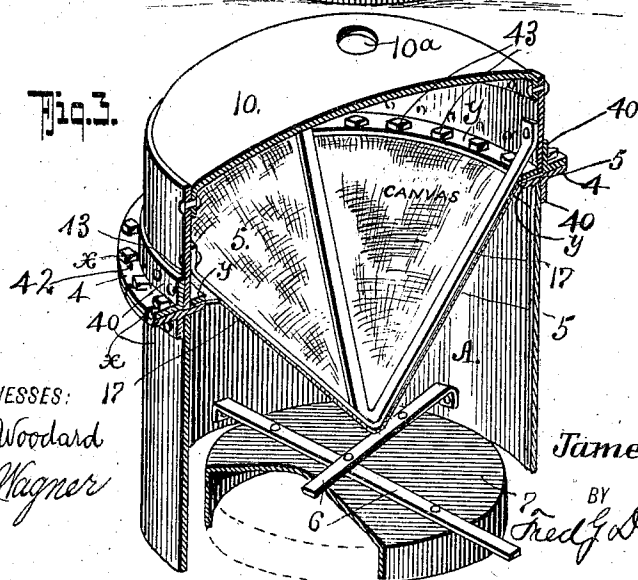
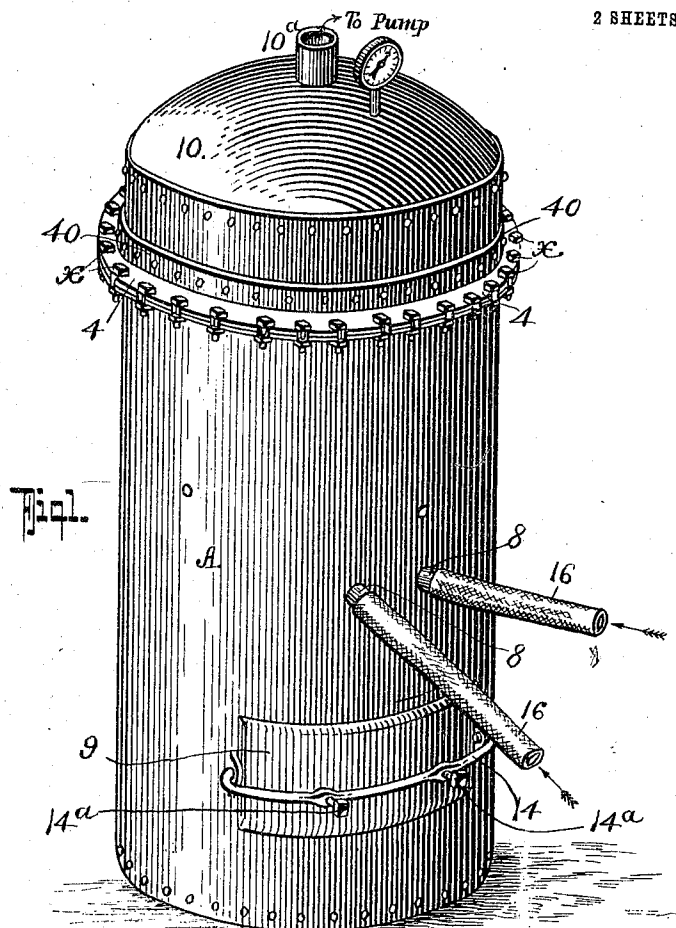


995,974.

J. C. LEWIS.
DUST TANK.
APPLICATION FILED OCT. 13, 1909.

Patented June 20, 1911.

2 SHEETS—SHEET 1.



WITNESSES: 17

Hayward Woodard
Charles H. Wagner

INVENTOR

James C. Lewis

BY

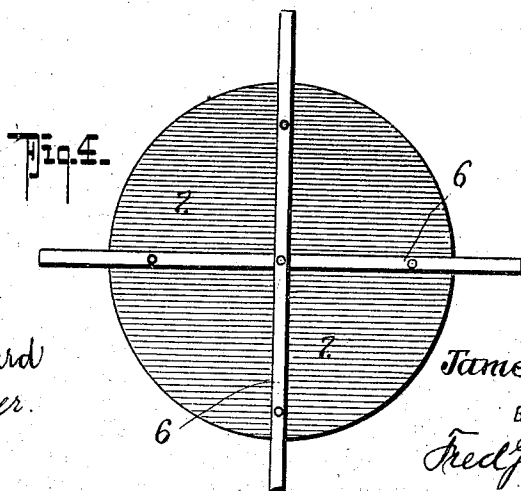
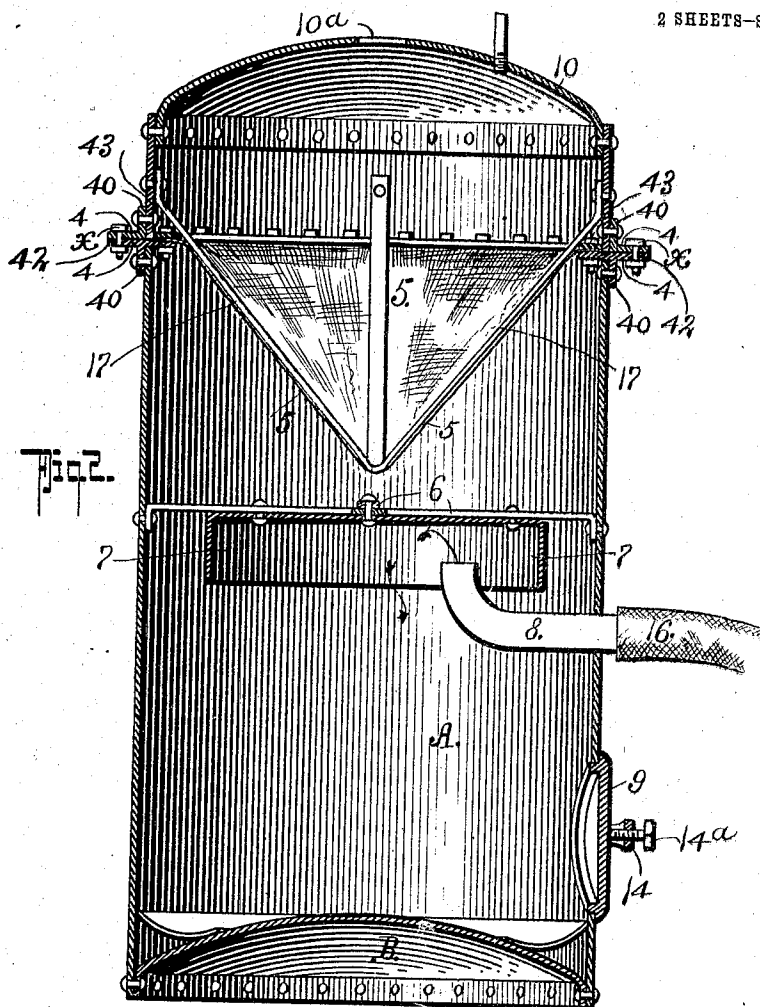
Fred E. Dieterich & Co.
ATTORNEYS

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2 SHEETS—SHEET 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JAMES C. LEWIS, OF MANSFIELD, OHIO.

DUST-TANK.

995,974.

Specification of Letters Patent. Patented June 20, 1911.

Application filed October 13, 1909. Serial No. 522,460.

To all whom it may concern:

Be it known that I, JAMES C. LEWIS, residing at Mansfield, in the county of Richland and State of Ohio, have invented a new and Improved Dust-Tank, of which the following is a specification.

This invention, in its generic nature, relates to improvements in that class of apparatus or means for cleaning carpets, draperies, etc., by compressed air, known as portable vacuum cleaners, and in its more specific nature, it has for its object to provide an improved construction of the tank for receiving the dust, especially designed for taking up the fine dust in such manner that it will not injure or clog the hood and readily pass off, so that the necessity of taking the tank apart for cleaning the hood is overcome.

With other objects in view that will be hereinafter made clear, my invention embodies the peculiar combination and novel arrangement of parts, all of which will be hereinafter fully described, specifically pointed out in the claim and illustrated in the accompanying drawings, in which:—

Figure 1, is a perspective view of my improved construction of tank. Fig. 2, is a vertical section thereof. Fig. 3, is a view in perspective, of the flange and rim ends of the upper and lower drum sections, the hood and the skeleton metal frame that cooperates with the hood. Fig. 4, is a detail view of the crossed framing and the pan secured thereto.

In the practical arrangement of my invention, the tank is a cylindrical shell A, the lower end of which is closed by the convex bottom member B, the upper end being arranged to receive the dome like top 10, centrally apertured as at 10^a to receive the suction pipe from the pump (not shown).

Shell A comprises an upper section and a lower section and the adjacent edges of the said sections each have an annular rim 4, horizontally disposed with respect to the shell, and each formed with a vertical flange 40 riveted or bolted to the shell sections, as best shown in Figs. 2 and 3, by reference to which it will be also noticed that the rims 4 have their peripheral edges formed with radial notches to receive the securing bolts.

Flanges *y* extend within the shell and are provided with alining apertures 42, the purpose of which will presently appear.

9 designates a hinged door in the bottom of the shell held closed air tight by a bail 14 and set screws 14^a the door being provided for readily cleaning out the tank.

At a suitable point below the annular flanges *y*, crossed brace rods 6—6 are horizontally held within the shell and to the said braces is fixedly held, in any approved manner, an inverted dust pan 7 against which the inlet tubes 8—8 discharge, hose members 16—16 being attached to the tubes which in turn are of suitable length, and in practice are equipped with pick up or suction nozzles (not shown) of any approved type.

By reason of arranging the dust pan in the shell so the inlet tubes 8—8 discharge directly against the said pan 7, the heavy dirt will strike against the said pan and be deflected back onto the bottom of the tank. In my present type of tank, I have also provided a novel way for holding and securing the hood, which forms an essential feature of my present invention.

In my construction, the hood or dust separator 5 is of canvas or other straining material and is preferably cone-shaped with its upper end formed into an annular rim 50 that is clamped between the flanges *y* of the rim members 4 and secured by the bolts 43 that pass through the apertures 42 of the two flanges *x*, as clearly shown in the drawing.

For bracing the hood or separator and holding it from being drawn upwardly by the suction, a V-shaped skeleton frame 17 is attached to the inner wall of the upper shell section and projects down into the other section to hold the separator or hood with its apex end in close proximity to the retarding or deflector pan 7.

From the foregoing taken in connection with the drawing the complete arrangement and construction of my tank will be apparent.

By arranging the inverted dust pan directly over the tubes 8—8 as shown, the heavy dust is caused to fall to the bottom of the tank, while the fine dust that escapes around the edges of the pan 7 and passes upward, is held back by the canvas hood or separator, which prevents the said fine dust from passing out to the suction pipe to the pump and thereby saves the pump from being rendered ineffective by reason of dust getting into it, as is usually the case in other types of vacuum cleaners now in gen-

eral use. Another and important advantage of the pan construction is that it prevents the heavy dirt from striking the hood, and since the fine dust does not hurt or clog it up, there is no need of taking the tank apart to clean the hood.

Having thus described my invention, what I claim is:

In a suction cleaning apparatus, a dust tank having a removable top section, a skeleton frame composed of V-shaped members secured to the top section and projected into the lower section, a filtering hood

held over said frame with its edges clamped between the top and bottom sections of the tank, a cross bar frame directly beneath said hood, an inverted pan secured to said cross bar frame and having a depending annular flange, inlet tubes entering the tank beneath said opening and discharging into said pan, substantially as shown and described.

JAMES C. LEWIS.

Witnesses:

JESSE E. LA DOW,
W. H. REBUCH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
