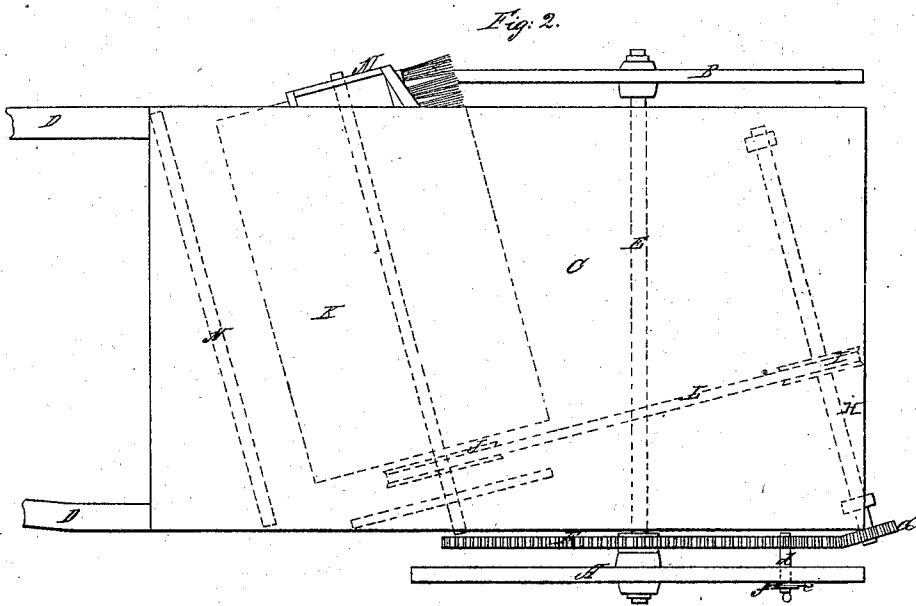
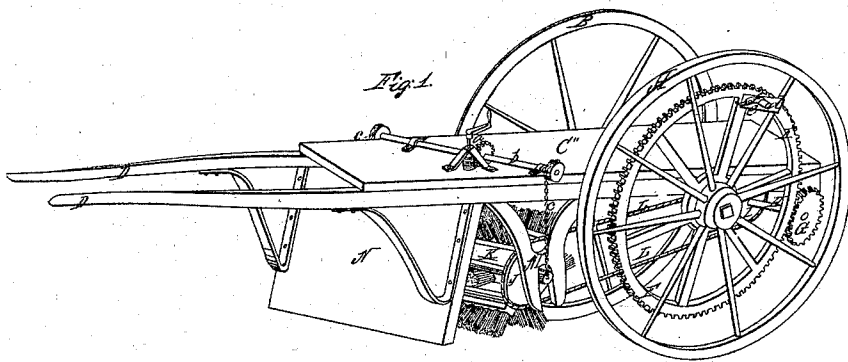


W. H. KING.  
STREET SWEEPER.

No. 15,566.

Patented Aug. 19, 1856.



# UNITED STATES PATENT OFFICE.

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## MACHINE FOR SWEEPING GUTTERS.

Specification of Letters Patent No. 15,566, dated August 19, 1856.

*To all whom it may concern:*

Be it known that I, WILLIAM H. KING, of the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Sweeping Gutters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part thereof, in which—

Figure 1 represents a perspective view of the machine complete, and Fig. 2 represents a top plan.

Similar letters in the two figures denote like parts in both.

The nature of my invention relates to the sweeping of the sides or gutters of streets, by a machine so constructed that it will in moving forward in a direct line, convey the sweepings to one side of the machine, and leave in it what is termed a windrow; and consists mainly in the location and operation of an inclined or oblique rotating brush, with a similarly inclined directing board, against which the sweepings are thrown by the brush which rotates from the swept to the unswept surface; the united action of said brush and directing board being to move the sweepings from the sides toward the center of the street, and leave it in windrows.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A, B, represent a pair of carrying or supporting wheels, to which are connected the platform C, shafts D, and axle E, to form a carriage for supporting the sweeping and directing apparatus. On the wheel A of the pair of wheels, is placed a cogged wheel F, slightly beveled, so as to take into and turn a similarly beveled spur wheel G, on a shaft H, which is in rear of the axle E, and stands at an inclination to said axle as shown in Fig. 2. On the shaft H, is a pulley I, around which and around a pulley J, on the axis of the revolving brush K, passes an endless chain or belt L, to give motion to the brush.

The journals of the brush, are supported in the brackets M, which are so placed on the frame or carriage, as that the shaft of the brush shall stand oblique to the frame

or parallel to the shaft H, from which it is to receive its motion. This obliquity is designed for getting the brush close in to the curb, and conveying the sweepings out toward the center of the street. But this would be imperfectly done were it not for the guiding or directing board N, in front of the brush, against which the sweepings are thrown, and by which they are more readily brought into a windrow at the side of the machine.

The brush revolves in the direction of the movement of the machine, and sweeps from the swept to the unswept surface, and cannot leave anything behind it. The board N moving with the machine recedes as it were from the sweepings thrown against it, and thus aids to direct the sweepings to the outside. If the brush ran in a direction contrary to that of the movement of the machine, then the board would have to be placed behind it, and it would then be advancing against the sweepings, and its tendency is in that position to hold the sweepings, and not direct them to the side of the machine. And by reversing the motion of the brush, it would then sweep from the unswept to the swept surface, and thus throw the dirt back over what had been previously swept. There is, therefore, much gained by placing the brush, and guiding board in front of the axle, and rotating the brush in the direction of the motion of the machine.

The brackets are so arranged, as that the journals of the cylinder brush, may be raised or lowered therein, to adjust the brush to the surface to be swept, and this may be done by the hand worm wheel a, shaft b, and suspension chains c, or any other well known raising or lowering device.

d, is a clutch pin, passing through a plate e, firmly attached to the spokes of the wheel A, which said clutch pin is held in place by the catch f, taking into a groove in said pin. When the machine is transported from place to place the pin d, is partially drawn out and there held, which disengages the wheel A, from the cog wheel F, and the machine will then move along without driving the brush. To connect the wheels A, F, the clutch pin is forced in, so as to catch against the spoke of the wheel F, and then the two wheels travel together.

Having thus fully described the nature of my invention, what I claim therein as new and desire to secure by Letters Patent is—

The combination of the skewed revolving  
5 brush and guiding board, arranged, located,  
and operating together substantially as described, for the purpose of making a side,

or gutter sweeping machine, that will leave the sweepings in windrows, as set forth.

WM. H. KING.

Witnesses:

JNO. B. KENNEY,  
CHARLES THOMPSON.