Aug. 11, 1925. 1,549,258

J. F. S. JERNHOLM

WASHING IMPLEMENT FOR CARRIAGES, AUTOMOBILES, HOUSE FRONTS, OR THE LIKE

Filed Oct. 31, 1923

Fig. 1.

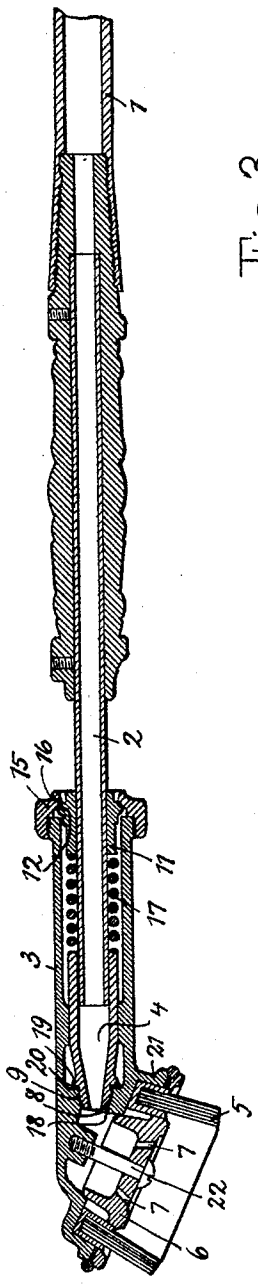


Fig. 3.

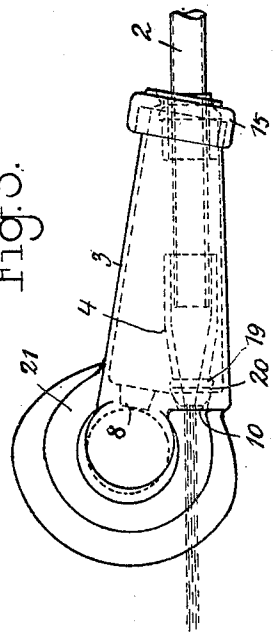


Fig. 2.

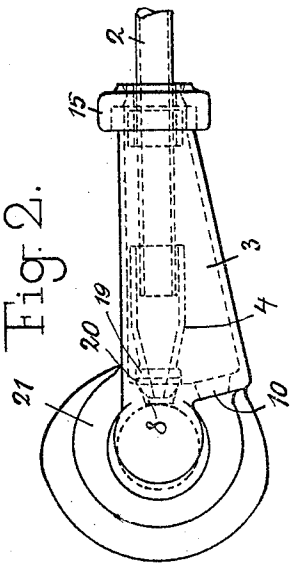
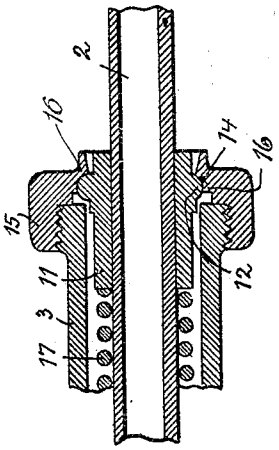


Fig. 4.



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WASHING IMPLEMENT FOR CARRIAGES, AUTOMOBILES, HOUSE FRONTS, OR THE LIKE.

Application filed October 31, 1923. Serial No. 671,859.

To all whom it may concern:

Be it known that I, JOHAN FREDERIK SCHROETER JERNHOLM, manufacturer, a subject of the King of Denmark, residing at Copenhagen, in the Kingdom of Denmark, have invented new and useful Improvements in Washing Implements for Carriages, Automobiles, House Fronts, or the like, of which the following is a specification.

The present invention relates to an implement to be used in washing carriages, automobiles, house fronts or the like, and which is characterized in that the supply of water, without the employment of valves or the like, may be varied during use, in such a manner that the water may be caused either to percolate through the brushes or to act directly on the object, so that any particles of grit or the like adhering to the surfaces to be cleaned may be removed most gently without scratching the surface.

The distinguishing feature of the present invention is that all the members serving to alter the direction of the jet are enclosed in a casing, the outer walls of which are smooth and have rounded edges, which therefore cannot themselves damage the varnished surface.

By this encasing the further great advantage is attained that the water, during the change of the water supply from the brushes to direct flushing, or vice versa, is prevented from spraying out to the sides, although the supply of water is not interrupted during this change, whereby the use of valves for interruption of the supply of water becomes superfluous.

Referring to the drawing,

Fig. 1 shows a vertical longitudinal section of the apparatus,

Figs. 2 and 3 the same in top view adjusted for supply of water to the brush and for direct sprinkling, respectively, and

Fig. 4 is a detail on a larger scale.

2 is a water supply pipe serving, at the same time, as handle of the implement and being connected, by means of a hose 1, to a water cock. 4 is a nozzle on the tube 2, the said nozzle being disposed within a casing 3 onto which a clamping disc 6 serving as holder for a brush 5 is attached. This clamping plate is fitted with outlet openings 7 for the water, when the latter flows out from the nozzle 4 by way of an opening 8 in the front wall 9 of the casing. The clamping disc is held in position in a recess 21 in the front end of the casing by means of a stud bolt 22. The casing is fitted with another opening 10, by way of which the water escapes in case of direct flushing.

The pipe 2 passes out through a sleeve 11 fitted with an annular shoulder 12 which rests against a surface 14 in a nut 15, which is screwed onto the rear threaded end of the casing 3. The surface 14 is provided on an inward flange 16 on the nut 15. The hole in this flange affording passage for the sleeve 11 is conically expanded at the rear end, in such a manner that the sleeve has the necessary lateral play in the nut. The nozzle 4 is attached on the front end of the pipe 2, and between the rear end of the nozzle and the front end of the sleeve 11 a helical spring 17 encircles the pipe 2 holding partly the shoulder 12 of the sleeve 11 pressed against the face 14 of the nut 15 and partly the hemispherically shaped point 18 of the nozzle pressed into either one of the outlet openings 8 and 10 for the water to the brush and for direct flushing, respectively. These openings are preferably conically reduced towards the exterior. On the nozzle there is provided, immediately behind the point, a flange 19 supporting a gasket 20 adapted to fit against the wall of the casing around either of the outlet openings 8 or 10.

During use the casing is thus tightly closed at the front as well as at the rear end, at the latter end by means of the shoulder 12 resting against the nut 15, so that the water may only escape by way of the orifice of the nozzle.

When the direction of the jet of water is to be altered, this may be brought about by compressing the helical spring 17 and thus pulling the water pipe so far towards the rear that the orifice 18 of the nozzle 4 goes clear of the opening 8 or 10 into which the orifice has been inserted, and the pipe with the orifice is then swung to the other opening 10 or 8. When the pipe 2 is then released, the helical spring will force the orifice of the nozzle into the opening concerned, so that the water may now escape by way of of the latter. While the nozzle 4 is thus being swung, any inconvenience from water squirting out sideways is avoided, although the supply of water is not interrupted.

The apparatus is used in known manner, it being first adjusted for direct sprinkling as shown in Fig. 3, whereby it becomes practicable to direct a powerful jet of water

against the surface to be washed. This surface is thus rinsed for most of the grit or the like adhering to the same. Then the supply of water is switched to the brushes, and the remaining and now soaked dirt is now both brushed and flushed away. When this operation is finished, the implement is readjusted for direct flushing, and the washed surface is given a finishing flushing.

Having thus described my invention, what I claim is:—

A washing implement, comprising a hollow head having a tubular extension, a brush supported in said head, a pipe passing through said extension for supplying water to the head, a nozzle on said pipe, the head having two discharge openings one communicating with the atmosphere outside of the brush and the other communicating with the brush, a sleeve slidable on said pipe, a nut engaging the end of said tubular extension and encircling a portion of said sleeve, said nut and sleeve having cooperating faces adapted to movably retain the sleeve between the end of said extension and the nut whereby said nozzle is adapted to be swung laterally of the head into communication with either of said openings, and a helical spring encircling said pipe and exerting pressure on said nozzle thereby to retain the same in engagement with either of said openings.

In testimony whereof I have signed my name to this specification.

JOHAN FREDERIK SCHROETER JERNHOLM.

Witnesses:

S. Bardram,

Gilbert Ask.