C. R. POLLARD.

VACUUM CLEANING APPARATUS.

APPLICATION FILED JULY 24, 1908.

945,343. **Patented Jan. 4, 1910.**

2 SHEETS—SHEET 1.

Fig. 1

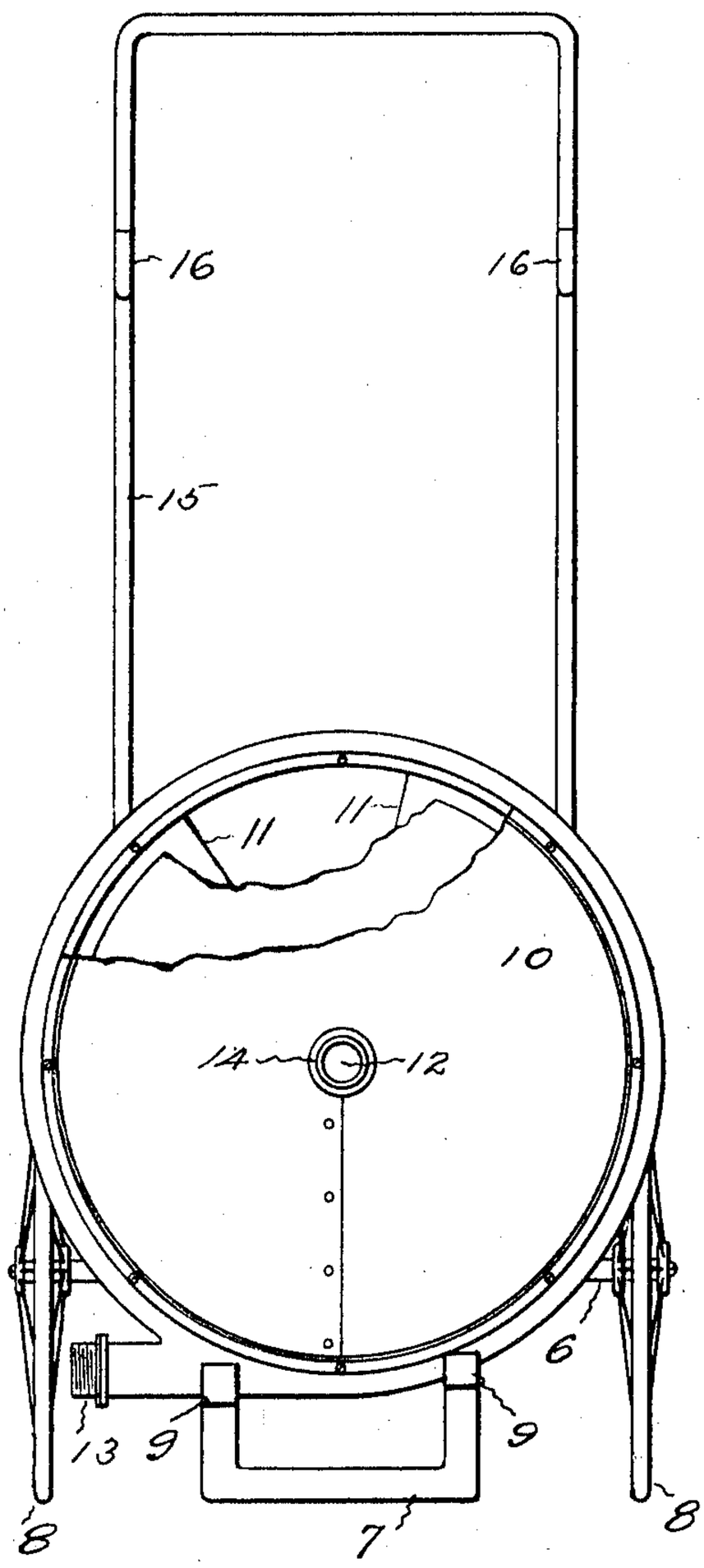

Fig. 2

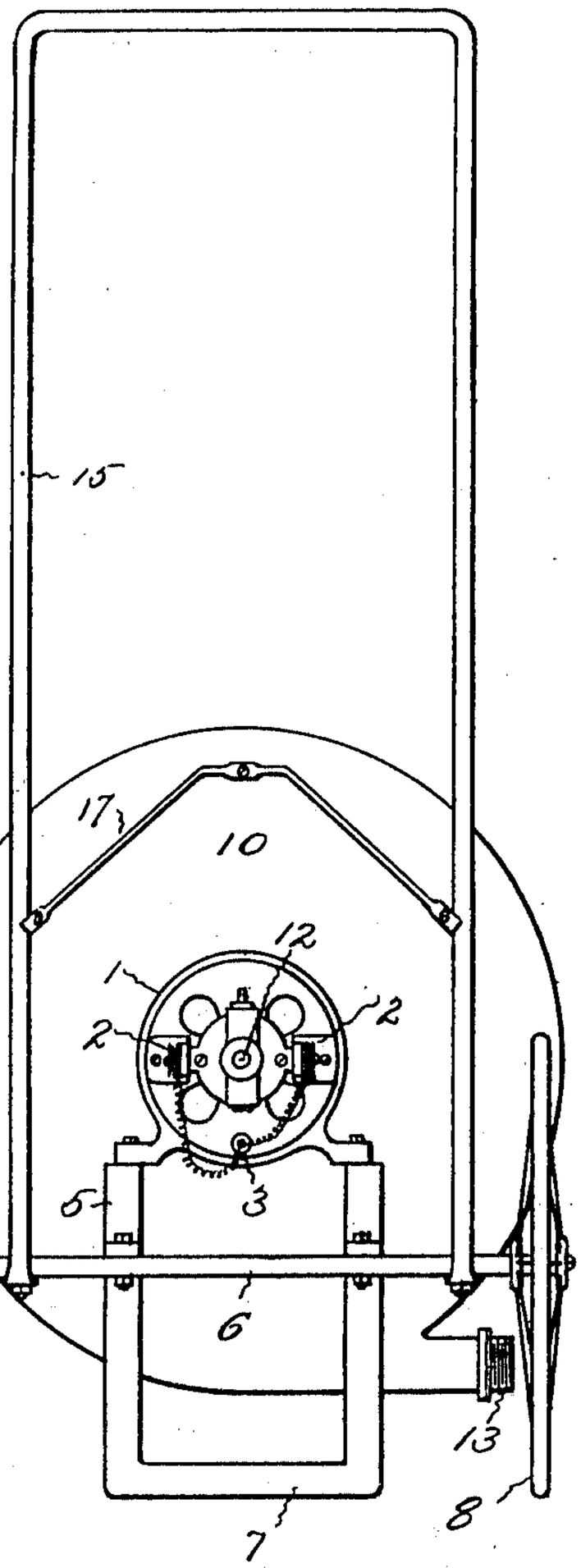

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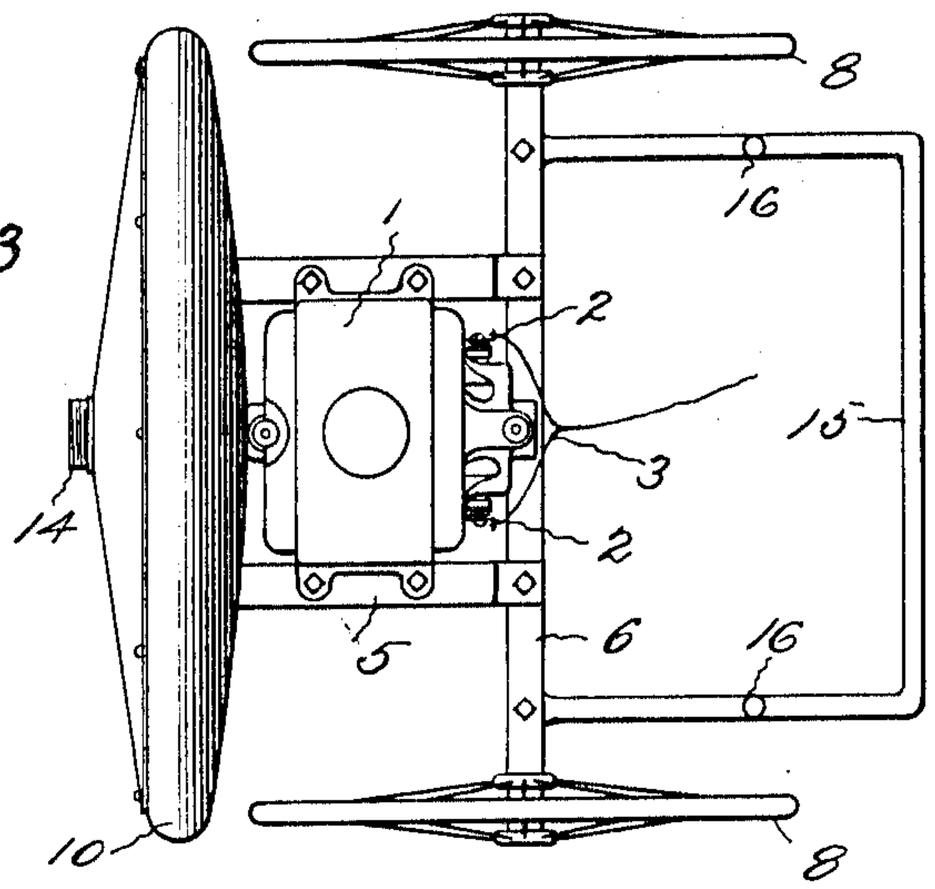
Fig. 3



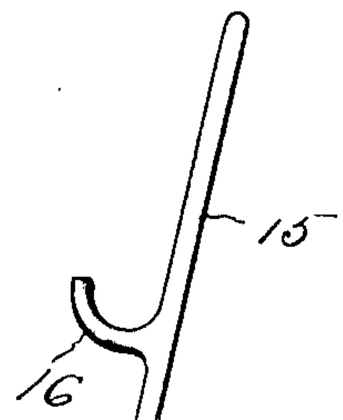
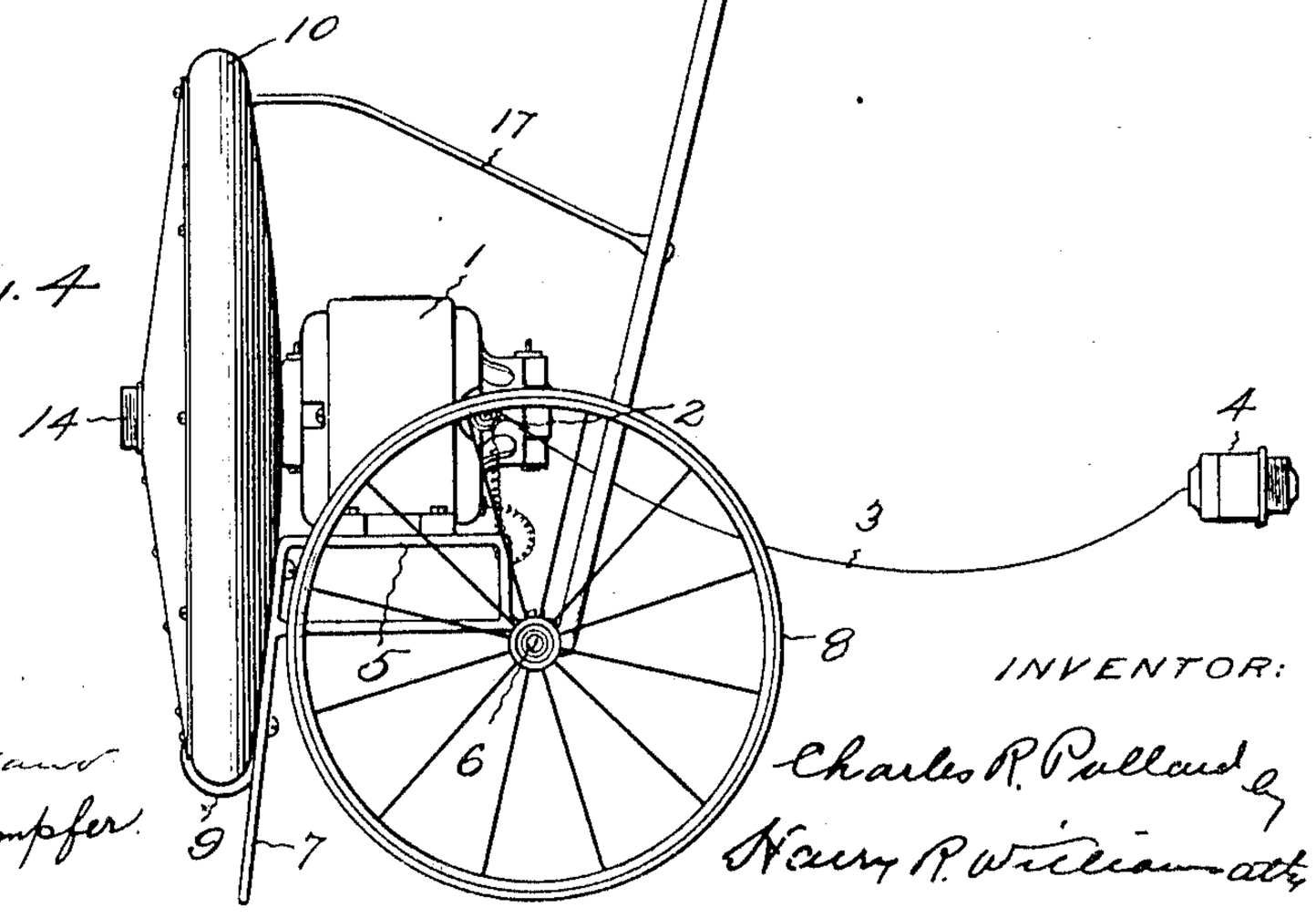


Fig. 4



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UNITED STATES PATENT OFFICE.

CHARLES R. POLLARD, OF HARTFORD, CONNECTICUT, ASSIGNOR TO DAVID W. WILLIAMS, OF GLASTONBURY, CONNECTICUT.

VACUUM CLEANING APPARATUS.

945,343. Specification of Letters Patent. Patented Jan. 4, 1910.

Application filed July 24, 1908. Serial No. 445,122.

To all whom it may concern:

Be it known that I, CHARLES R. POLLARD, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Vacuum Cleaning Apparatus, of which the following is a specification.

This invention relates to a portable electric suction-producing apparatus, which is designed to be utilized for cleaning purposes.

The object of the invention is to provide a very simple, light, cheap and convenient portable apparatus of this nature, which is particularly adapted for domestic purposes.

Figure 1 of the accompanying drawings shows a front elevation, with parts broken away, of an apparatus which embodies the invention. Fig. 2 shows a rear elevation. Fig. 3 shows a plan and Fig. 4 shows a side elevation of the same.

The motor 1 is an electric motor, either of the direct current type or alternating current type, as desired, of any required capacity. That shown is a direct current motor of common construction, approximately one-sixth horse power. Connected with the brushes 2 of this motor are lead wires 3 of suitable length, provided with a plug 4 of common form, which may be screwed into an ordinary incandescent lamp socket. The motor is fastened by bolts or screws upon a metallic frame 5. The rear of this frame is secured to an axle 6, and the front extends downward and forms a supporting foot 7. Secured on each end of the axle, in a common manner, is a wire spoke rubber tired wheel 8. Projecting forwardly from the front of the supporting part of the frame are arms 9 and supported, practically vertically, by these arms is a rotary exhaust fan 10, the blades 11 of which are connected with and driven by the armature shaft 12 of the motor.

At the center of the front plate of the fan casing, and communicating with the interior, is a threaded inlet nipple 14. A hose, that is provided with a brush or other implement for collecting dust and dirt, is designed to be attached to this inlet nipple.

Projecting tangentially from the lower peripheral edge of the fan casing is the threaded outlet nipple 13. A hose, that may be led out of a window or to any other locality, or to a receptacle, where it is desired to deposit the dust and dirt that is sucked up by the action of the fan, is designed to be attached to this outlet nipple.

Connected with the axle and projecting upwardly therefrom is a framelike handle 15. This handle is preferably provided with lugs 16 near its upper end, upon which the inlet and outlet hose may be coiled when not in use. A brace 17 may be placed between the handle and the upper part of the fan casing for the purpose of stiffening the handle and aiding in the support of the fan.

This apparatus is comparatively light in weight, and it is easily rolled from room to room and taken up and down stairs. It can be conveniently connected with an ordinary incandescent lamp circuit and the hose that is connected with the outlet of the fan may be led out of a window or into a receptacle. When the device is in use, that is, when the motor is being run and the fan blades rotated so as to suck air with dust and dirt in through the inlet and blow it out through the outlet the machine remains stationary, and if it is desired to change the position of the machine, it requires but a very slight effort to tip the handle and roll the machine to the desired locality. The parts are so designed that the device occupies but little space and can be conveniently stored. The weight is so distributed that while it requires but a slight effort to tip the machine and roll it from place to place, or take it up and down stairs, when it is located and in operation, the greater part of the weight is forward of the axle. As a result of this the front of the frame, which rests upon the floor, supports the greater part of the load. This prevents the machine from moving and holds it steadily so that it will not vibrate when in use.

The invention claimed is:

1. A portable suction apparatus having an axle, a pair of wheels supporting the axle, a handle for moving the apparatus from place to place, a frame connected with the axle, an electric motor supported by the frame in front of the axle, and a fan mounted on the frame in front of the axle and having blades rotated by the motor, said frame forming the front support for the apparatus.

2. A portable suction apparatus having an axle, wheels supporting the axle, a frame attached to the axle, an electric motor mounted on the frame with its armature

shaft extending at right angles to the axis of the axle, and a fan with its blades mounted upon the armature shaft and supported vertically by the frame in front of the axle.

3. A portable suction apparatus having an axle, wheels supporting the axle, a frame extending in front of the axle and forming a support for the apparatus, an electric motor mounted on the frame in front of the axle, and a fan mounted on the frame in front of and driven by the motor.

4. A portable suction apparatus having an axle, a pair of wheels supporting the axle, a frame having a horizontal section and a vertical section, the vertical section forming a support for the apparatus, an electric motor mounted on the horizontal section of the frame, and a fan mounted on the vertical section of the frame and adapted to be driven by the motor.

5. A portable suction apparatus having an axle, wheels supporting the axle, a handle projecting upwardly and rearwardly from the axle, a frame extending forwardly from the axle, the front part of the frame projecting downwardly and forming a support for the apparatus, an electric motor mounted on the frame, and a fan mounted on the frame and driven by the motor.

CHARLES R. POLLARD.

Witnesses:
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