April 12, 1932. W. T. CUNNINGHAM 1,853,960

VACUUM CLEANING MACHINE

Filed Sept. 28, 1929

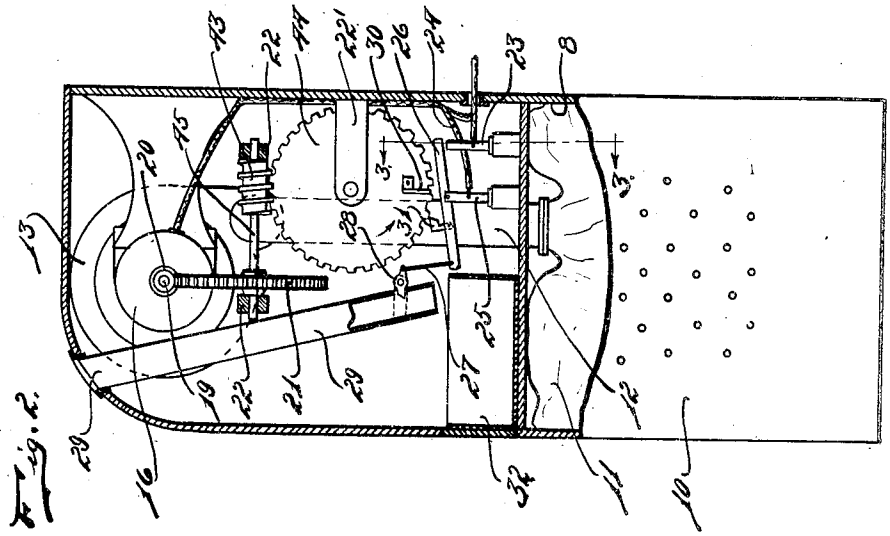

Fig. 2.

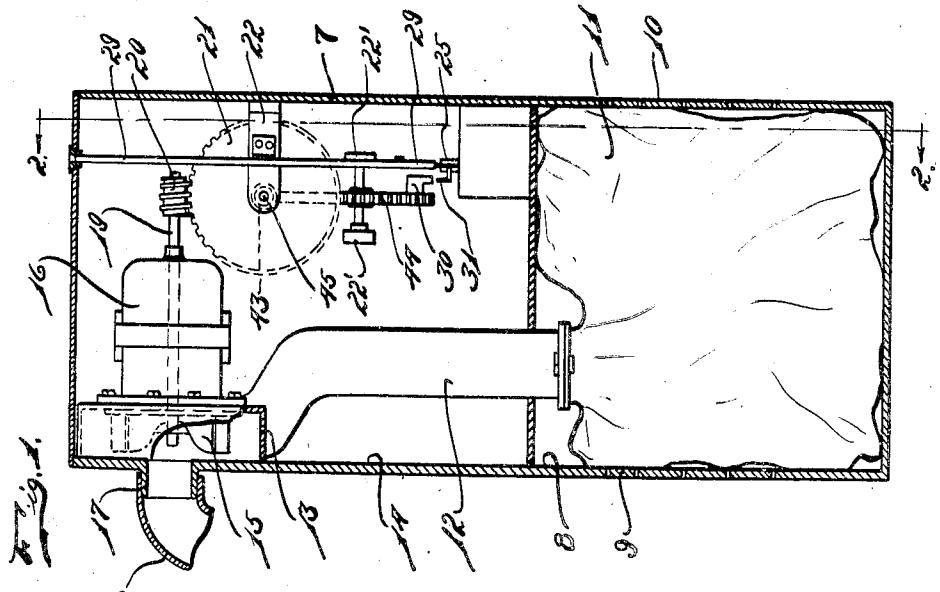

Fig. 1.

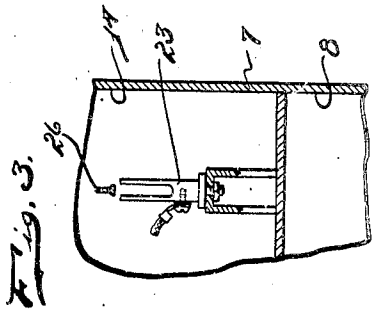

Fig. 3.

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UNITED STATES PATENT OFFICE

WILLIAM T. CUNNINGHAM, OF ST. CLAIR, MICHIGAN

VACUUM CLEANING MACHINE

Application filed September 26, 1929. Serial No. 395,769.

My invention relates to a new and useful improvement in a vacuum cleaning machine and particularly of the coin controlled type. It is an object of the present invention to provide a vacuum cleaning machine which may be operated by coin control and utilized for cleaning the upholstery of vehicles and the like so that the device may be installed in service stations and utilized as a self-serving device.

It is another object of the invention to provide a vacuum cleaning mechanism whereby a high suction may be afforded to those desiring to use the same.

Another object of the invention is the provision of a device of this class which will be simple in structure, economical of manufacture and highly efficient in use.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by a reference to the accompanying drawings which form a part of this specification and in which,

Fig. 1 is a side elevational view of the invention, with parts broken away and parts shown in section.

Fig. 2 is a view taken on line 2—2 of Fig. 1 with parts broken away and parts shown in section.

Fig. 3 is a fragmentary sectional view taken on substantially line 3—3 of Fig. 2.

The device comprises a housing 7 having a lower compartment 8 with the walls 9 and 10 perforated. Positioned in the compartment 8 is a dust bag 11 connecting with the conduit 12 which communicates with the blower housing 13 positioned in the upper compartment 14 of the housing.

In the blower housing 13 is a fan 15 driven by the electric motor 16, and communicating through the nipple 17 with the blower housing 13 is an inlet conduit 18. The shaft 19 of the motor is provided with a worm 20 meshing with a worm wheel 21 journaled on suitable brackets 22 mounted in the compartment 14. The shaft 45 on which the wheel 21 is mounted carries a worm 43 meshing with a worm wheel 44 supported by brackets 22'. One of the wires of the circuit leading to the motor 16 is connected to the contact 23 and continued by the wire 24 which is connected to the contact 25. Rockably mounted on the contact 25 is the switch arm 26 which is connected by the rod 27 to the dog 28 which is rockably mounted on the coin tube 29 and projected inwardly so that when a coin is dropped down the tube 29 it will rock the dog 28 to move the switch arm 26 into engagement with the contact 23 and close the circuit to the motor 16. The motor 16 will then be set into operation and cause a rotation of the wheel 44, the switch remaining closed until the contact member 30 mounted on the face of the wheel 44 is brought into engagement with the projection 31 on the arm 26, upon which the arm 26 will be rocked into the position shown in Fig. 2 to open the switch.

The ratio of the gearing between the worm 20 and the wheel 44 will, of course, determine the length of time the device will be operated upon the deposit of a coin in the device. A coin receptacle 32 is positioned in the compartment 14 below the coin tube 29.

With a device constructed in this manner, the advantages sought are obtained and it is believed that the simplicity of the structure is evident from the description.

While I have illustrated and described the preferred form of my invention, I do not wish to limit myself to the precise details of structure shown but desire to avail myself of such variations and modifications as may come within the scope of the appended claim.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

In a device of the class described, a motor; a rockably mounted switch arm for controlling the operation of said motor; a rotatable member rotatable upon operation of said motor; a contact member carried by said rotatable member; and a projection mounted on said arm engageable with said contact member, upon rotation of said rotatable member

to a pre-determined position, for rocking said switch arm and opening said switch; and rockable means connected to said switch arm and adapted upon rocking movement for rocking said switch arm to switch closing position.

In testimony whereof I have signed the foregoing specification.

WILLIAM T. CUNNINGHAM.