

(No Model.)

J. S. MORGAN.
STREET SWEEPER.

No. 583,499.

Patented June 1, 1897.

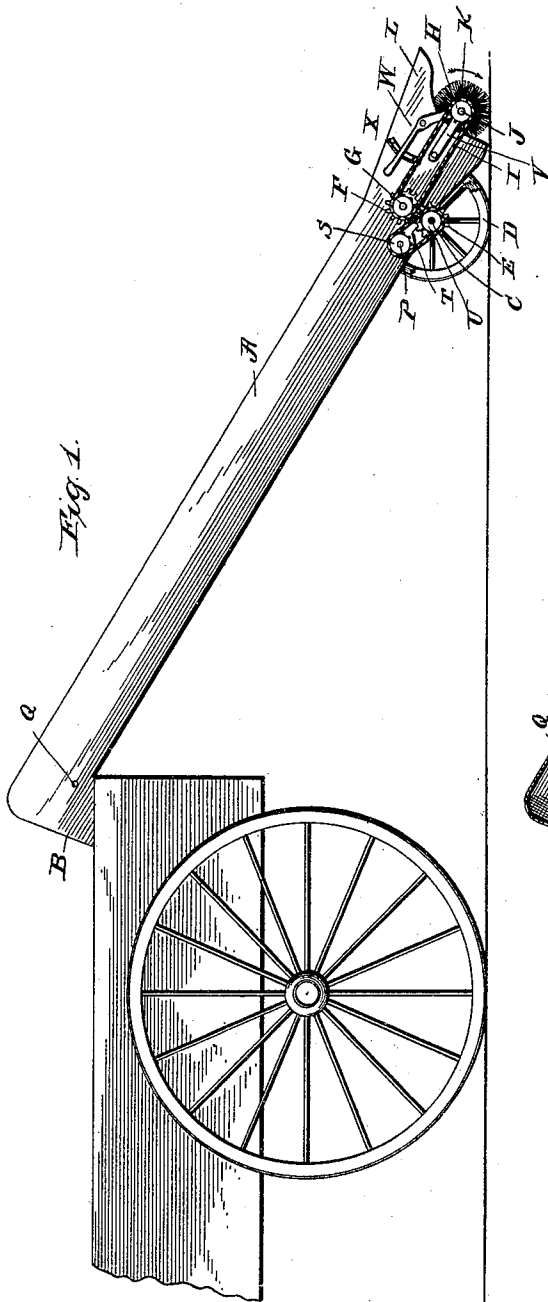


Fig. 1.

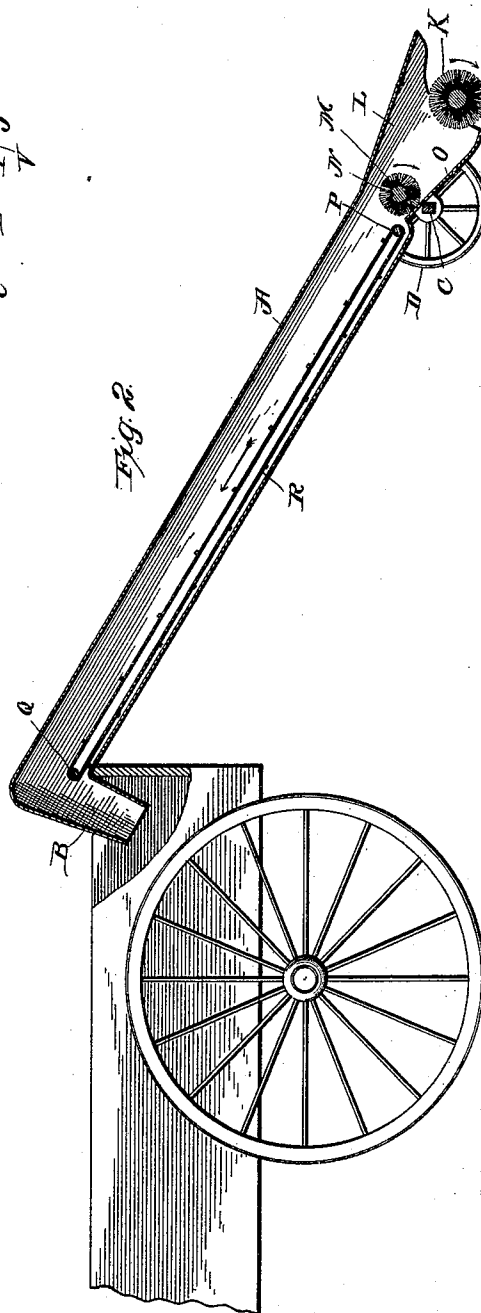


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN S. MORGAN, OF EMPORIA, KANSAS, ASSIGNOR OF ONE-HALF TO W. C. LONG, OF SAME PLACE.

STREET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 583,499, dated June 1, 1897.

Application filed September 5, 1896. Serial No. 604,970. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. MORGAN, a citizen of the United States, residing at Emporia, in the county of Lyon and State of Kansas, have invented a new and useful Improvement in Street-Sweepers, of which the following is a specification.

This invention relates to a new and useful improvement in street-sweepers, and has for its object to so construct a device of this description that it may be attached to a wagon or cart of ordinary design and its action brought about by the forward progression of said wagon or cart and which may at any time be detached from the cart, thereby leaving the latter free to convey the accumulations of sweepings to any desired point while the sweeper is attached to another cart for further operations.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, its construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of my improvement, showing the method of attaching the same to a cart or wagon; and Fig. 2 is a central section thereof.

In carrying out the invention a housing A is provided, which is preferably rectangular in cross-section and of such a length as to stand at the proper angle when its upper end is supported by the rear position of a wagon or cart, and this upper end is turned downward to form the chute B, so that when the sweepings are conveyed through the housing they will be guided into the body of the cart. The lower end of the housing is supported by an axle C, which is mounted upon the wheels D, one of which is provided with a gear-wheel E, meshing with a similar gear-wheel F, and the sprocket-wheel G is carried by the gear F for the purpose of transmitting rotation to the sprocket-wheel H through the chain I, and the

last-named sprocket-wheel is mounted upon the shaft J, upon which is located the sweeping-brush K. By this arrangement when the sweeper is drawn forward the brush will be rotated in the direction of the arrow and when in contact with the road-bed over which the sweeper travels will thrust the dirt from said road-bed within the hood L. A secondary brush M is also mounted within the hood upon the shaft N, upon which is also mounted the gear F, through which the shaft receives its motion, causing the brush carried thereby to revolve in the direction of the arrow adjacent thereto, and in practice it is preferred to so locate this brush as to cause it to revolve in contact with the apron O, in order that when the dirt has been thrust upward upon said apron by the brush K the brush M will receive the same and again thrust it upward within the housing. Drums P and Q are journaled within the housing and have mounted thereon the carrier R, which consists of an endless belt having legs arranged upon its surface, and the drum P extends through the housing and has secured thereto a sprocket-wheel S, which is driven by the chain T, running from said sprocket-wheel, and a similar wheel U, carried by the axle C, so that when the sweeper is in operation the upper surface of the carrier will travel in the direction of the arrow, thereby conveying the sweepings which have been thrust thereon by the brush M to the chute B, through which they will be conveyed to the body of the cart.

The shaft J is preferably mounted within the swinging arms V, which are controlled by the levers W, adapted to be held in any adjustment by the notched segments X, one of which is shown in Fig. 1, so that when it is desired to raise or lower the brush K for any purpose this may be readily accomplished.

From this description it will be seen that to sweep a road-bed it is only necessary to place the upper end of the housing upon the rear end of a cart-body and move said cart forward, when the road-bed will not only be swept of all loose dirt, but said dirt will be conveyed to the cart, so that when said cart has been filled the sweeper may be detached therefrom and the cart permitted to convey

the dirt to the desired location, during which time the sweeper may be again used in connection with another cart.

When it is desired to convey the sweeper from one point to another without its brushes operating upon the road-bed, this is readily accomplished by lowering the forward end thereof sufficiently to elevate the brush K out of contact with the road-bed.

I am aware that slight modifications might be made in the design here shown without departing from the spirit of my invention, and I therefore do not wish to be limited to these exact details of construction.

Having thus fully described the invention, what is claimed as new and useful is—

A street-sweeper composed of a housing, an angular chute on the upper end thereof, a hood on the lower end of the housing, an axle secured therebeneath, traction-wheels journaled on the axle, a sprocket-wheel and gear-wheel secured on one of the traction-wheels,

an upper and lower drum journaled in the housing, an endless conveyer carried thereon, a sprocket-wheel on the lower drum, a chain connecting said sprocket-wheel with the first-named sprocket-wheel, a brush journaled in the hood, a sprocket-wheel and gear-wheel secured thereon, said gear-wheel meshing with the first-named gear-wheel, swinging arms pivoted on each side of the hood, a brush journaled therein, a sprocket-wheel on said brush, a chain connecting the sprocket-wheels of the two brushes and a lever for adjusting the swinging arms, as and for the purpose described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

JOHN S. MORGAN.

Witnesses:

S. S. WILLIAMSON,
S. SMITH.