No. 725,119. PATENTED APR. 14, 1903.

D. McCAFFERY.

CAR SASH AND PANEL CLEANER AND POLISHER.

APPLICATION FILED MAY 24, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

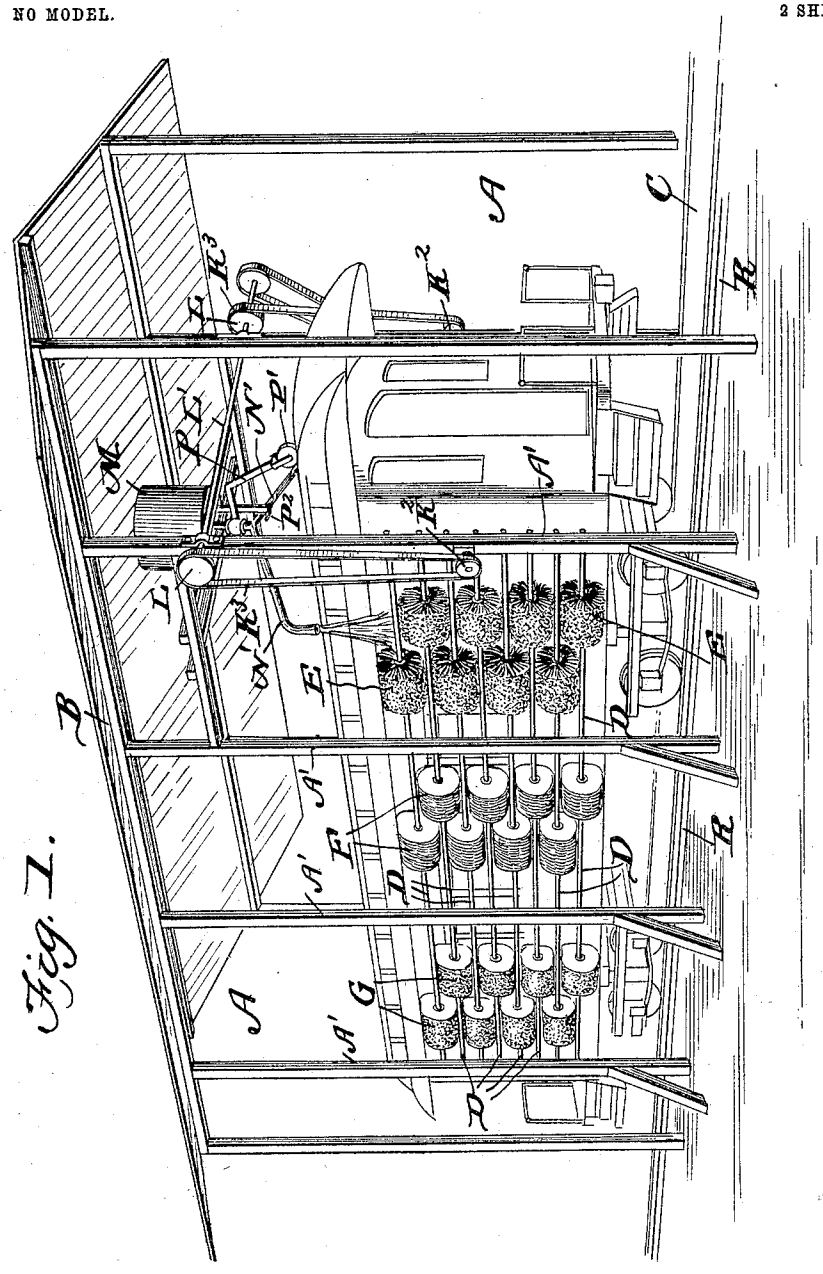


Fig. 1.

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Witnesses

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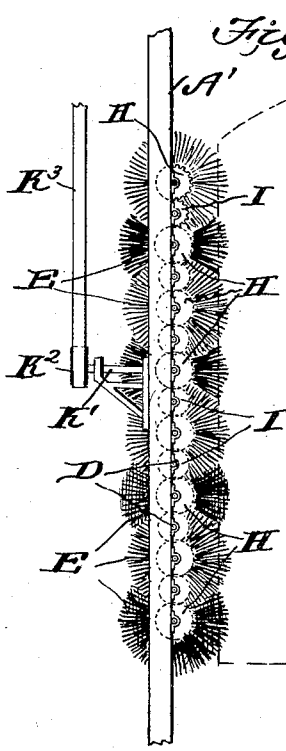
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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.



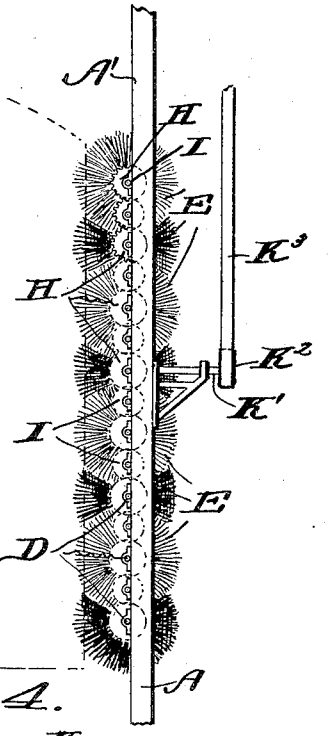


Fig. 4.

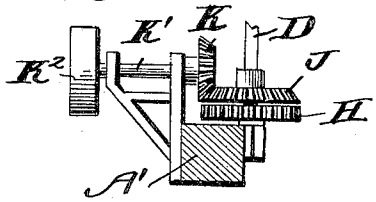


Fig. 3.

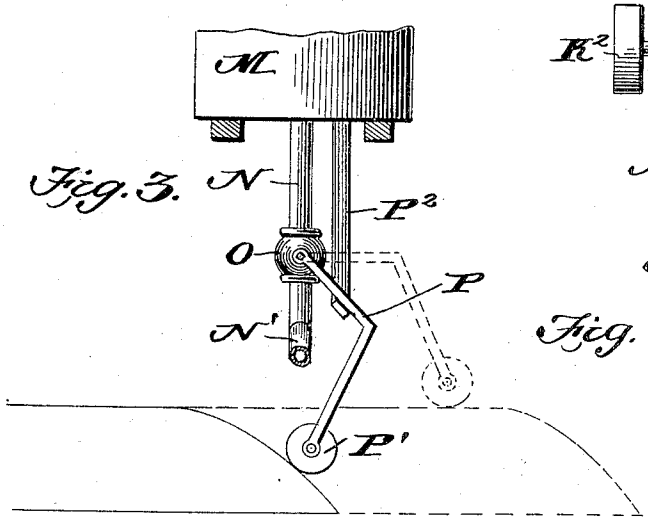
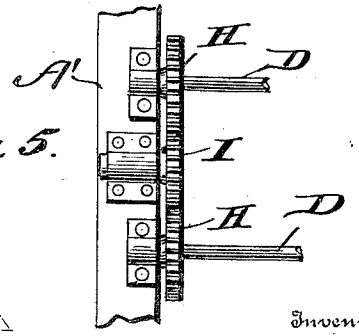


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

DAVID McCAFFERY, OF NEW YORK, N. Y.

CAR SASH AND PANEL CLEANER AND POLISHER.

SPECIFICATION forming part of Letters Patent No. 725,119, dated April 14, 1903.

Application filed May 24, 1902. Serial No. 108,809. (No model.)

To all whom it may concern:

Be it known that I, DAVID MCCAFFERY, a citizen of the United States, residing in the city of New York, in the State of New York, have invented a new and useful Car Sash and Panel Cleaner and Polisher, of which the following is a specification.

This invention relates to an improved device for cleaning the sides of cars and car-windows; and the object thereof is to provide a cheap, simple, and effective means for automatically washing, drying, and polishing the sides of the car and the car-windows as the car is drawn through the frame that carries the brushes for doing the work.

With these objects in view my invention comprises a suitable frame in which is mounted a series of shafts, each of which carries a brush made of bristles for washing the car, a suitable brush for drying the car, and a third brush for polishing the car.

My invention also comprises means for automatically discharging water onto the bristle brushes as the car is drawn through the frame.

A further object of my invention is to provide an arrangement for automatically cutting off the supply of water, as will be fully described in the following specification and pointed out in the claims, reference being had to the drawings, in which—

Figure 1 is a perspective view of my improvement, showing a car arranged in position for being cleaned. Fig. 2 is a detail end view illustrating the outline of a car in dotted lines arranged in the frame. Fig. 3 is a detail view illustrating the manner of opening and closing the valve that is arranged in the pipe that connects with the tank for supplying water to the said bristles. Fig. 4 is a detail sectional view, and Fig. 5 is a detail view illustrating the gears for operating the shafts.

In carrying out my invention I employ a suitable frame A, comprising the vertical members A′, over which is arranged a suitable cover B, the whole forming a shed, as clearly illustrated in the drawings. The vertical members of the frame are arranged upon either side of a car-track C, and upon these said members are journaled a series of shafts D, upon each of which is mounted a series of brushes E, F, and G. The brushes E are constructed of bristles and are arranged for scrubbing-brushes, while the brushes F and G are constructed of felt and are arranged, respectively, for drying and polishing the side of the car and car-windows.

Each shaft D is provided with a gear H, which meshes with an idle pinion I, journaled upon the said vertical members and between each of the said shafts D. One of the shafts, however, is provided with a beveled pinion J, which meshes with a drive-pinion K, mounted upon the inner end of a short drive-shaft K′, upon the outer end of which is mounted a pulley K^2, over which runs a belt K^3, that is driven by a suitable pulley L, carried by a drive-shaft L′, that may in turn receive its power from any suitable source.

Within the frame is suitably mounted a water-tank M, from the bottom of which projects a pipe N, whose lower end terminates in lateral branch sections N′ N′, whose extreme ends terminate in short downwardly-extending portions that are arranged directly above the scrubbing-brushes arranged upon the shafts.

A valve O is interposed in the pipe N and has its stem connected with an L-shaped operating-arm P, in whose lower end is journaled a roller or wheel P′, that is designed for engagement with the car for the purpose as will appear later on. A suitable arm P^2 projects from the frame supporting the tank and is designed to act as a stop for limiting the downward movement of the arm P, as most clearly shown in Fig. 3 of the drawings.

While I have described the arrangement of one set of brushes, it will of course be understood that the same arrangement is employed for operating the brushes upon either side of the car, and in practice I propose to arrange the frames and brushes at such a distance that as the car passes therebetween the brushes will be flattened to such an extent that every space upon the side of the car will be engaged by the brushes during its passage through the frame.

In operation the shafts are revolved through the medium of the drive shafts and belts immediately before the car enters the frame, and as the car is drawn through the wheel P′ will be engaged by the top of the car, which raises the arm P, opening the valve O and allowing the supply of water to be discharged upon the

brushes E as long as the car remains in the frame or shed, and as soon as the car passes from under the wheel the arm P will be allowed to drop and the supply of water entirely cut off, the arm and valve remaining in this position until the next car is drawn through the shed, as will be clearly understood. During the passage of the car through the shed and between the vertical members of the frame the brushes are continuously revolved, and the first set of brushes, which are practically scrubbing-brushes, thoroughly scrub and clean the side of the car, the second set are arranged for drying the car, while the third set is employed for polishing the car, and in practice I propose to arrange a suitable gutter R adjacent each side of the track for carrying off the water as it drops from the brushes.

It will thus be seen that I employ an exceedingly cheap, simple, and efficient device for the purpose described, and it will be observed that I arrange the brushes alternately upon the shafts, so that each and every portion of the side of the car and car-windows will be engaged thereby as the car is drawn past them.

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

1. In a device of the kind described, the combination with a suitable frame arranged adjacent a railway-track, of horizontal shafts parallel with the track and carried by said frame, brushes arranged in sets carried by said shafts the brushes of each set being arranged in series mounted upon alternate shafts, means for rotating the shafts and means for conveying water to the brushes of one set.

2. In a device of the kind described, the combination of a frame arranged upon either side of a car-track, the shafts journaled therein, brushes mounted upon the shafts, gears arranged upon one end of the shafts, idlers journaled upon the frame adapted for engagement with the gears, a tank mounted in the frame, a discharge-pipe connected to the tank, said pipe having its lower end terminating in lateral branch sections, a valve arranged in the pipe, means for operating the shafts, and means for opening and closing the valve, substantially as and for the purpose set forth.

3. The combination with a suitable frame arranged adjacent a railway-track, of shafts parallel to the track, of brushes composed of bristles arranged in tiers on said shafts, brushes composed of felt similarly arranged on the said shafts at some distance from the first-named brushes, means for rotating the shafts, and means for conveying water to the bristle brushes.

4. In a device of the kind described, the combination of a frame, having shafts journaled therein, brushes carried by the said shafts, a water-tank arranged in the frame, a discharge-pipe connected to the said tank, the lower end of said pipe terminating in lateral branch sections whose ends terminate in vertical portions and arranged above one set of said brushes, a valve arranged in the said discharge-pipe, an arm connected to the stem of the valve, a roller journaled in the free end of the said arm, the said arm being raised for opening the valve by the car as it passes through the frame, and means for operating the said shafts carrying the brushes, substantially as shown and described.

5. In a device of the kind described, the combination of a frame composed of the vertical members which are arranged upon either side of the car-track, a series of shafts journaled upon the said vertical members, brushes carried by each of the said shafts, said brushes being arranged in sets, one set of the said brushes being arranged in advance of the brushes of its respective adjacent set, a water-tank mounted in the frame, a discharge-pipe connected to the tank and arranged to discharge upon one set of the said brushes, a valve arranged in the said pipe, means for revolving the said shafts and brushes, and means for operating the said valve, substantially as shown and for the purpose set forth.

6. In a device of the kind described, the combination of a frame, shafts arranged longitudinally therein and upon either side of a car-track, brushes carried by the said shafts, a tank arranged in the frame above the said brushes, a pipe leading from the said tank and adapted to discharge upon one set of the said brushes, and means for rotating the said brushes and controlling the discharge of the said pipe, substantially as shown and described.

DAVID McCAFFERY.

Witnesses:
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SAMUEL FROHMAN.