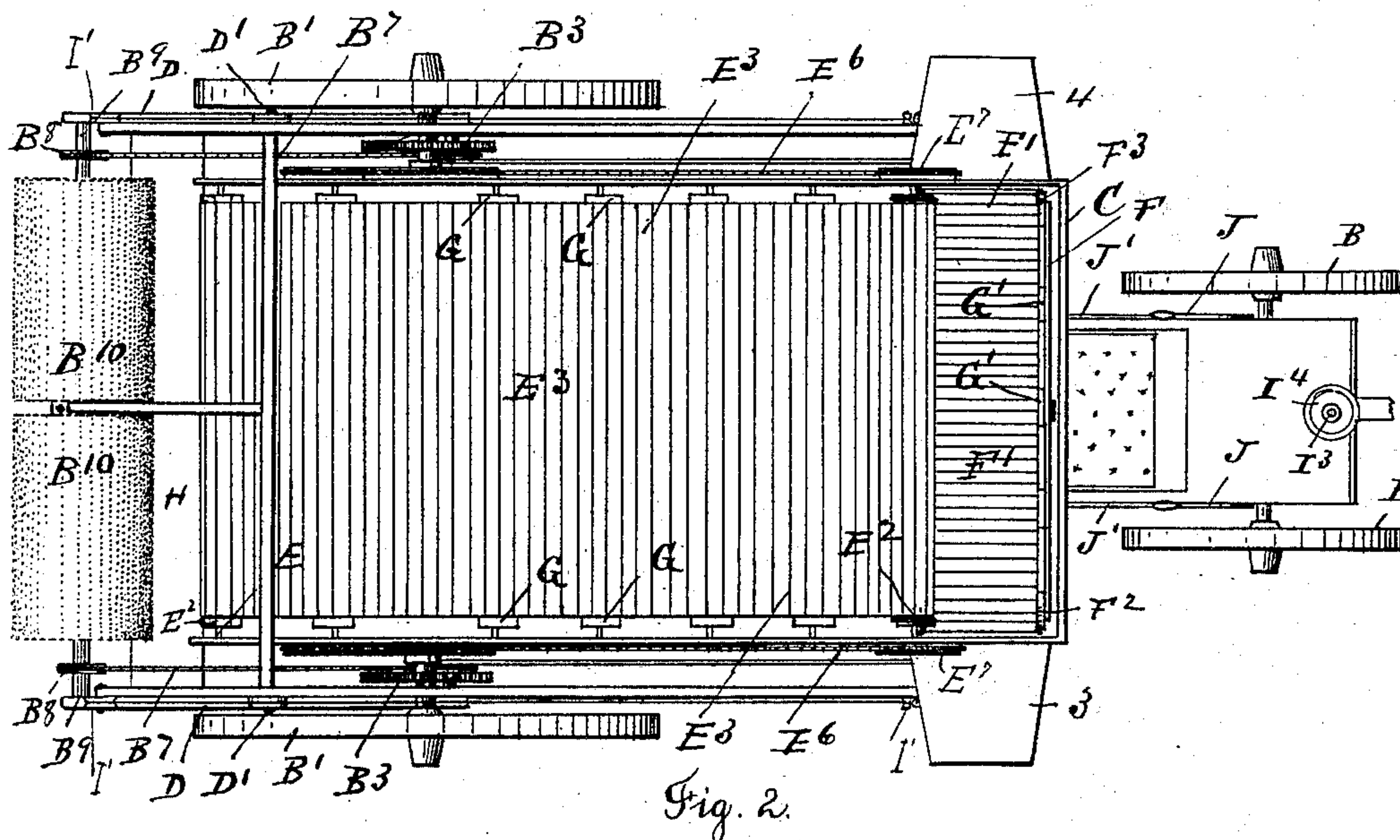
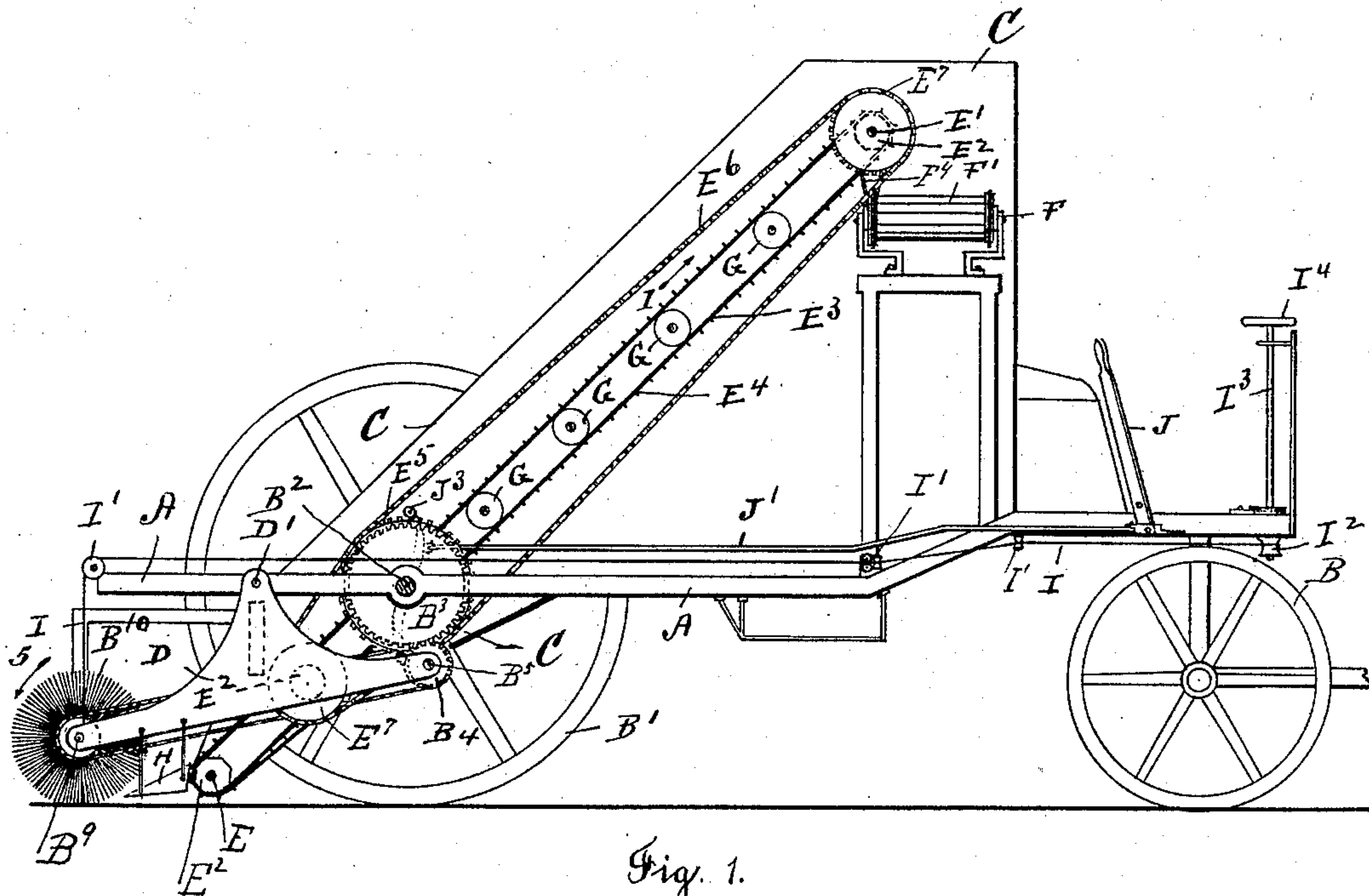
(No Model.)

2 Sheets—Sheet 1.

O. A. LOGAN & F. W. WRIGHT.  
STREET SWEEPER.

No. 580,603.

Patented Apr. 13, 1897.



Witnesses

Allie C. Whiting  
Emma Hester.

Inventors

Oscar A. Logan.  
Flint W. Wright.

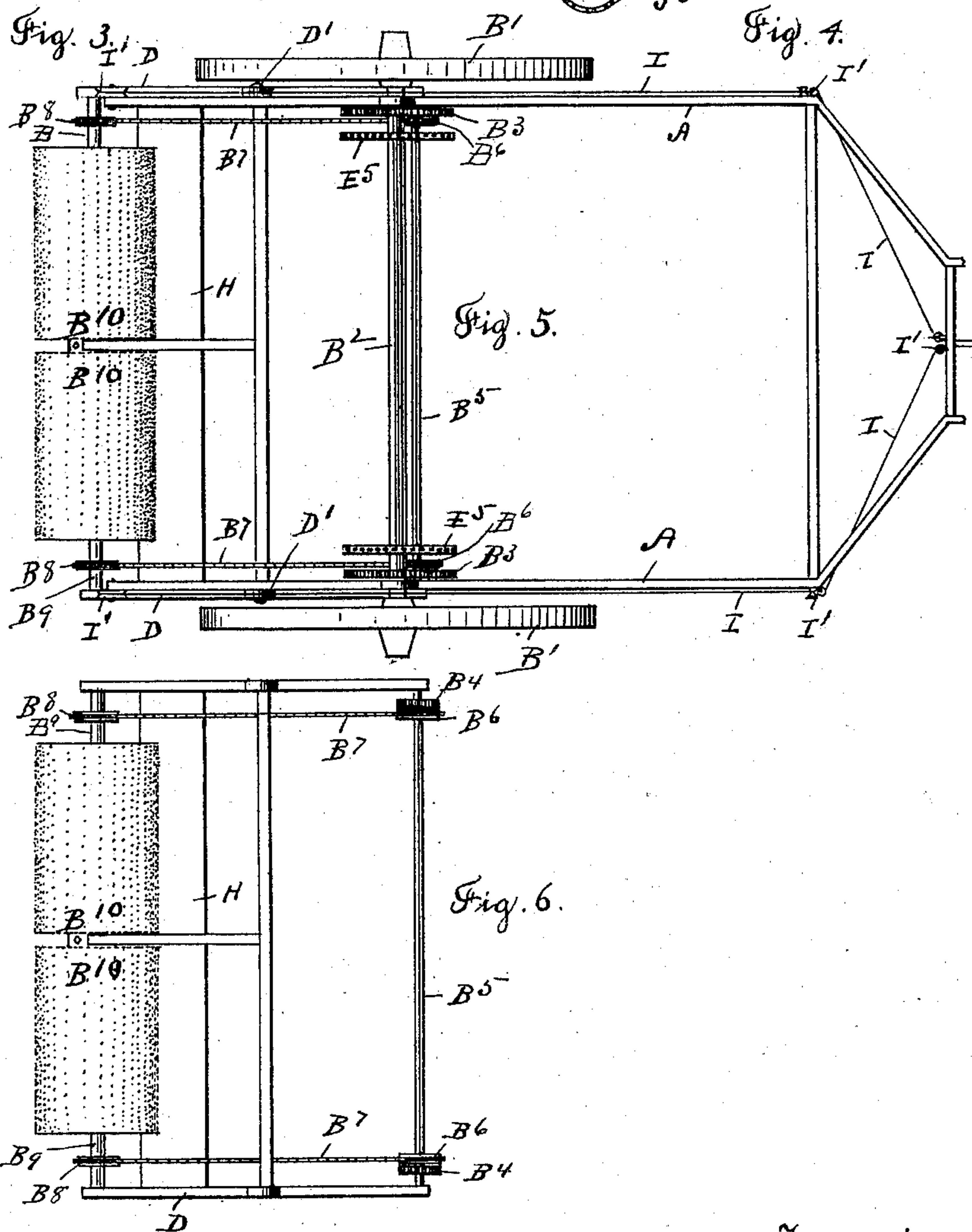
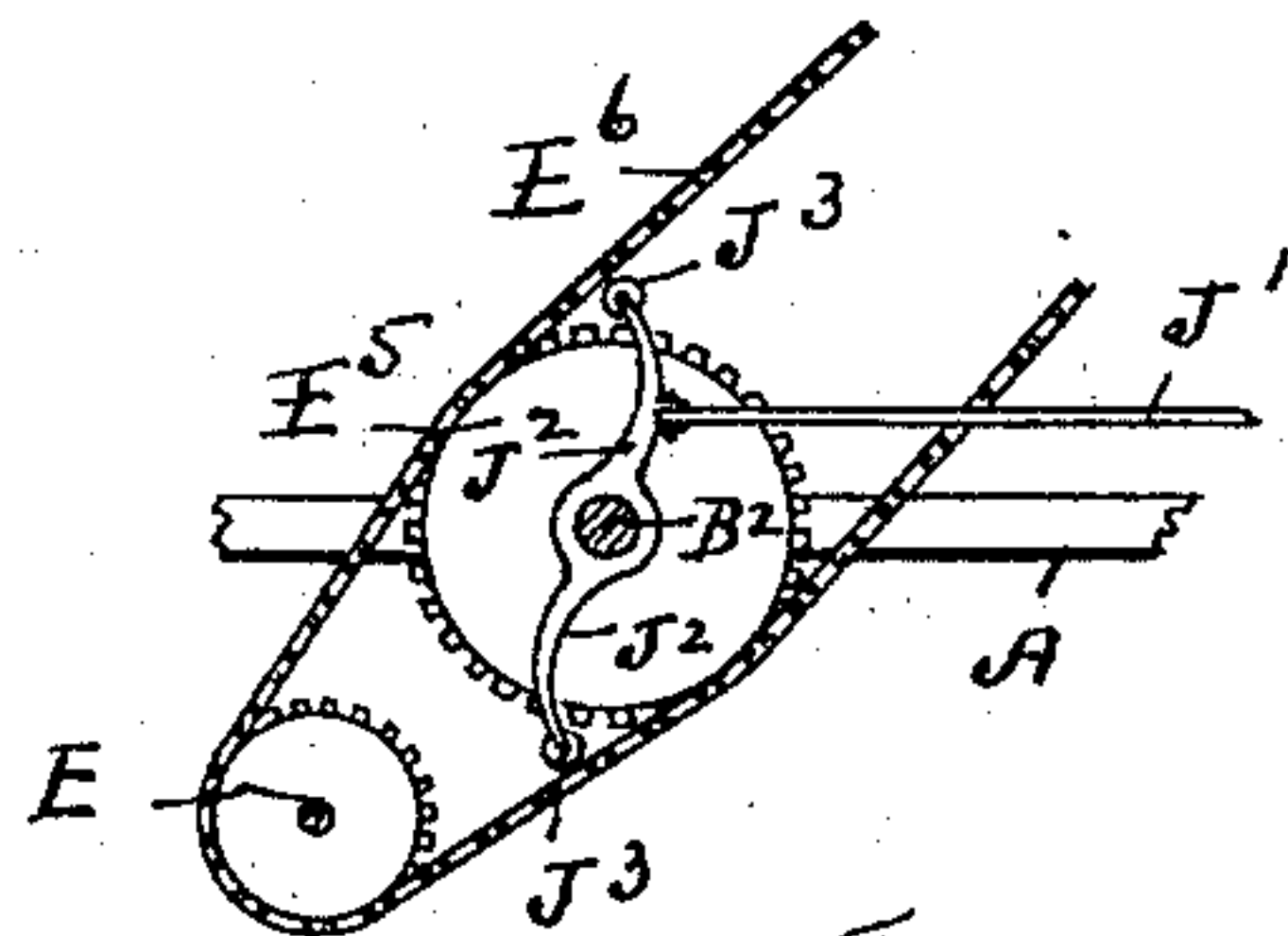
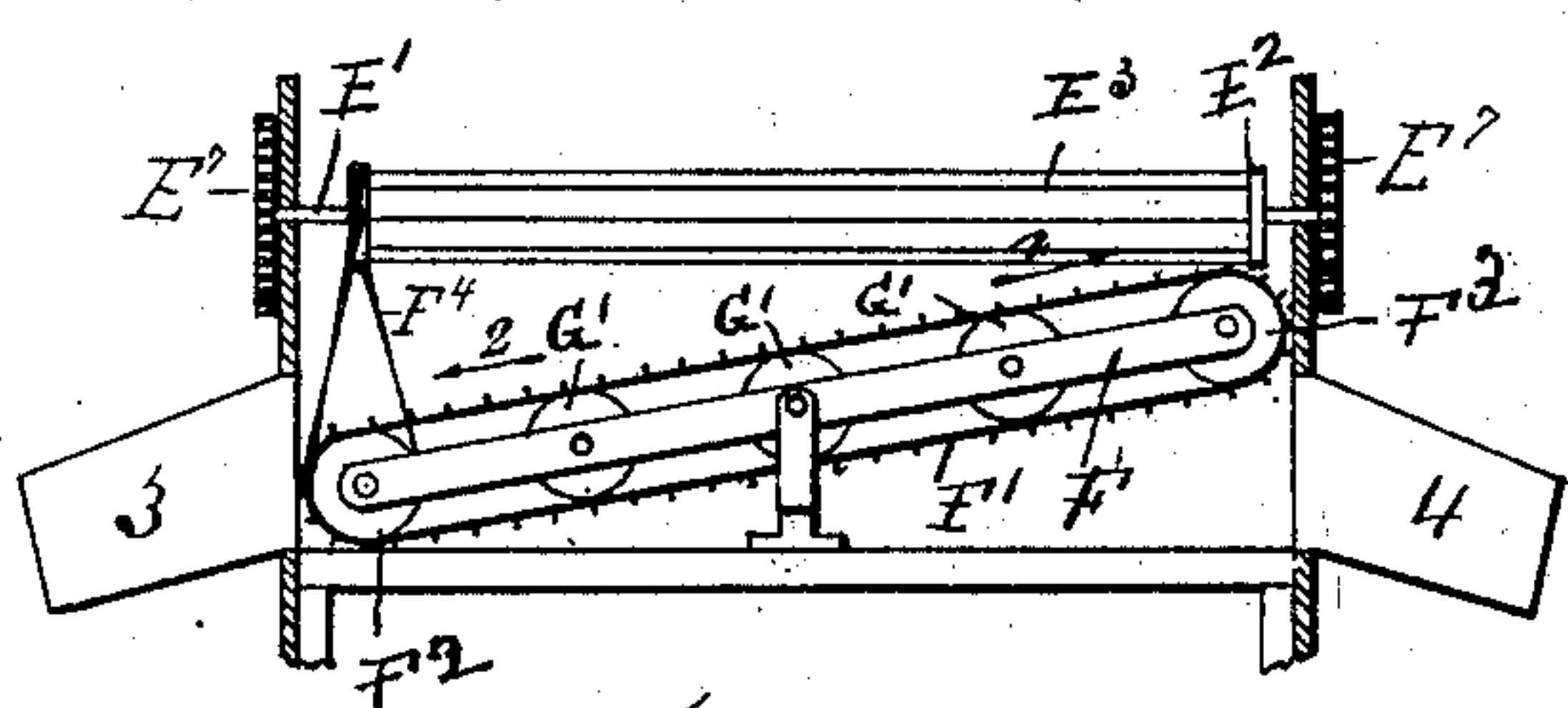
By their Attorney.

Refus B. Fowler.

2 Sheets—Sheet 2.

No. 580,603.

Patented Apr. 13, 1897.



Witnesses  
Allie C. Whiting.  
Emma Hester.

Inventors

Oscar A. Logan.  
Elint W. Wright.

By their Attorney,  
 Rufus B. Fowler



# UNITED STATES PATENT OFFICE.

OSCAR A. LOGAN, OF NEW YORK, AND FLINT W. WRIGHT, OF BROOKLYN,  
NEW YORK.

## STREET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 580,603, dated April 13, 1897.

Application filed May 11, 1892. Serial No. 432,562. (No model.)

*To all whom it may concern:*

Be it known that we, OSCAR A. LOGAN, residing in the city of New York, in the county of New York, and FLINT W. WRIGHT, residing at Brooklyn, in the county of Kings, State of New York, citizens of the United States, have invented a new and useful Improvement in Street-Sweepers, of which the following is a specification, reference being had to the accompanying drawings, forming a part of the same, and in which—

Figure 1 shows a side elevation of the machine with one side removed in order to disclose the endless elevator. Fig. 2 is a top view of the machine. Fig. 3 is an end view of the elevator-belt and showing the transverse endless carrier-belt by which the sweepings are delivered upon either side of the machine. Fig. 4 is a detached view of the driving sprocket-wheel and a portion of the chain by which the elevator-belt is actuated and also showing the device by which the chain is disengaged from the sprocket-wheel. Fig. 5 is a top view of a portion of the supporting framework with the elevator and carrier belts removed; and Fig. 6 is a top view of the tilting frame, by which the revolving brushes are carried.

Similar letters refer to similar parts in the different figures.

Referring to the accompanying drawings, A denotes the framework forming the wagon-reach, by which the operating mechanism is carried.

B B' are the wagon-wheels, the wheels B' being attached to the axle B<sup>2</sup>.

Upon the frame A is a case C, extending along the sides and across the front and inclosing the elevator and carrier belts, by which the sweepings are carried from the revolving brush and delivered at either side of the machine.

To the revolving axle B<sup>2</sup> are attached gear-wheels B<sup>3</sup>, engaging pinions B<sup>4</sup>, attached to a shaft B<sup>5</sup>, journaled in a tilting frame D, which is pivoted at D' to the framework A.

To the shaft B<sup>5</sup> are attached sprocket-wheels B<sup>6</sup>, which are connected by endless chains B<sup>7</sup> with the sprocket-wheels B<sup>8</sup> upon shafts B<sup>9</sup> B<sup>9</sup>. The shafts B<sup>9</sup> B<sup>9</sup> are in alinement and are car-

ried by the tilting frame D. Upon the shafts B<sup>9</sup> B<sup>9</sup> are placed the cylindrical brushes B<sup>10</sup> B<sup>10</sup>, forming substantially a single brush with a slight gap in the center, but each of the brushes B<sup>10</sup> being capable of an independent rotation—as, for example, when the sweeper is being turned in a circular track and one of the driving-wheels B' travels faster than the other. The inner ends of the shafts B<sup>9</sup> B<sup>9</sup> are supported in journal-bearings held by the frame of the machine, so that each shaft is capable of an independent rotation.

In the sides of the case C are journaled shafts E and E', to which are attached rolls E<sup>2</sup>, carrying an endless elevator-belt E<sup>3</sup>, provided with projecting flanges or buckets E<sup>4</sup>, by which the sweepings are raised by the movement of the belt in the direction of the arrow 1.

The axle B<sup>2</sup> is provided with sprocket-wheels E<sup>5</sup>, operatively connected by chains E<sup>6</sup> with sprocket-wheels E<sup>7</sup> on transverse shafts supporting an elevator-belt E<sup>3</sup>, said transverse shafts being placed on opposite sides of the sprocket-wheels E<sup>5</sup> and parallel with the axis, by which motion is imparted to the elevator-belt E<sup>3</sup> by the rotation of the axle B<sup>2</sup>.

Supported upon a tilting frame F and directly beneath the upper and forward end of the elevator-belt E<sup>3</sup> is a carrier-belt F', supported by and carried upon rolls F<sup>2</sup> F<sup>3</sup>, and which is driven by a belt connection F<sup>4</sup> from the upper shaft E', causing the carrier-belt to be moved in the direction of the arrow 2 and delivering the sweepings to the spout 3 at the side of the machine.

When it is desired to deliver the sweepings at the opposite side of the machine, the frame F is tilted, raising the roll F<sup>2</sup> and depressing the roll F<sup>3</sup>. The belt F<sup>4</sup> is then transferred to the roll F<sup>3</sup> and to the opposite end of the roll upon the shaft E', causing the carrier-belt F' to move in the direction of the arrow 3, Fig. 3, and deliver the sweepings through the spout 4.

The elevator and carrier belts E<sup>3</sup> and F' are prevented from sagging when loaded by the transverse rolls G and G', respectively.

Suspended from the tilting frame D is a platform H, extending transversely across the



machine and filling the space between the lower end of the elevator-belt  $E^3$  and the revolving brush  $B^{10}$ .

To the rear end of the tilting frame D are 5 attached cords or chains I, which pass over guiding-pulleys  $I'$  and are attached to a drum  $I^2$  upon a shaft  $I^3$ , carrying a hand-wheel  $I^4$ , by which the cords I can be wound upon the drum  $I^2$ , lifting the rear end of the tilting 10 frame D and depressing the forward end, by which the pinions  $B^4$  are thrown out of engagement with the driving gear-wheels  $B^3$  and the motion of the brushes stopped.

Pivoted upon the frame A are the levers J, 15 to the lower ends of which are pivoted rods  $J'$ , connecting the levers J with the arms  $J^2$ , which are pivoted upon the axle  $B^2$  and carry in their ends the rolls  $J^3$ , arranged to be brought beneath the chains  $E^6$ , lifting them 20 out of engagement with the sprocket-wheels  $E^5$ , thereby disconnecting the shafts E E' from the axle  $B^2$  and stopping the motion of the elevator and carrier belts.

As the machine is drawn along the street 25 the brush  $B^{10}$  is rotated in the direction of the arrow 5, causing the sweepings to be thrown

across the platform H upon the lower end of the elevator-belt  $E^3$ , by which they are raised and delivered to the carrier-belt  $F'$ , which when tilted, as shown in Fig. 3, will deliver 30 the sweepings to the side spout 3, from which they may be received into a cart drawn by the side of the machine.

What we claim as our invention, and desire to secure by Letters Patent, is— 35

The combination with a supporting-frame-work of shaft  $B^2$ , sprocket-wheels  $E^5$  carried on said shaft, shafts E and E', an elevator-belt carried by said shafts, chains  $E^6$  connecting 40 said shafts with said sprocket-wheels, arms  $J^2$  pivoted concentrically with said sprocket-wheels and carrying rolls  $J^3$  arranged to be brought beneath the chains  $E^6$  and lift them out of engagement with said sprocket-wheels, substantially as described.

Dated the 2d day of May, 1892.

OSCAR A. LOGAN.  
FLINT W. WRIGHT.

Witnesses:

JAS. E. CARPENTER,  
ALBERT J. APPELL.