April 14, 1931. J. R. C. SMITH 1,800,413

CAR CLEANING TOOL

Filed Feb. 17, 1928

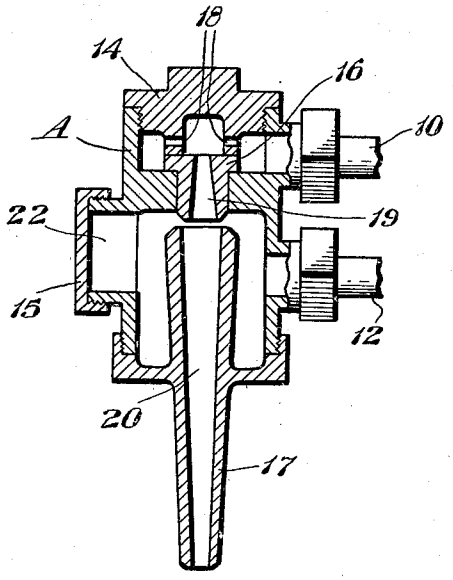


FIG. 3.

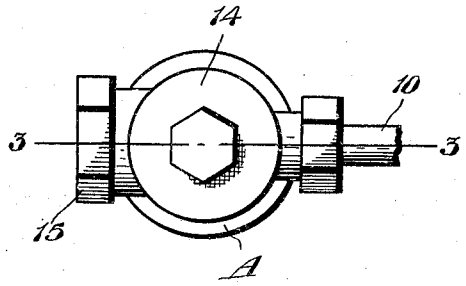


FIG. 2.

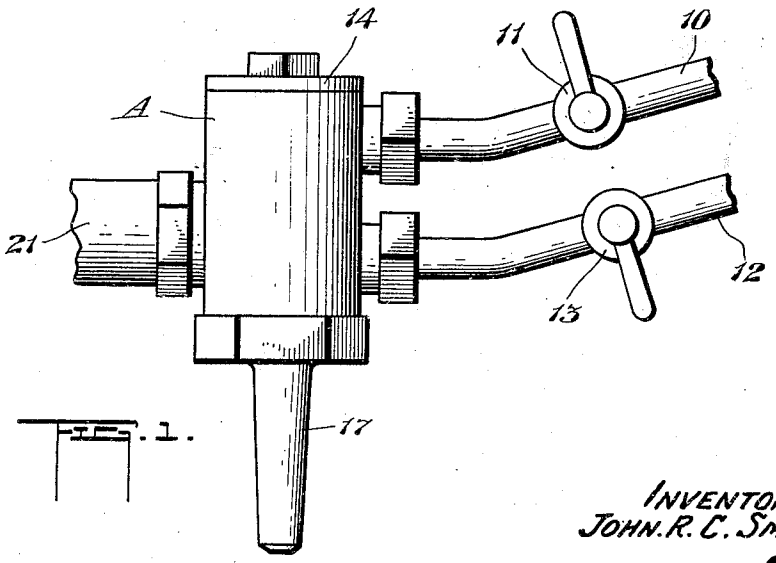


FIG. 1.

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Patented Apr. 14, 1931 1,800,413

UNITED STATES PATENT OFFICE

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CAR-CLEANING TOOL

Application filed February 17, 1928, Serial No. 255,162, and in Canada April 4, 1927.

My invention relates to a combined tool for removing dirt, grease, tar and foreign matter from the body, chassis, engine and running gears of cars, and the object of my invention is to combine in a single tool, easily handled, and suitably controlled, the supply of a high velocity water jet, a low velocity water jet, a steam jet and a vacuum suction, to render the tool simple in construction with the several parts readily accessible for inspection and repair. The high velocity water jet is to remove and loosen caked and hard foreign material, the low velocity jet to wash and flush off the dirt, the steam jet to soften and remove road tar, and the vacuum suction to clean away dust and loose particles from the floors, upholstery and interior of the car.

I attain these objects by the arrangement of parts illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of my improved device with the supply pipe connected thereto.

Figure 2 is a plan view, and

Figure 3 is a section taken on the line 3—3 of Fig. 2.

Referring to the drawings, in which my invention is illustrated, A represents the body of the apparatus to which are detachably connected the steam or air supply pipe 10, controlled by valve 11, the water supply 12, controlled by valve 13, the caps 14 and 15, and the nozzles 16 and 17. The high velocity jet is obtained by admitting steam or air under pressure through the valve 11 and openings 18, and water through the valve 13. The steam or air under pressure and escaping acts on the water through the openings 19 and 20 in the nozzles 16 and 17. The low velocity water jet is obtained by opening valve 13 and obtaining a flow through opening 20 in nozzle 17. The steam jet is obtained by opening valve 11 which obtains a flow of steam through openings 19 and 20 in nozzles 16 and 17. The vacuum suction is obtained by removing cap 15 and attaching a suitable hose 21; opening valve 11 to steam or air pressure which on escaping creates a partial vacuum in the passage 22, due to the velocity of the gas in the nozzles 16 and 17.

As many changes could be made in the above construction, and many apparently widely different embodiments of my invention, within the scope of the claim, constructed without departing from the spirit or scope thereof, it is intended that all matter contained in the accompanying specification and drawings shall be interpreted in an illustrative and not in a limiting sense.

What I claim as my invention is:

A car cleaning tool comprising a body open at both ends and including a transverse apertured partition dividing the body into upper and lower independent chambers, a high velocity steam and gas supply conduit communicating with the upper chamber, a low velicity water supply conduit communicating with the lower chamber, said conduits being arranged in right angular relation to their respective chambers, said lower chamber having an opening to accommodate a vacuum conduit, a cap for said opening, upper and lower caps closing the opposed ends of said body, a nozzle carried by the lower cap and partly projecting within the adjacent chamber, a second nozzle for the upper chamber arranged in axial alignment with the first mentioned nozzle and received by the aperture of said partition, and a hollow depending portion carried by the upper cap and bearing against the adjacent nozzle and having restricted openings through which the steam and air enter said nozzle from the upper chamber.

In witness whereof I have hereunto set my hand.

JOHN REGINALD CRISPIN SMITH.