

(No Model.)

2 Sheets—Sheet 1.

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

No. 580,603.

Patented Apr. 13, 1897.

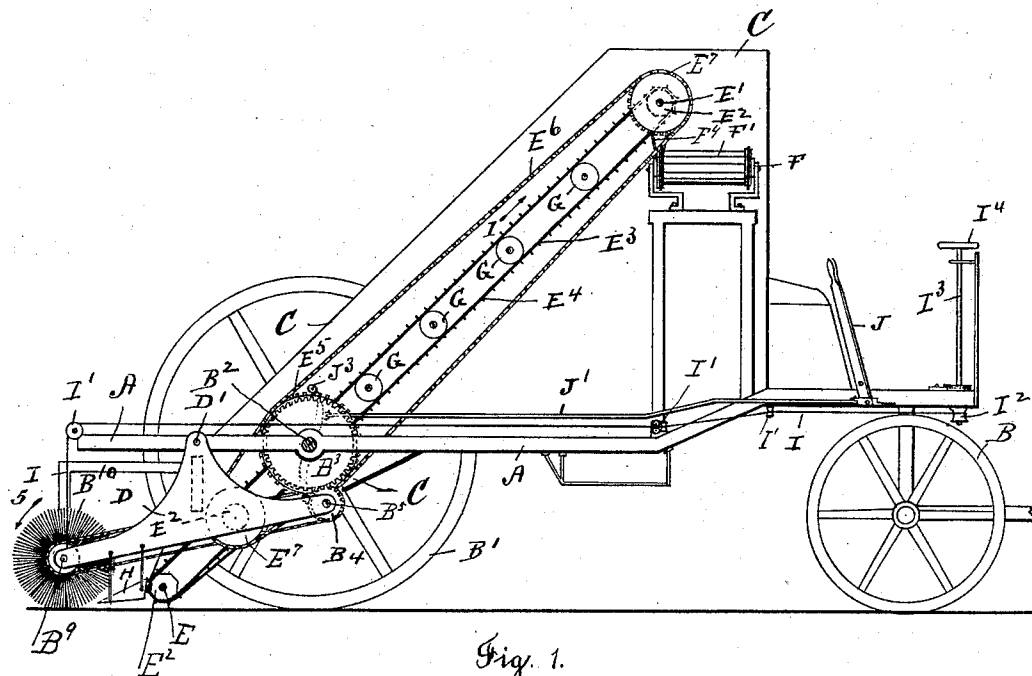


Fig. 1.

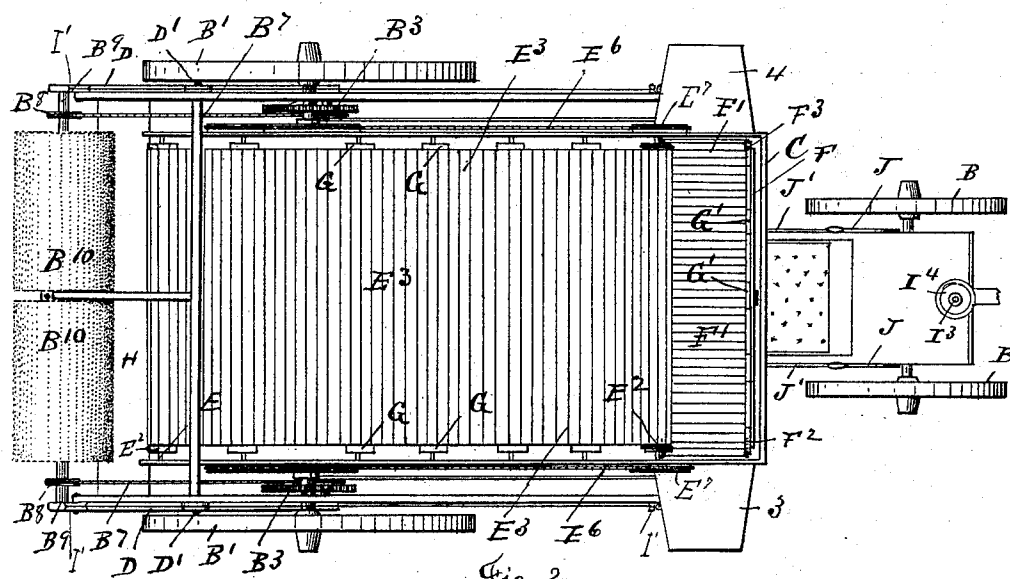


Fig. 2.

Witnesses

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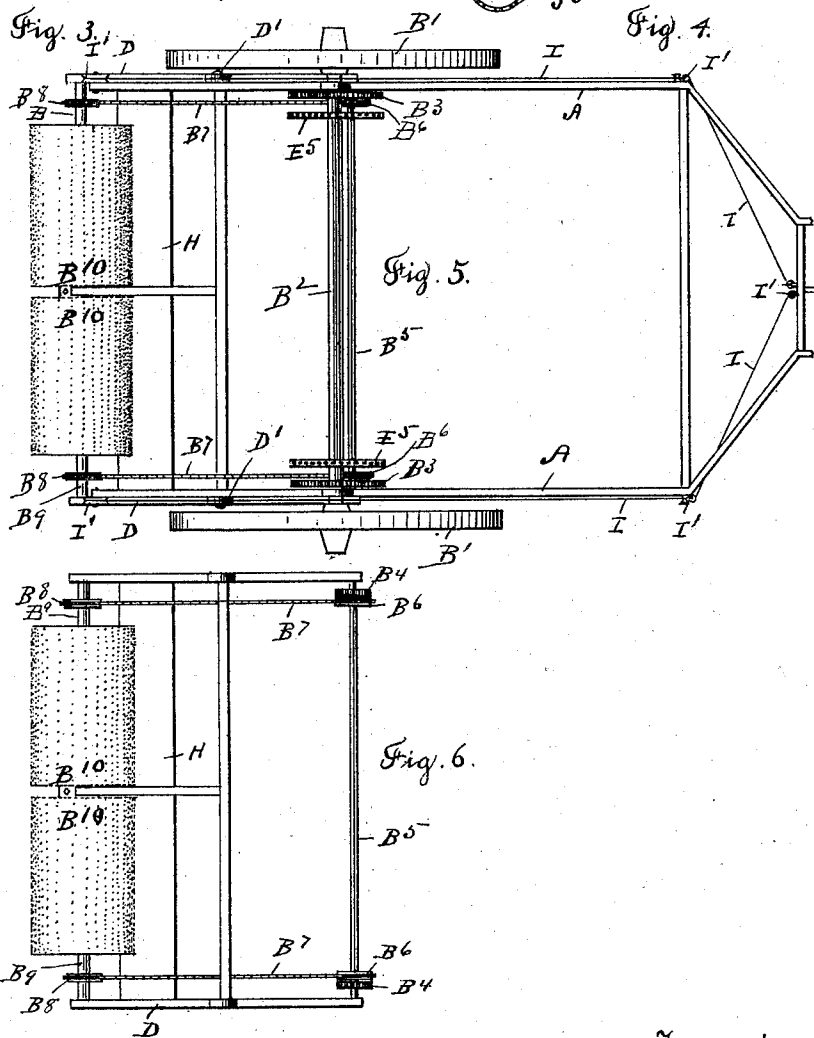
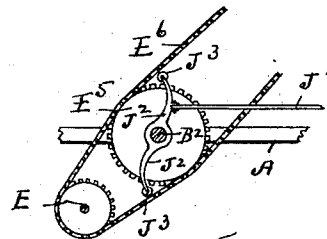
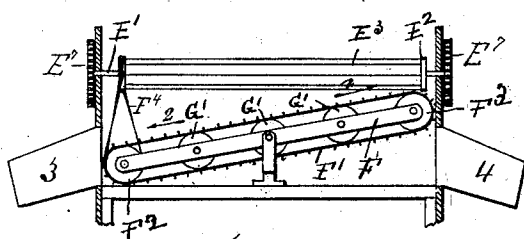
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UNITED STATES PATENT OFFICE.

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 B².

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 B² are attached gear-wheels B³, engaging pinions B⁴, attached to a shaft B⁵, journaled in a tilting frame D, which is pivoted at D' to the framework A.

To the shaft B⁵ are attached sprocket-wheels B⁶, which are connected by endless chains B⁷ with the sprocket-wheels B⁸ upon shafts B⁹ B⁹. The shafts B⁹ B⁹ are in alinement and are car-

ried by the tilting frame D. Upon the shafts B⁹ B⁹ are placed the cylindrical brushes B¹⁰ B¹⁰, forming substantially a single brush with a slight gap in the center, but each of the brushes B¹⁰ 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 B⁹ B⁹ 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 E², carrying an endless elevator-belt E³, provided with projecting flanges or buckets E⁴, by which the sweepings are raised by the movement of the belt in the direction of the arrow 1.

The axle B² is provided with sprocket-wheels E⁵, operatively connected by chains E⁶ with sprocket-wheels E⁷ on transverse shafts supporting an elevator-belt E³, said transverse shafts being placed on opposite sides of the sprocket-wheels E⁵ and parallel with the axis, by which motion is imparted to the elevator-belt E³ by the rotation of the axle B².

Supported upon a tilting frame F and directly beneath the upper and forward end of the elevator-belt E³ is a carrier-belt F', supported by and carried upon rolls F² F³, and which is driven by a belt connection F⁴ 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 F² and depressing the roll F³. The belt F⁴ is then transferred to the roll F³ 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 E³ 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 E³ and the revolving brush B¹⁰.

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 ² upon a shaft I³, carrying a hand-wheel I⁴, by which the cords I can be wound upon the drum I², lifting the rear end of the tilting 10 frame D and depressing the forward end, by which the pinions B⁴ are thrown out of engagement with the driving gear-wheels B³ 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 J², which are pivoted upon the axle B² and carry in their ends the rolls J³, arranged to be brought beneath the chains E⁶, lifting them 20 out of engagement with the sprocket-wheels E⁵, thereby disconnecting the shafts E E' from the axle B² and stopping the motion of the elevator and carrier belts.

As the machine is drawn along the street 25 the brush B¹⁰ 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 E³, by which they are raised and delivered to the carrier-belt F', which 30 when tilted, as shown in Fig. 3, will deliver 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 35 to secure by Letters Patent, is—

The combination with a supporting-frame- 40 work of shaft B², sprocket-wheels E⁵ carried on said shaft, shafts E and E', an elevator-belt carried by said shafts, chains E⁶ connecting said shafts with said sprocket-wheels, arms J² pivoted concentrically with said sprocket- 45 wheels and carrying rolls J³ arranged to be brought beneath the chains E⁶ and lift them out of engagement with said sprocket-wheels, substantially as described.

Dated the 2d day of May, 1892.

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Witnesses:

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