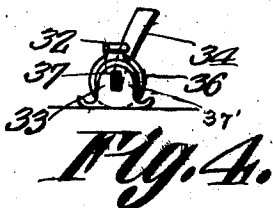
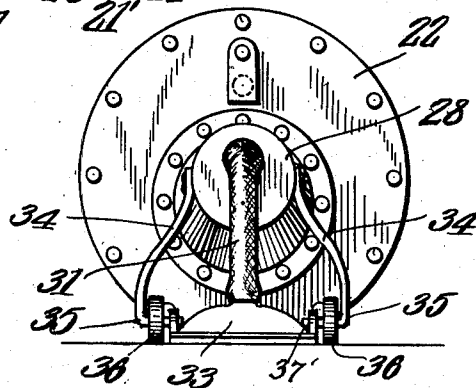
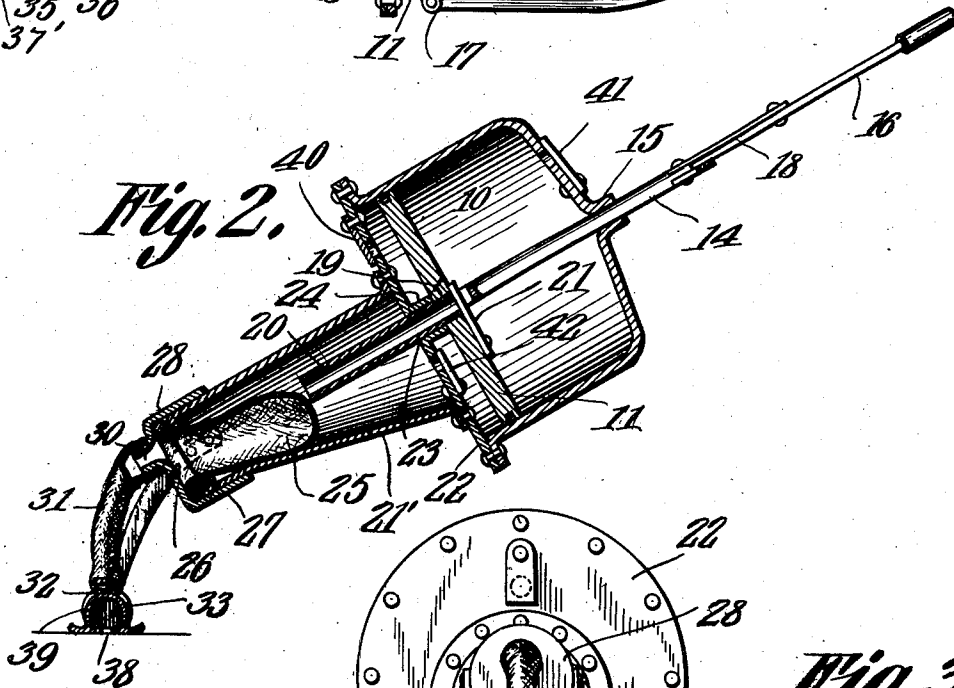
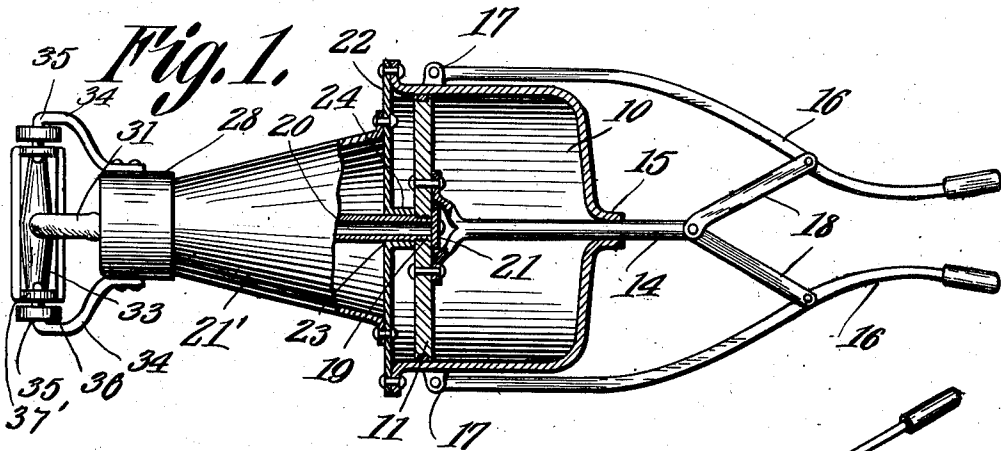


C. DE MATTIA.
VACUUM CLEANER.
APPLICATION FILED JULY 7, 1911.

1,029,916.

Patented June 18, 1912.



Witnesses

J. P. Lornein
L. H. Wilson

Constant De Mattia

Inventor,

by

C. A. Snow & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

CONSTANT DE MATTIA, OF DETROIT, MICHIGAN, ASSIGNOR TO RED CROSS VACUUM CLEANER COMPANY, OF DETROIT, MICHIGAN.

VACUUM-CLEANER.

1,029,916.

Specification of Letters Patent.

Patented June 18, 1912.

Application filed July 7, 1911. Serial No. 637,280.

To all whom it may concern:

Be it known that I, CONSTANT DE MATTIA, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Vacuum-Cleaner, of which the following is a specification.

This invention relates to an improvement in vacuum cleaners.

10 The primary object of the invention is to provide a nozzle which will accommodate itself to the surface to be cleaned, said nozzle having a flexible connection with the suction chamber, there being suitable means arranged within said suction chamber to receive the dust which is collected, said dust receiving means being conveniently removed from said chamber.

20 In the drawings:—Figure 1 is a top plan view partly in section of the cleaner. Fig. 2 is a side elevation partly in section. Fig. 3 is a front elevation. Fig. 4 is a detail view, showing the manner of supporting the nozzle.

25 In the drawings, 10 designates the suction chamber, which is arranged to house a piston 11. This piston is mounted on the forked extension 12 of a piston rod 14 which extends through the restricted neck 15 of the casing and which is reciprocated by means of the levers 16 which are pivotally supported by the bifurcated lugs 17 arranged on the casing, the levers 16 being connected to the piston rod 14 by means of links 18, the levers being moved toward and away from each other to reciprocate said rod. The piston 11 is provided with a central aperture 19 which receives the screw threaded end of a tube 20, a valve 21 which is secured to the piston between the forks of the extension 12 normally closing the end of said tube. Secured to the casing 10 is a substantially cylindrical casing 21' said casing being secured adjacent the edge of the wall 22 of the casing 10. This wall 22 is provided with a central aperture 23 which receives the tube 20, a boss 24 being formed on the plate or wall 22, said boss embracing the tube, guiding the same in its reciprocatory movement.

30 The casing 21' is bolted to the plate 22 of the casing 10 and is adapted to contain a dust receptacle 25 which is preferably in the

nature of a porous bag. This porous bag 25 has its open end 26 supported between the inwardly bent ends 27 of the casing 20 and a cap 28 which embraces the small end of the tapered casing 20, a wire or other suitable member being secured within the neck of the bag in order that the same may be held against displacement. The cap 28 is provided with the restricted extension 30 which extends within one end of a flexible tube 31, the other end of said tube embracing an extension 32 of a nozzle 33. The nozzle 33 is supported by a plurality of arms 34 which are secured to the cap 28. These arms 34 terminate in the angular extensions 35 which form bearings for rollers 36, which rollers support the lower end of the device, facilitating its movement across the surface to be cleaned. The inward extensions 35 extend beyond the rollers 36 and enter vertical slots 37 in the upturned ends or uprights 37' of the nozzle 33. This nozzle is provided with the longitudinal intake 38.

75 In operation the handles 16 are manipulated to create suction, within the chamber 10, the valves 41 and 42 being closed on the down stroke, air being expelled through the valve 40 and through the valve 21 in the upper compartment of the chamber, the air entering through the nozzle 33 either being conducted to the chamber by means of the tube 20 or the valve 42, the tube being utilized for this purpose on the down stroke, 85 and the valve on the up stroke. It will be noted by this construction that a constant suction is obtained with the use of a single piston. Attention is also called to the manner in which the dust receiving bag is supported within the casing 21' and the fact that the same may be conveniently removed when it becomes filled and an empty bag inserted in lieu thereof. Attention is also called to the nozzle 33 and the manner in 95 which the same is supported, this nozzle being supported in a manner which permits the same to move relative to its support.

What is claimed is:—

A vacuum cleaner comprising a pump, a 100 filter casing connected to and communicating with said pump, a cap forming a removable closure for the lower end of said filter casing, a pair of spaced arms extend-

ing from said cap, their lower ends being
inwardly extended, a roller journaled on
each of said ends, a nozzle, and a flexible
pipe connecting said nozzle with said cap,
5 said nozzle being provided with uprights
having slots which receive the ends of said
arms.

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

CONSTANT DE MATTIA.

Witnesses:

M. C. BRIGHT,
A. M. BRIGHT.