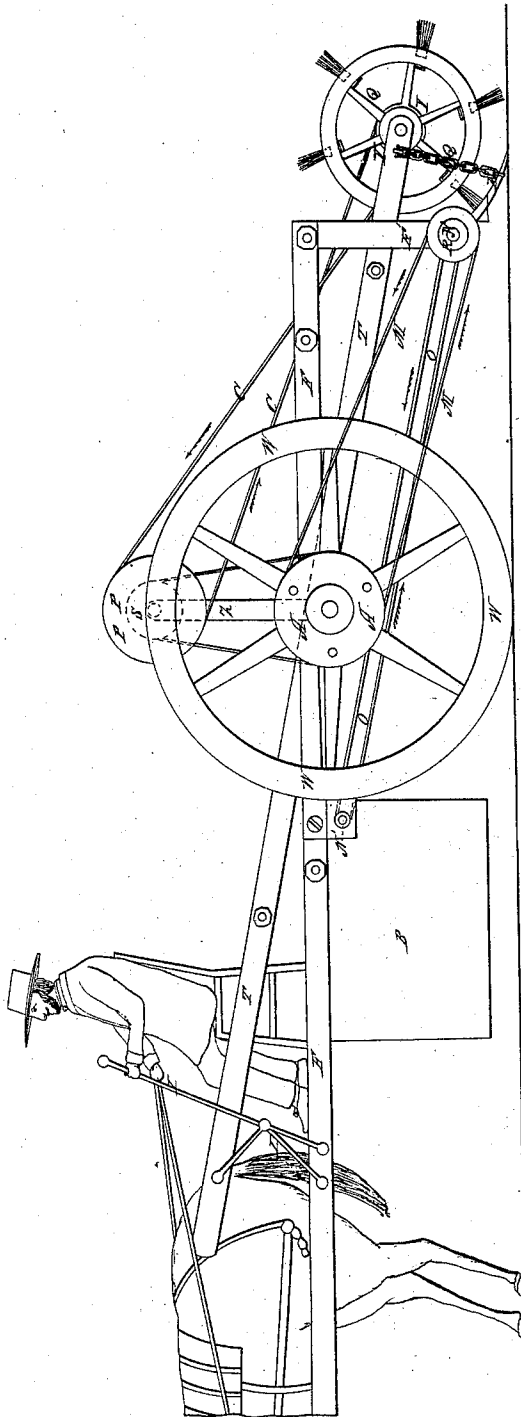


A. JONES.
STREET SWEEPER.

No. 3,203.

Patented July 28, 1843.

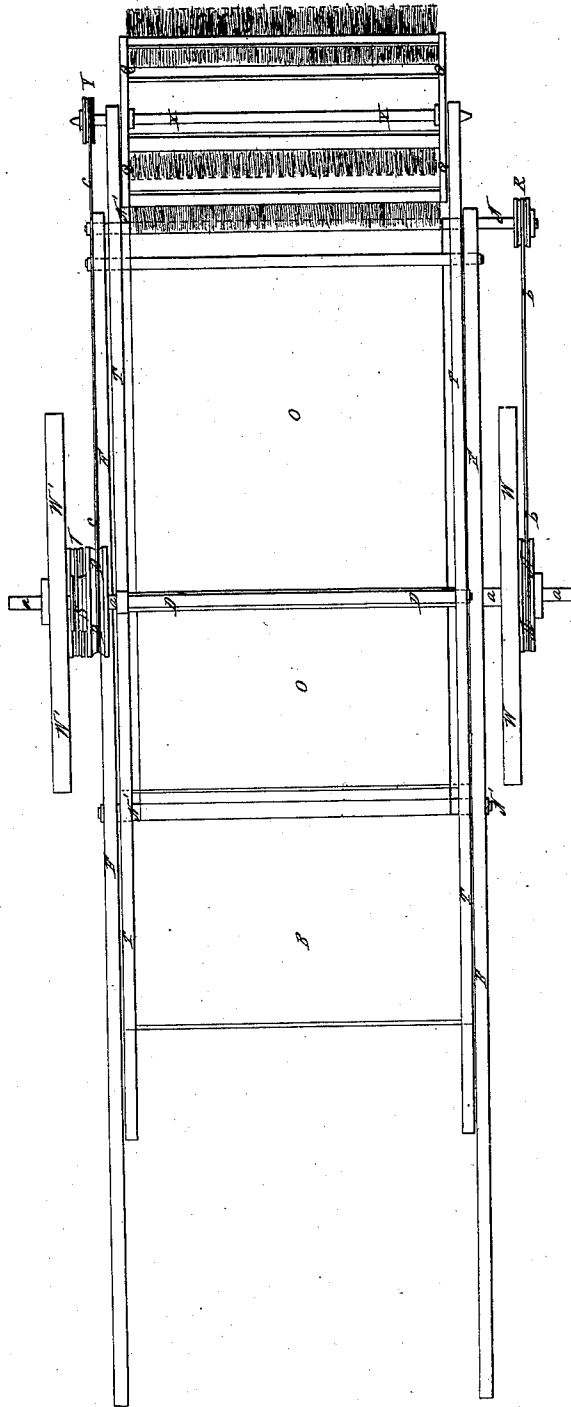


2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

ALEXANDER JONES, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR SWEEPING AND CLEANING STREETS.

Specification forming part of Letters Patent No. 3,203, dated July 28, 1843.

To all whom it may concern:

Be it known that I, ALEXANDER JONES, of the city of New York, in the State of New York, have made certain new and useful Improvements in the Manner of Constructing a Machine for Cleaning the Streets of Towns and Cities; and I do hereby declare that the following is a full and exact description thereof.

In the accompanying drawings, Figure 1 is a side elevation of my machine, and Fig. 2 a plan thereof.

W W' W' W' are two wheels, which run on the ground in the manner of ordinary cart-wheels.

A A is the hub of one of these wheels, which wheels run on axles or gudgeons *a a*, that pass through F F, which constitute the side timbers and shafts of the machine, and through the beams or levers T T, which vibrate on the said axles and carry the brush-wheel Q Q at their rear end. This brush-wheel may be raised or forced down at pleasure by the driver of the machine.

O O is an endless apron of leather, saturated cloth, or slats of wood, or of metal, properly jointed together. The endless apron O runs on two rollers, which cross the machine at N and N'. The roller N is driven by means of a whirl R and band *b b*, which band receives its motion from the hub A A of the wheel W, around which it passes.

To drive the revolving brushes Q Q, a crossed band C C passes round a pulley Y on the shaft X X of the brush-wheel and round a pulley P P, the shaft of which is sustained by uprights Z, mortised into the levers or beams T T. The pulley P P is driven by means of a band passing around a pulley V, made fast to the wheel W', and passing around a pulley S on the same shaft D D with the pulley P P. A shoe E, consisting of a concave piece of sheet metal, rests upon the ground at the rear of the machine and works on gudgeons at each of its ends at the lower parts of the uprights F', making a part of the frame of the machine. The upper part of this shoe rises above the upper side of the endless apron O O, and serves effectually to enable the brush-wheel to deliver the whole

of the dirt onto the endless apron. I connect the shoe E and the rear end of the levers T together by means of a link or chain, as shown at *e e*, so that when the revolving brush is raised the shoe also will be raised with it clear of the ground and admit of the unobstructed turning or backing of the machine.

B is a box or receptacle near the fore part of the machine, into which the dirt is delivered by the endless apron O. This box is to be so attached as that it can be liberated, hauled off, and another supplied at any moment.

It is necessary to have the revolving brush-wheel completely under control, so that it may be borne down onto the ground with any desired degree of force, which will vary considerably with the nature of the dirt to be removed and the state of the weather. As the beams or levers T T, which carry the brush-wheel, are made to vibrate, they may be forced down or raised by a screw or by levers under the control of the driver in various ways. An arrangement of levers for this purpose is shown at I I.

Having thus fully described the nature of my machine for cleaning streets, and shown the operation of the same, what I claim therein as new, and desire to secure by Letters Patent, is—

The manner in which I have arranged the revolving brush-wheel so as to turn on the rear ends of the vibrating arms or levers T T, that have their fulcrum on the main axle of the cart-wheels, in combination with the shoe and endless apron attached to the main or cart frame, the shoe being suspended by a chain or cord to the arms T T, by which arrangement the brush and shoe may be lifted up from the street and by the flexibility of the chain the brush may be made to bear with any degree of pressure upon the shoe.

I do not claim the brush, shoe, and endless apron independently of this particular arrangement.

I do not intend to limit myself to any particular material for forming the revolving brushes, as these may be made of splints of any suitable kind of wood, of whalebone, or

of other elastic material. The splints or fibers may be firmly confined between bars of metal by intervening rods of iron, the whole being confined by means of screw-bolts, and it will be found advantageous to have the fibers of double the required length, so that they may be folded together in the manner

of bristles in those brushes where they are secured by wires.

ALEXANDER JONES.

Witnesses:

WILLIAM V. MILNOR,
SAMUEL E. GILES.