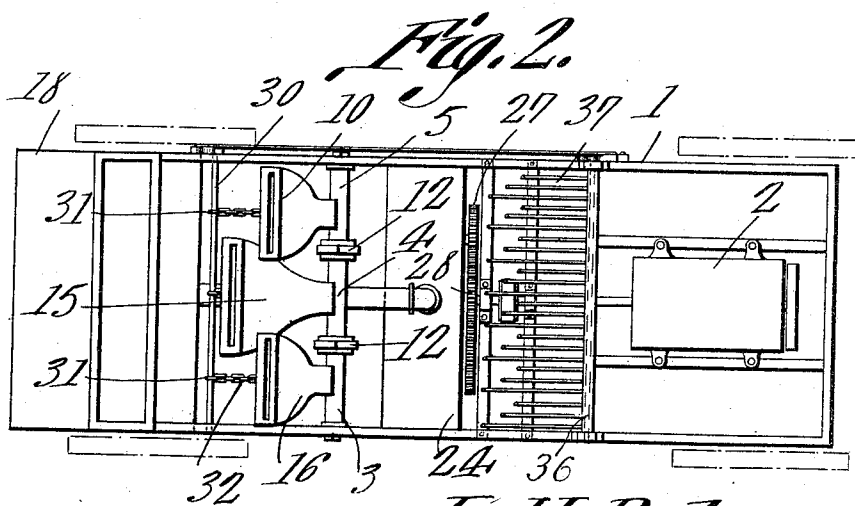
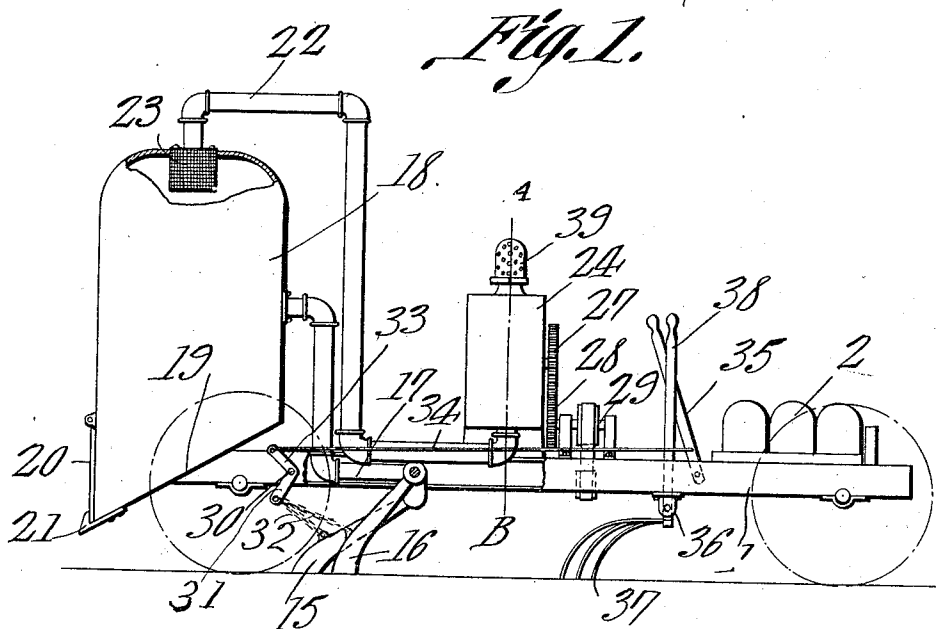


LE ROY H. ROBY.
 STREET CLEANING MACHINE.
 APPLICATION FILED APR. 28, 1911.

1,015,637.

Patented Jan. 23, 1912.

2 SHEETS—SHEET 1.



Witnesses

J. P. Goulin
S. H. Wilson

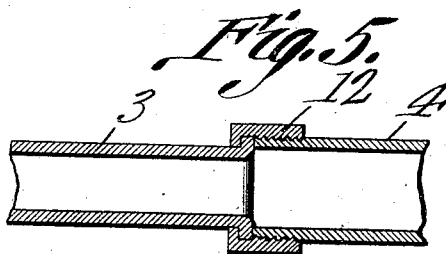
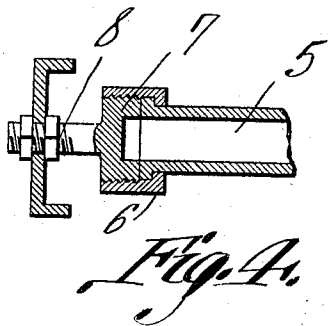
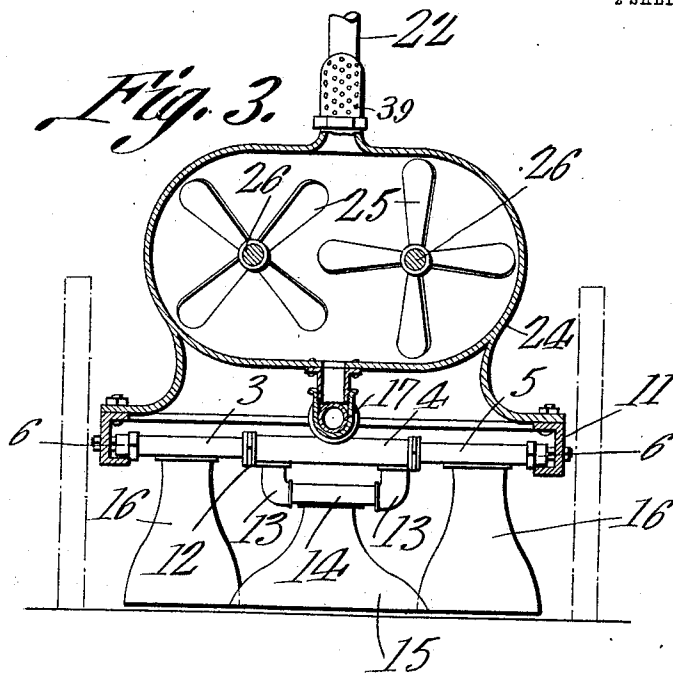
L. H. Roby, Inventor
 by *C. Snow & Co.* Attorneys

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Witnesses

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S. H. Wilson.

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UNITED STATES PATENT OFFICE.

LE ROY H. ROBY, OF FOSTORIA, OHIO.

STREET-CLEANING MACHINE.

1,015,637.

Specification of Letters Patent.

Patented Jan. 23, 1912.

Application filed April 28, 1911. Serial No. 623,889.

To all whom it may concern:

Be it known that I, LE ROY H. ROBY, a citizen of the United States, residing at Fostoria, in the county of Seneca and State of Ohio, have invented a new and useful Street-Cleaning Machine, of which the following is a specification.

This invention relates to street cleaning machines and its object is to provide a motor propelled vehicle having means whereby dirt may be sucked from the surface over which the machine is traveling and deposited in a dust collector carried by the machine, there being means located in advance of the suction tubes for loosening the dirt so that it can be easily carried away by the air sucked through the tubes.

Another object is to provide a plurality of independently movable suction tubes designed to shift upwardly out of the way of any obstructions in the path thereof, thus preventing injury to the tubes after they have once been set in operative positions.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings, the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a view partly in section and partly in elevation of the street cleaning machine. Fig. 2 is a bottom plan view of the machine. Fig. 3 is an enlarged transverse section on the line A—B Fig. 1. Fig. 4 is an enlarged section through one of the end bearings of the suction pipe. Fig. 5 is an enlarged section through one of the intermediate bearings of the suction pipe.

Referring to the figures by characters of reference 1 designates the frame of the vehicle, the same having a motor 2 of any desired type mounted thereon whereby the machine can be propelled in the same manner as an ordinary motor vehicle. Arranged within the rear portion of the frame is a suction tube made up of three sections designated at 3, 4 and 5 respectively, the end sections 3 and 5 being each swiveled within coupling members 6 detachably secured to heads 7, which in turn, are fastened,

as by means of stems 8 to the sides of the frame 1. The inner ends of the sections 3 and 5 are swiveled within couplings 12 detachably secured to the ends of the intermediate section 4, this intermediate section being formed with downwardly and rearwardly extending tubular arms 13 in which a pipe section 14 is mounted to rotate. A nozzle 15 is secured to and extends downwardly and rearwardly from the pipe section 14 and additional nozzles 16 are connected to and extend downwardly and rearwardly from the pipe sections 3 and 5, these last mentioned sections extending into the path cleaned by the nozzle 15 so that the three nozzles thus clean a path extending practically throughout the width of the machine. The pipe section 4 communicates through a pipe 17 with the interior of a dust collector 18 mounted on the rear portion of the frame 1 and having an inclined bottom 19 extending downwardly to an outlet opening normally closed by a door 20, any suitable means such as a catch 21, being provided for holding the door shut. An outlet pipe 22 extends from the top or dome of the dust receiver, there being a screen 23 for preventing dust from entering the pipe 22. Said pipe extends downwardly and opens into the bottom of a fan casing 24 in which are arranged two oppositely rotating fans 25 the shafts 26 of which are provided with meshing gears 27. One of these gears is actuated by a gear 28 secured to a shaft 29 adapted to be driven by the motor 2, any suitable mechanisms, not shown, being provided for this purpose.

A shaft 30 extends transversely of and is journaled within the frame 1 and has downwardly extending arms 31 connected by means of chains 32 or the like to the respective nozzles 15 and 16. Another arm 33 extends upwardly from this shaft and is connected, by a rod 34, to an actuating lever 35 by means of which the shaft can be rotated so as to pull on the chains and simultaneously elevate the nozzles.

A rock bar 36 extends transversely of the frame 1 and in front of the nozzles 15 and 16 and has a plurality of rake teeth 37 extending downwardly therefrom and disposed in staggered relation. This rock bar 36 is adapted to be shifted by means of a lever 38.

When the machine is driven forward the fans are set in motion and the rock bar 36 is

rotated so as to force the ends of the teeth 37 into contact with the surface to be cleaned, it being obvious that these teeth will thus loosen the dirt adhering to said surface. The fans create a suction through the nozzles 15 and 16 and pipe 17 to the dust collector 18 thence through pipe 22 to the fan casing 24. The air is exhausted from said casing through a screened outlet 39 arranged at the top of the fan casing. By shifting lever 35, the nozzles can be caused to swing downwardly close to the surface to be cleaned and the air rushing into the nozzles will suck the dirt therewith and convey it into the receiver 18 where it will be separated from the air by the screen 23 and drop onto the inclined bottom 9. Should one or more of the nozzles move against an obstruction in the path thereof, it will be raised independently of the other nozzles and ride over the obstruction after which it will drop by gravity back to normal position. It will be seen, therefore, that there is no danger of the nozzles being injured by coming into contact with such obstructions. Moreover should one nozzle be elevated out of proper relation to the surface to be cleaned, it will not affect the other nozzles but they will continue to suck dirt upwardly into the collector.

What is claimed is:—

1. A street cleaner including a motor propelled vehicle, suction nozzles disposed

in lapped relation and mounted for independent swinging movement about an axis extending transversely of the vehicle, means under the control of the operator for swinging said nozzles toward or away from the surface to be cleaned, a dust collector, a pipe connection between said nozzles and the collector, and means for creating a suction through said nozzles and the dust collector.

2. A street cleaner including a motor propelled vehicle, alining tubes extending transversely of the vehicle, said tubes being independently revoluble, an intermediate tube disposed between and alining with the first mentioned tubes and held against rotation, a dust collector, a pipe connection between said collector and the intermediate tube, a tube communicating with and supported by the intermediate tube and mounted for rotation about its longitudinal axis, suction nozzles connected to and movable with the respective revoluble tubes, means for shifting said nozzles toward or away from the surface to be cleaned, and means for creating a suction through the nozzles and tubes and through the dust collector.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

LE ROY H. ROBY.

Witnesses:

DOTT E. SIXX,
J. T. STOLDT.