

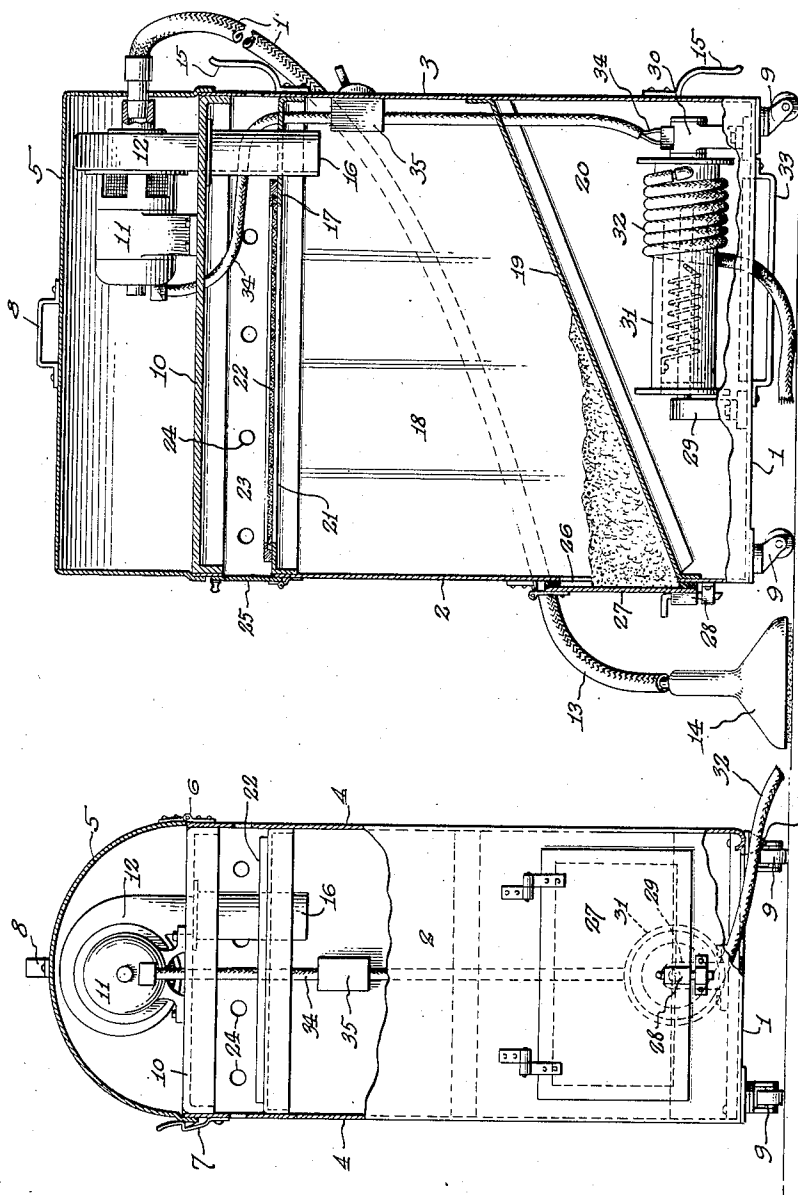
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H. W. SMITH

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CAR CLEANING DEVICE

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UNITED STATES PATENT OFFICE

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CAR-CLEANING DEVICE

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My invention aims to provide a car or automobile cleaning device that may be shifted about the automobile or readily carried from one position to another so that the device may be conveniently used for removing dust, loose dirt and other foreign matter from the automobile, particularly the seats, floor, luggage and such matter as may be within the automobile. The device operates on the principle of a vacuum cleaner and obviously may be used for removing dust from the clothes of tourists.

My invention further aims to provide an electrically operated suction cleaning device in the bottom of which is placed a holder or take-up reel for an electric conductor, so that the device can be connected to a suitable source of electrical energy and conveniently moved from one location to another. The device includes a simple and durable construction that can be manufactured at a comparatively small cost so that automobile service stations may adopt the device and permit of its use gratuitously.

The device will be hereinafter specifically described and then claimed, and reference will now be had to the drawing, wherein

Figure 1 is an end view of the device, partly broken away and partly in section, and

Fig. 2 is a longitudinal sectional view of the device.

The car cleaning device may be advantageously made of sheet metal finished to present a neat appearance and non-corrodible so that it will not be materially affected by outdoor use. The device is in the form of an oblong casing having a bottom wall 1, end walls 2 and 3 and side walls 4. The top of the casing is formed by a semi-cylindrical cover 5 hinged, as at 6, to the upper edge of one of the side walls 4 and the other side wall may be provided with a conventional form of fastener 7, so that the cover 5 may be secured in a closed position and the device lifted and carried by a handle 8 on the cover.

The bottom wall 1 of the casing is provided with casters or swiveled wheels 9 so that the device may be readily moved about in addition to being portable.

In the top of the casing is a horizontal partition or support 10 for an electric motor 11

provided with a conventional form of suction fan 12, said motor and fan being enclosed by the cover 5. Detachably connected to the fan 12 and extending through an end wall of the cover 5 is an intake hose or flexible connection 13 provided with a conventional form of nozzle 14 adapted to be moved over a surface or in proximity thereto to lift dust or foreign matter from the surface when the suction fan 12 is driven by the motor 11. The hose 13 may be of considerable length with suitable joints so that the hose may be freely moved about an automobile, and when the hose is not in use it may be hung on or wrapped about holders 15 on the end wall 3 of the casing.

The suction fan 15 has a discharge connection 16 extending through a screen partition 17 into a dust compartment 18 having an inclined bottom wall 19 some distance above the bottom wall 1 in order to form a reel compartment 20 in the bottom of the casing.

The screen partition 17 has a large opening 21 over which is placed a detachable screen 22 disposed below the partition for support 10 so as to form an air chamber 23 communicating with the atmosphere through suitable openings 24 in the side and end walls of the casing. The screen 22 may be removed from the air chamber 23 and cleaned by virtue of a hinged door 25 carried by the end wall 2 of the casing.

The bottom wall 19 of the dust chamber 18 is inclined downwardly from the end wall 3 towards the end wall 2 and said end wall 2 has an opening 26 normally closed and sealed by a hinged upwardly and outwardly swinging door 27 provided with a suitable latch 28 for retaining it in a closed position. Dust and dirt will accumulate against the door 27 and air exhaust from the compartment 18 through the screen 22 into the chamber 23 and out of the openings 24.

In the reel compartment 20 are bearings 29 and 30 for a take-up reel or roller 31 to which is attached and wound thereon an electrical conductor 32 having its outer end extending at the bottom wall 1 of the casing over a bail 33 and out from the under the casing so that the free end of said conductor may be attached to a plug or other connec-

tion of a suitable source of electrical energy which I deem it unnecessary to illustrate. The reel or roller 31 is of the spring actuated type by which the conductor 32 will be automatically wound on the reel or roller and thus prevent the conductor from lying around and becoming entangled incident to moving the cleaning device about an automobile. Since the reel or roller 31 is rotatable the bearing 30 is equipped with a brush or rotary contact of a conventional form (not shown). This is in order that there may be leading-out conductors 34 to a conventional form of switch 35 and to the motor 11, the switch 35 being supported by the end wall 3 of the casing within the dust compartment 18 and operatable from the outer side of the wall 3. Obviously the conductors 34 may be incased so as to conveniently extend through the partitions 19, 17 and 10.

With the electric conductor 32 in a suitable electric operating circuit, the cleaning device may be carried or pushed about an automobile and the nozzle 14 used for removing dust and dirt from the automobile into the compartment 18, which may be emptied from time to time. I do not care to confine my invention to the particular type of fan and motor, but it is important that the various chambers and compartments be compactly arranged within the casing, so that the device may be carried if necessary. I believe I am the first to provide such a cleaning service at an automobile service station so that tourists and others may use the cleaning device while other service is being performed at the station. Such a device at a hotel entrance will be a convenience to tourists for cleaning luggage and wearing apparel before entering a hotel, and while in the drawing I show the device as now constructed and used, yet it is to be understood that the structural elements are susceptible to such changes as fall within the scope of the appended claims.

What I claim is:—

1. A cleaning device comprising a casing, a support mounted in the upper portion thereof, a motor driven fan on said support, a screen positioned in said casing beneath said support and spaced therefrom to form an air chamber therewith, said casing being ported between the support and screen, an inlet hose connected to said fan and disposed outside the casing, and an outlet pipe extending from said fan through said chamber and opening into the space beneath said screen.
2. A cleaning device comprising a casing, a motor driven suction fan supported in said casing, an inclined partition in said casing beneath said fan and cooperating with said casing in providing a compartment adapted to receive matter from said fan, a screen in said compartment and above said partition, said casing having air outlet ports formed

above said screen, said fan being positioned to discharge upon the higher part of said inclined partition.

In testimony whereof I affix my signature.

HAROLD W. SMITH.

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