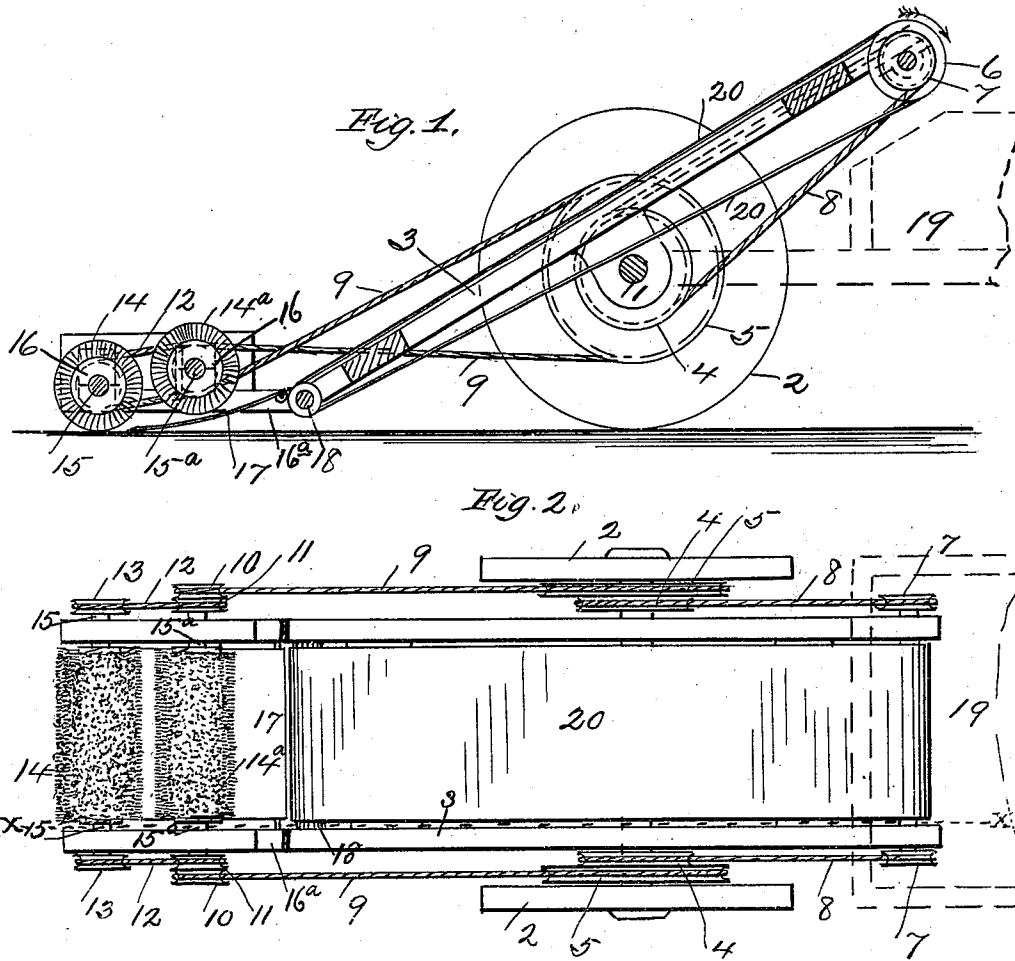


(No Model.)

G. D. HUPHAND.
STREET SWEEPER.

No. 545,652.

Patented Sept. 3, 1895.



Witnesses:
H. C. Harrison.
J. A. Hervey.

Inventor
George D. Huphand.
By his *O. W. Davis.*
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE D. HUFHAND, OF PITTSBURG, PENNSYLVANIA.

STREET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 545,652, dated September 3, 1895.

Application filed August 13, 1894. Serial No. 520,122. (No model.)

To all whom it may concern:

Be it known that I, GEORGE D. HUFHAND, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Street-Sweepers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved street-cleaning apparatus; and it consists in certain details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a side sectional elevation of my improved street-cleaning apparatus, which is constructed and arranged in accordance with my invention, the same being taken on line *x x* of Fig. 2. Fig. 2 is a plan view of the same.

To put my invention into practice I provide a frame 3 of a suitable size and form of construction and mount the same upon an axle 1. This frame 3 is arranged in an inclined position and provided at each end with a roller 6 and 18, over which an endless flexible conveyer 20 is placed. This conveyer is operated by means of pulleys 4 and 7, attached to the axle 1 and to the shaft carrying the front roller 6, said pulleys 4 and 7 being compassed by a belt 8.

Arranged at the rear of the frame 3 are two sweepers 14 14^a, the shafts 15 15^a of which are mounted or journaled in suitable bearings 16, secured upon bars or timbers 16^a, suitably hinged to the lower ends of the side pieces of the frame 3. Upon the ends of the shaft 15 of the sweeper 14 are pulleys 13, and similarly located upon the shaft 15^a are pulleys 11 11, compassed by belts 12, simultaneously driving or rotating said sweepers, themselves driven by belts 9, compassing pulleys 5 on the axle 1 and pulleys 10 on the shaft 15^a of the sweeper 14^a.

Arranged beneath the front sweeper 14^a is an apron 17, hinged to the timbers 16^a and

adapted to receive the sweepings of the rear sweeper 14 and deposit the same upon the lower end of the conveyer 20.

This apparatus, constructed as described, is attached to the rear of a wagon or other vehicle 19, which projects beneath the conveyer 20 and is adapted to receive the sweepings from the said conveyer.

In operation the apparatus is drawn by horse or other power, which puts the truck-wheels 2 in motion. This motion of the wheels 2 is conveyed to the conveyer 20 and to the sweepers 14^a and 14 in the manner described, and the dirt or sweepings carried up the conveyer and deposited in the vehicle 19.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of the inclined elevating endless conveyer, the correspondingly disposed frame having rollers at its ends compassed by said conveyer, pulleys on the upper one of said rollers, transporting wheels for said frame, whose axle also carries a series of pulleys, belts compassing the pulleys on said upper roller and pulleys of said series, the parallel rotary sweepers and their carrying frame connected with the lower end of said inclined frame, one of said sweepers having a pulley on each end, and the other sweeper having a series of pulleys on each end, belts compassing the pulleys of one of said sweepers and one of each of the series of the pulleys of the other sweeper, belts compassing the other pulleys of said last referred to series of pulleys and the coincident pulleys of the series of pulleys on the axle of the transporting wheels, and the apron hinged at the lower end of said carrying frame and arranged below the inner one of the said sweepers, substantially as set forth.

In testimony that I claim the foregoing I hereunto affix my signature this 9th day of February, A. D. 1894.

GEORGE D. HUFHAND. [L. S.]

In presence of—

M. E. HARRISON,
JAS. J. MCAFEE.