(No Model.)

A. HANKEY.

STREET SWEEPER.

No. 553,753. Patented Jan. 28, 1896.

Fig. 1.

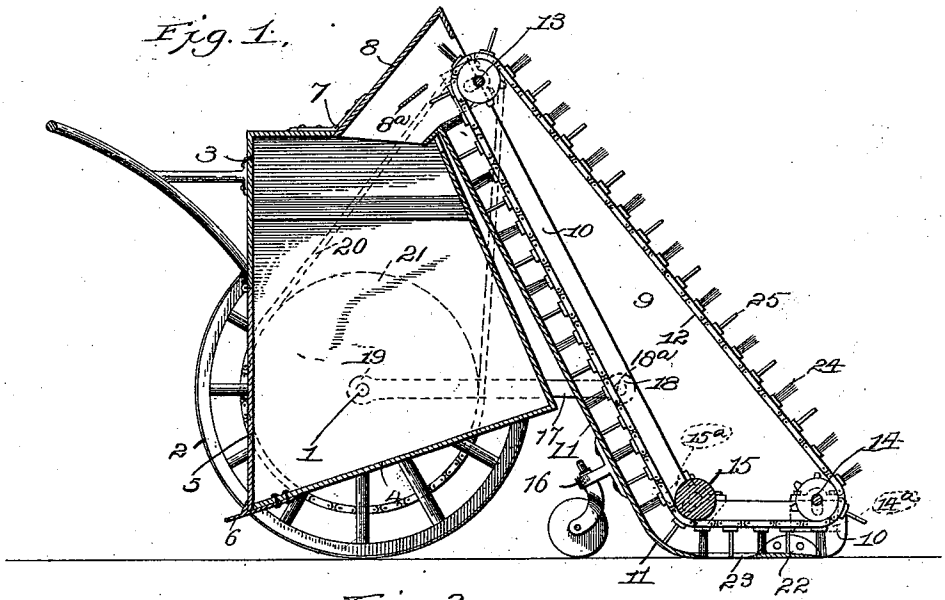


Fig. 2.

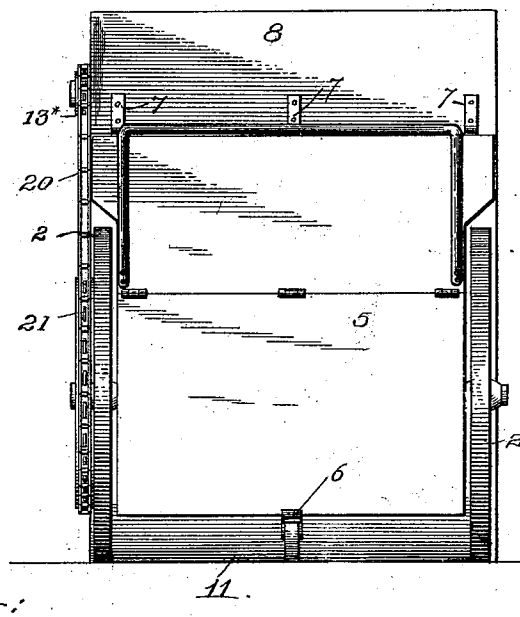
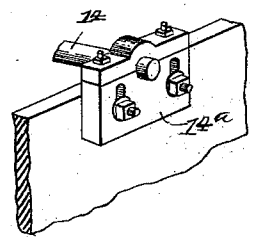


Fig. 3.



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UNITED STATES PATENT OFFICE.

ANTHONY HANKEY, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JOSEPH X. ROGERS, OF PHILADELPHIA, PENNSYLVANIA.

STREET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 553,753, dated January 28, 1896.

Application filed March 4, 1895. Serial No. 540,485. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY HANKEY, a citizen of the United States, and a resident of Boston, in the State of Massachusetts, have invented certain new and useful Improvements in Street-Sweepers, of which the following is a specification.

My invention relates to that class of street-sweepers which collect the sweepings and deposit them into a suitable receptacle by an elevating-apron; and my invention consists in certain novel features in the construction and arrangement of the parts of such a machine, which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal section of a sweeping-machine constructed in accordance with my invention. Fig. 2 is a rear view of the same. Fig. 3 is a detail view of one of the adjustable bearings.

Upon the axle 1 of wheels 2 is mounted a receptacle 3, having an inclined bottom 4 and a dumping-gate 5, held closed by a catch 6. Hinged at 7 to the receptacle 3 is a hood 8, into which empties an elevator 9, comprising the side-boards 10, having horizontal portions, upwardly-extending portions and a curved floor 11 between the upwardly-extending portions, and the combined scraping and brushing apron, consisting of chains 12, which are guided over upper sprocket-wheels, 13, and lower sprocket-wheels, 14, and a guide-roller 15, located in rear of the lower sprocket-wheels, so as to loosen and collect the dirt and pass it up and deposit it through hood 8 into the receptacle 3.

17 is one of a pair of connecting-bars on opposite sides of the machine and which are connected at 18 to a pin 18^a on the side-bars 10 and at 19 to axle 1. As the elevator is supported at its base on a caster-wheel 16, the connecting-bars 17 and hinge 7 permit the elevator to follow the surface of the ground over which it is working independently of the rear main carrying-wheels 2. The side-boards 10 are connected directly with the hood 8, and as the upper sprocket-wheels, 13, are journaled in bearings on said side-boards the elevator maintains a constant relation to said hood. 8^a is a scraper for clearing the ends of brushes 24.

20 is a driving chain belt which connects a driving sprocket-wheel 21 on the axle 1 to the driving sprocket-wheel $13^\times$ on the shaft of the upper sprocket-wheels, 13. The relative sizes of these driving sprocket-wheels are intended to be such in practice as to give the necessary speed of travel to the apron.

Fixed in advance of the collecting and elevating bottom 11 is a main scraper 22, attached between the horizontal portions of the side-boards 10, and the location of the lower sprocket-wheels, 14, is such that the apron passes the material to the rear which is loosened by this main scraper. Just in rear of this scraper 22 is a supplementary sweeping opening or space, where the scrapers and brushes come into more intimate sweeping contact with the ground and thoroughly gather up all dust and dirt within the path of the machine. The sweep of the machine extends to the outside of the rear wheels, as indicated in Fig. 2, and thus adapts the machine to sweep close up to curbs.

The bearings for the sprocket-wheels 13 14 and roller 15 are made in adjustable plates 13^a, 14^a, and 15^a, which are attached to the side-boards by means of slots and bolts, and wear on the brushes can thus be compensated for.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. A street-sweeper, comprising a receptacle, the elevator, having a hood hinged to the top of the receptacle, the side-boards having horizontal portions and upwardly-extending portions, the curved floor located between the upwardly-extending portions of the side-boards, the main scraper located between the horizontal portions of the side-boards, in advance of the floor, leaving a rear opening between the scraper and the lower end of the floor, the upper sprocket-wheels, the lower sprocket-wheels, the guide-roller in rear of the lower sprocket-wheels, the chains, provided with alternately-arranged brushes and scrapers, adapted to travel over the sprocket-wheels and under the guide-roller so as to cause the brushes and scrapers to brush and

scrape both in front and in rear of the main scraper, means for carrying the base of the elevator, means for connecting the body of the elevator with the receptacle, and means for driving one of the sprocket-wheels; substantially as described.

2. A street-sweeper comprising a receptacle, the axle upon which the receptacle is mounted, the elevator having a hood hinged to the top of the receptacle, the side-boards having horizontal portions and upwardly-extending portions, the curved floor located between the upwardly-extending portions of the side-boards, the main scraper located between the horizontal portions of the side-boards in advance of the floor leaving a rear opening between the scraper and the lower end of the floor, the upper sprocket-wheels, the lower sprocket-wheels, the guide-roller in rear of the lower sprocket-wheels, the chains provided with alternately-arranged brushes and scrapers, adapted to travel over the sprocket-wheels and under the guide-roller, so as to cause the brushes and scrapers to brush and scrape both in front and in rear of the main scraper, means for carrying the base of the elevator, means for connecting the body of the elevator with the receptacle consisting of bars pivotally secured to the axle and to the elevator, and means for driving one of the sprocket-wheels; substantially as described.

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