

G. CLEMENTS.  
VACUUM CLEANER.  
APPLICATION FILED OCT. 30, 1912.

1,145,555.

Patented July 6, 1915.

Fig. 1.

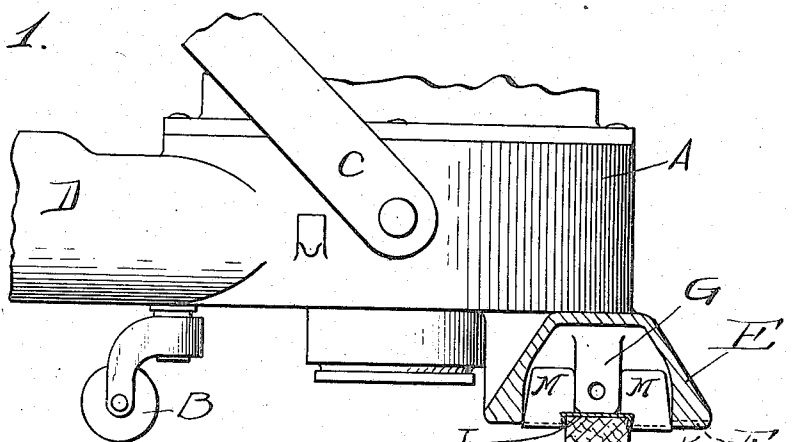


Fig. 2.

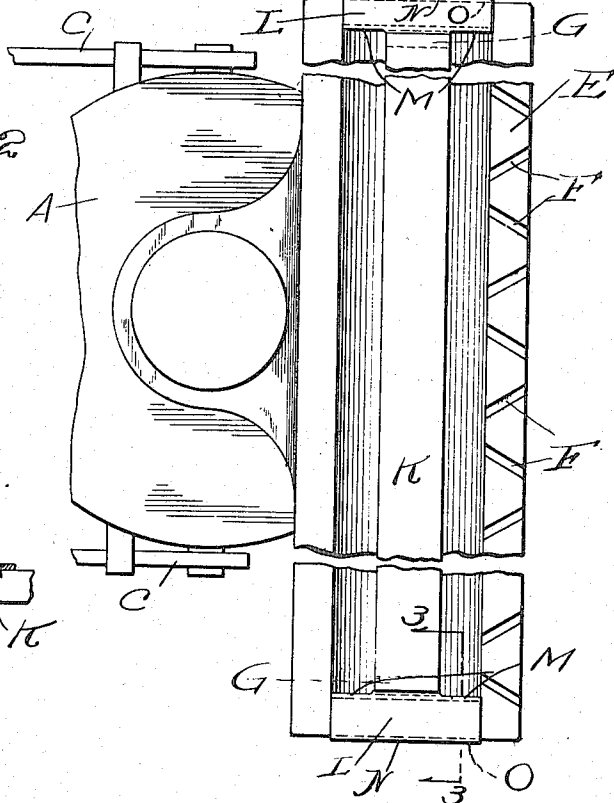
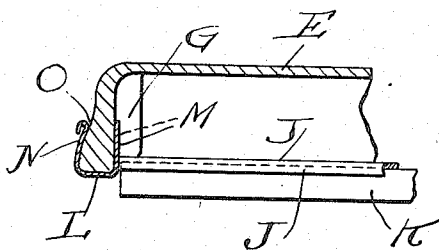


Fig. 3.



Witnesses:  
O. S. Plummer  
Minnie J. Plummer

Inventor  
George Clements  
by *[Signature]*  
his Attys.

# UNITED STATES PATENT OFFICE.

GEORGE CLEMENTS, OF CHICAGO, ILLINOIS, ASSIGNOR TO CLEMENTS MFG. CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## VACUUM-CLEANER.

1,145,555.

Specification of Letters Patent.

Patented July 6, 1915.

Application filed October 30, 1912. Serial No. 728,566.

*To all whom it may concern:*

Be it known that I, GEORGE CLEMENTS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Vacuum-Cleaners, of which the following is a specification.

My invention relates to pneumatic vacuum cleaners and has for its object to provide convenient means whereby a vacuum sweeper can be converted into a vacuum scrubber.

It is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation with a cross-section through the nozzle; Fig. 2 is a bottom view of the same; Fig. 3 is a detail cross section through the end of the nozzle and squeegee.

Like parts are indicated by the same letters in all the figures.

A is the casing provided with the caster B, the handle ends C, C, the outlet hose connection D and the nozzle E. The nozzle is in the usual form and when seen from below presents an oblong rectangular opening. The forward lip is preferably provided with diagonal slots F, F. Inside the nozzle are the lugs G, G adapted to receive the ends of a roller brush which is employed when the device is used for dry vacuum cleaning.

J is a bar with up-turned edges between which the squeegee K is secured.

L, L are end pieces for the squeegee support, each provided with two upwardly extending prongs or fingers M, M adapted to lie on opposite sides of the brush-holding lugs and thus hold the squeegee in the middle of the nozzle opening. These ends are also provided with external spring lips N, N adapted to overhang and grip the upwardly and inwardly inclined surfaces O, O on the ends of the nozzle so as to hold the squeegee in position.

Obviously the squeegee support and attaching means can be varied at will, the essential point being that there are means for the detachable connection of the squeegee with the nozzle so that it will be held free from both lips of the nozzle. Preferably the device takes a form somewhat as shown where-

in the squeegee support springs onto the ends of the nozzle and is centered and held in position by the properly centered supports for a rotary brush.

The brush and the squeegee are, of course, used interchangeably. The device which I have illustrated might be provided with a brush for dry cleaning or for rubbing rough soft surfaces. The squeegee would naturally be used for wet cleaning or smooth hard surfaces. When the operator has finished using the vacuum cleaner as a dry cleaner, for example, for sweeping floors or rugs and he desires to finish up or clean a wet floor or carry on a scrubbing operation, he can remove the brush and substitute the squeegee; and, since it is free from the lips of the nozzle, the latter can be moved back and forth, being operative while being moved in either direction.

The end pieces L are preferably attached to the bar J by soldering, or by any other desired means.

The subject matter contained in this application is illustrated in its entirety or in part in each of my co-pending applications; #754,707, filed March 17, 1913, "Vacuum cleaner"; and #705,398, filed June 24, 1912, vacuum cleaner.

I claim:

1. In a vacuum cleaner the combination of a nozzle with a squeegee detachably and rigidly secured in the mouth of the nozzle intermediate the lips, widely separated therefrom and projecting beyond said lips so as to contact the floor and leave unobstructed air passages on opposite sides of the squeegee under the lips of the nozzle and between such lips and such squeegee.

2. In a vacuum cleaner the combination of a nozzle with a squeegee and means for detachably supporting it intermediate the lips of the nozzle, said means comprising a support and spring lips on the ends of the squeegee support to engage the walls of the nozzle.

3. In a vacuum cleaner the combination of a nozzle with a squeegee and means for detachably supporting it intermediate the lips of the nozzle, said means comprising

lugs on the ends of the nozzle and a squeegee support longitudinally arranged in the nozzle and provided with springs at its ends, said springs comprising bifurcated ends to  
6 straddle the lugs and lips to engage the ends of the nozzle.

In testimony whereof, I affix my signature

in the presence of two witnesses this 25th day of October, 1912.

GEORGE CLEMENTS.

Witnesses:

MINNIE SUNDFAR,  
LILLIAN G. ROSS.