

S. SPEER.
RAILROAD TRACK SWEEPER.
APPLICATION FILED JAN. 29, 1909.

924,114.

Patented June 8, 1909.

2 SHEETS—SHEET 1.

FIG. I.

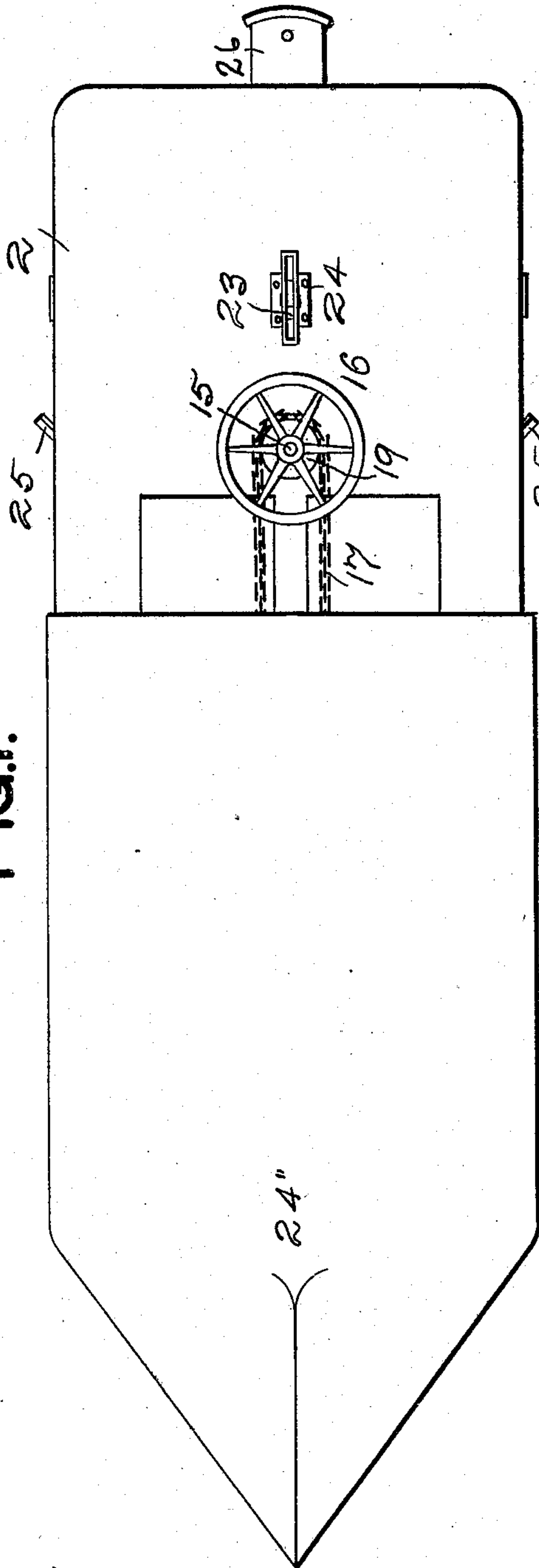


FIG. II.

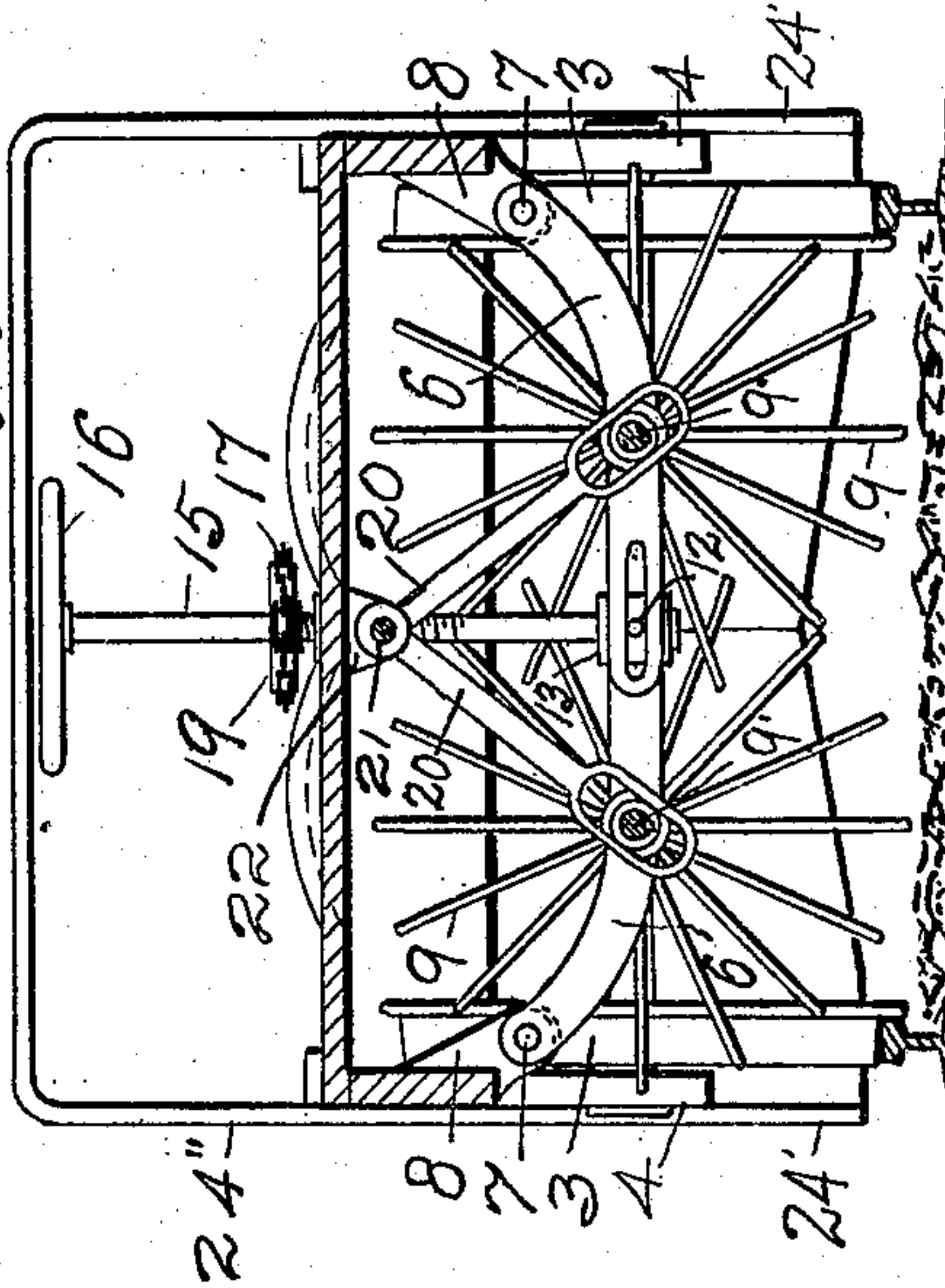
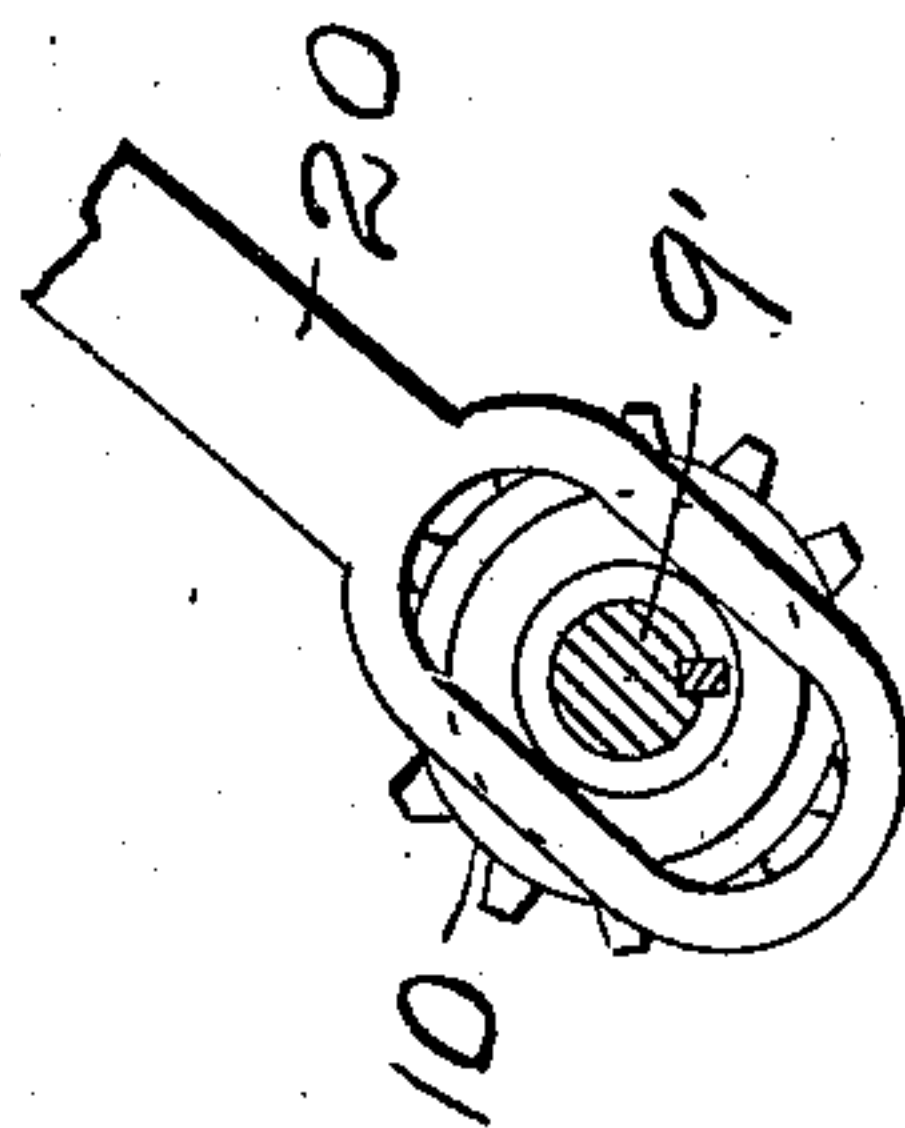


FIG. III.



Witnesses

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APPLICATION FILED JAN. 29, 1909.

2 SHEETS—SHEET 2.

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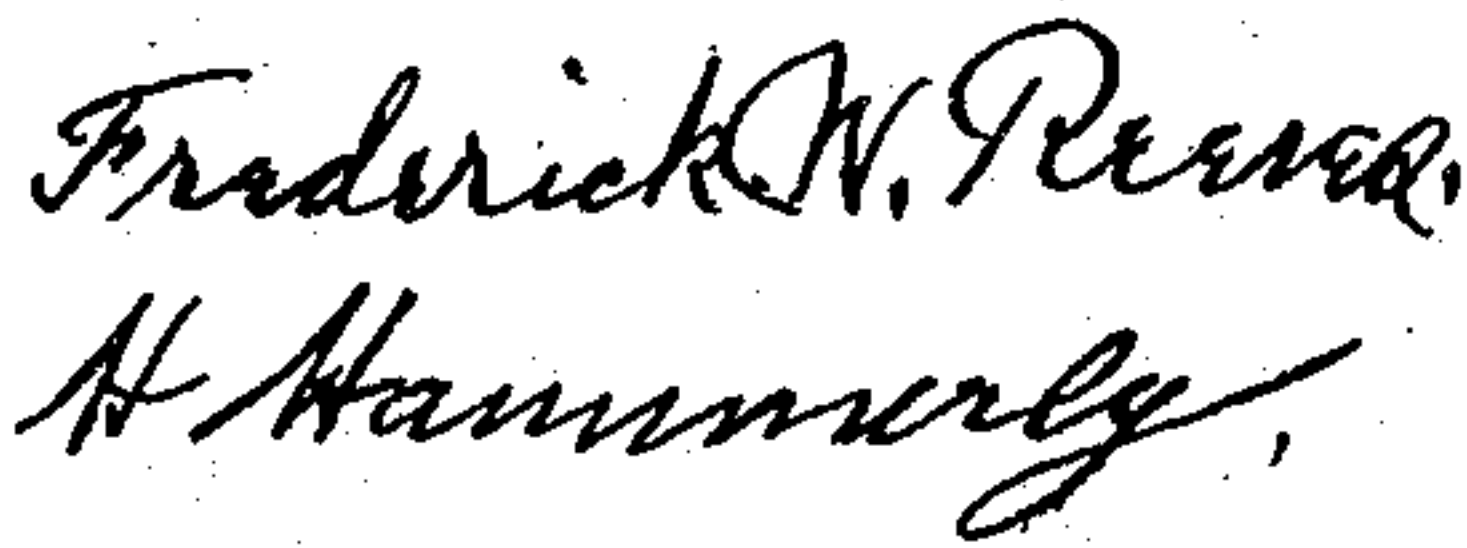


FIG. 5.



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UNITED STATES PATENT OFFICE.

SAMUEL SPEER, OF PITTSBURG, PENNSYLVANIA.

RAILROAD-TRACK SWEEPER.

No. 924,114.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed January 29, 1909. Serial No. 475,000.

To all whom it may concern:

Be it known that I, SAMUEL SPEER, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Railroad Track Sweepers; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of cleaners as employed for removing snow from the track and road-bed of rail-roads, and has for its object the provision of a combined plow and rotary sweeper, in which the latter is operated from the axle of the truck carrying the same, by intermediate mechanism, said cleaner being provided with means for raising and lowering the brushes as well as stopping and starting the same, when desired, all of which improvements will be hereinafter more fully described in detail and operation in the following specification.

In the accompanying drawings which form a part of this specification, Figure I, is a plan view of the complete apparatus. Fig. II, is a rear end view thereof, partly in section. Fig. III, is a detailed view of a portion of the brush-rotating and elevating mechanism. Fig. IV, is a side elevation of the apparatus, partly in section, and Fig. V, is a plan view of the truck, and attending mechanism, with the platform and plow removed.

In all of the views similar detail parts are designated by numerals of like character.

The invention comprises in its structure, a truck formed of a frame 1 carrying a platform 2, mounted upon the wheels 3, by means of bearings 4 engaging the ends of the wheel axles 5.

Arranged beneath the truck platform, upon transversely disposed levers 6 which are fixed at their outer ends to a shaft 7 loosely supported by lugs 8 upon the truck frame, is a pair of longitudinally disposed rotatable brushes 9 carrying longitudinally slidable pinions 10 upon the rear ends of their shafts 9', which pinions mesh with bevel wheels 11 fixed to axle of the rear wheels. The inner ends of these brush-supporting levers are slotted lengthwise for a short distance to receive pins 12 which project from a block 13

loosely arranged upon the lower ends of the vertically disposed threaded shafts 14 and 15 which are carried by the platform, the rear one of said shafts carrying a hand-wheel 16 upon its upper end, said shafts being operatively connected to one another by a chain 17 engaging on chain wheels 18 and 19 carried by the respective shafts. Engaging over the hub portions of the said pinions 10, within grooves extending thereabout, are angularly and downwardly disposed link levers 20, the upper ends of which are loosely fitted upon one end of the longitudinally disposed and operative bar 21 carried by lugs 22 upon the underside of the platform, said rod being adjustably or slidably connected to the lower end of a lever 23 pivotally mounted within an upright frame 24 fixed to the platform. The apparatus is further provided with a tapered or plow pointed casing 24'' arranged at and fixed to the forward end of the truck frame and platform, the portion 24' thereof extending over the edge of the track. The apparatus is further provided with a pair of angularly disposed and inclined scraper blades 25, which are fixed to the truck frame directly in front of the rear wheels and extend in close proximity to and over the track rails.

In practice, the apparatus is connected to a locomotive, or other power conveyance, by coupling the same with the draw-bar 26, and as the apparatus is pushed forward the plow 24'' removes the greater portion of the snow by thrusting it aside. During the forward movement, the brushes are caused to rotate in opposite directions and thereby remove the remaining snow from the track, between the rails, by sweeping it out at the sides of the truck, and that which accumulated upon the rails is removed and thrust outwardly by the action of the scrapers 25.

When it is desired to stop the brushes from rotating, the lever 23 is thrown rearward, causing the pinions to slide forward upon the brush shafts, disengaging them from the gears upon the rear axle of the truck, and if it be desired to elevate the brushes when not in use, etc., the hand-wheel 16 is rotated, causing the inner ends of the levers 6 to be raised accompanied by the brushes.

By means of the combined plow and sweeper the tracks can be kept from the accumulation of deep snows.

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

1. The combination with a truck carrying a pointed plow, a pair of bevel gears carried by one of the truck wheel axles, a pair of rotatable brushes disposed in parallel relation beneath the truck platform at right angles to and between the wheel axles, each of which is provided with a longitudinally slidable gear pinion on one end operatively engaging its respective gear on the wheel axle, a pair of downwardly disposed link members depending from a slidable bar, the link extremities of said members engaging said pinions, and a hand lever connecting said slidable bar to operate the same and attending mechanism to stop the brushes from rotating.

2. The combination with a truck carrying a pointed plow, a pair of bevel gears carried by one of the truck wheel axles, a pair of rotatable brushes disposed in parallel relation beneath the truck platform at right angles to and between the wheel axles, each of which is provided with a longitudinally slidable gear pinion on one end operatively engaging its respective gear on the wheel axle, a pair of downwardly disposed link members depending from a slidable bar the link extremities of said members engaging said pinions, a hand lever connecting said slidable bar to operate the same and attending mechanism to stop the brushes from rotating, and means to elevate said brushes.

3. The combination with a truck carrying a plow, a pair of beveled gears carried by one of the truck wheel axles, a pair of rotatable brushes disposed in parallel relation beneath

the truck platform at right angles to and between the wheel axles, each of which is provided with a longitudinally slidable gear pinion on one end operatively engaging its respective gear on the wheel axle, a pair of downwardly disposed link members depending from a slidable bar the link extremities of said members engaging said pinions, a hand lever connecting said slidable bar to operate the same and attending mechanism to stop the brushes from rotating, and scrapers arranged in advance of the rear wheels.

4. The combination with a truck carrying a plow, a pair of beveled gears carried by one of the truck wheel axles, a pair of rotatable brushes disposed in parallel relation beneath the truck platform at right angles to and between the wheel axles, each of which is provided with a longitudinally slidable gear pinion on one end operatively engaging its respective gear on the wheel axle, a pair of downwardly disposed link members depending from a slidable bar the link extremities of said members engaging said pinions, a hand lever connecting said slidable bar to operate the same and attending mechanism to stop the brushes from rotating, scrapers arranged in advance of the rear wheels, and means to elevate the said brushes.

In testimony whereof, I affix my signature, in presence of two witnesses.

SAMUEL SPEER.

Witnesses:

LOUIS E. ARONSON,
R. S. HARRISON.