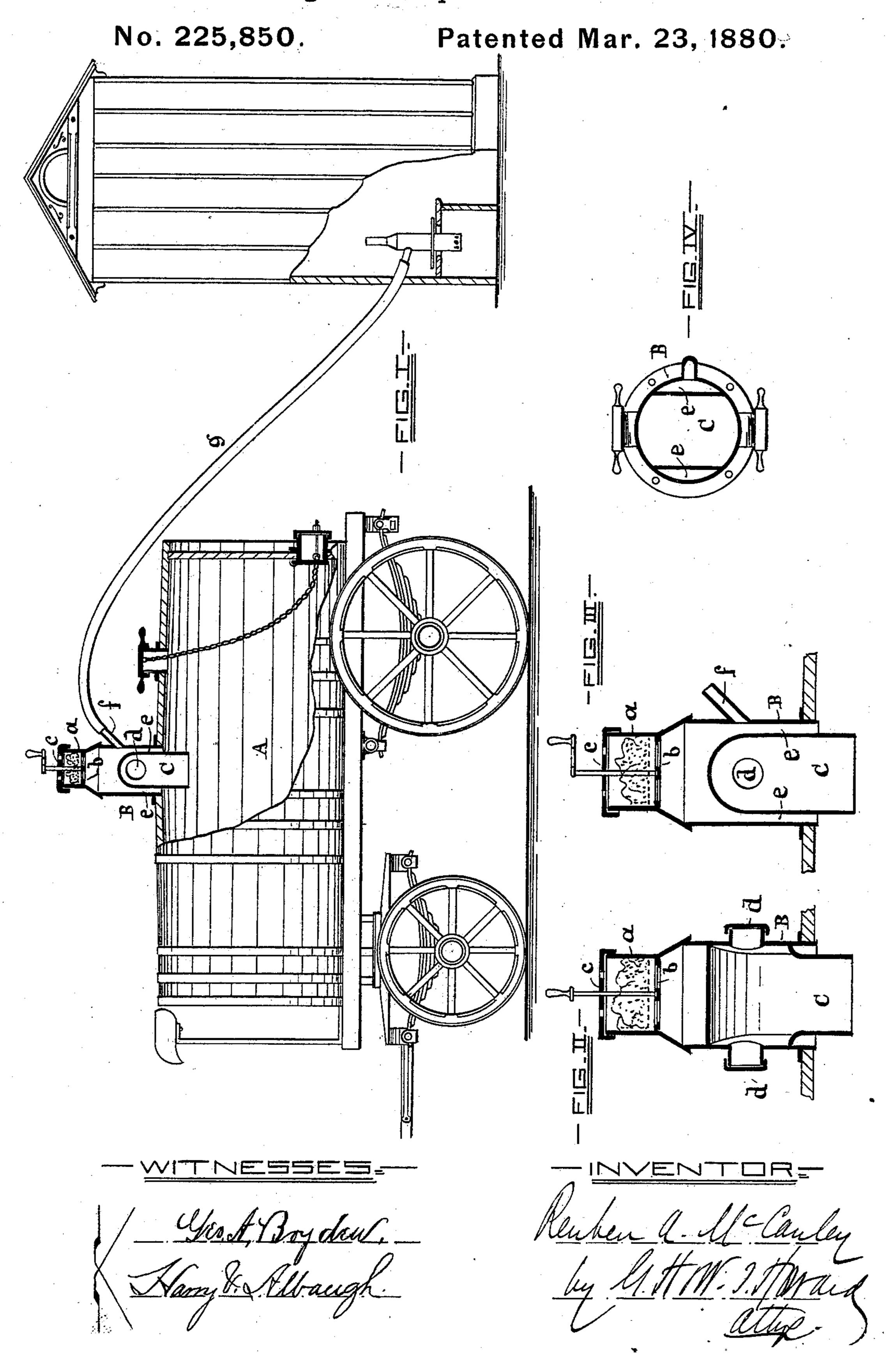
R. A. McCAULEY. Sewage-Transportation Tank.



United States Patent Office.

REUBEN A. McCAULEY, OF BALTIMORE, MARYLAND.

SEWAGE-TRANSPORTATION TANK.

SPECIFICATION forming part of Letters Patent No. 225,850, dated March 23, 1880.

Application filed November 26, 1879.

To all whom it may concern:

Be it known that I, Reuben A. McCauley, of the city of Baltimore and State of Maryland, have invented certain Improvements in Sewage-Transportation Tanks, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The invention consists, first, in the combination, with a sewage-transportation tank, of a filling-nozzle casing, safety-valve, and dedoorizer, constructed as hereinafter specified, whereby the escape to the deodorizing apparatus of the vapor delivered with the sewage-matter is prevented, and only such gases carried off as have been robbed to some extent of their moisture by being held for a considerable length of time above the matter contained in the tank. By this means the deodorizer, whether consisting of fire-pot or of a chemical purifying-mixture, is rendered more effective in destroying injurious and unpleasant emanations from the tank.

The invention consists, secondly, in combining with the filling-nozzle casing, safety-valve, and deodorizer a supplemental or auxiliary nozzle, whereby foul gases ascending from the privy-vault during the work of removing night-soil therefrom may, if necessary, be deodorized by a special deodorizer and pipe, as hereinafter set forth.

In the further description of my said invention which follows, reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure I is a partly-sectional view of a sewage-tank provided with my improvements connected to a fire-deodorizer situated in a privy. Figs. II and III are sectional views, on an enlarged scale, of the invention as seen from different points. Fig. IV is a plan of the invention, also on an enlarged scale.

Similar letters of reference indicate similar parts in all the views.

A is a sewage-transportation tank, provided with the ordinary discharging devices and 5° mounted on a wheeled truck. B is the casing of the filling-nozzle, terminating at its upper

end in a deodorizing-chamber, a. A valve, b, of any appropriate construction, forms the base of the chamber a, and above the said valve is a grated or perforated seat for cotton-waste, 55 wool, sponge, or other fibrous material, which is saturated with some suitable deodorizing-liquid. The chamber b is covered by a cap, c, which is perforated to admit of the escape of the gases purified by passing through the 60 saturated fibrous material.

C is a pipe or box, closed at the top and open at the bottom, secured within the casing B, into which the sewage-matter is discharged through the hose-nozzles d. Spaces e, between 65 the pipe or box C and the casing B, admit air and gases to the valve b from the surface of the sewage-matter, and to prevent the moisture or vapor liberated from the sewage-matter as it is delivered to the tank from passing directly to the said spaces, the lower end of the pipe or box C is extended to a point considerably below the upper edge of the tank.

A small pipe, f, on the side of the casing B is used when the gases are carried to a deo- 75 dorizing-stove located at some distance from the tank, and when such stove is used it is connected to the pipe f by means of a flexible pipe or tube, g. The pipe f and its connections are, however, only auxiliaries, the saturated fibrous material being, in most cases, amply sufficient to effect the destruction of offensive odors. When the auxiliary pipe is not used, or during transportation of the tank, the said pipe is closed by means of a plug or 85 cap, and the valve b opened.

It will be understood that a tank provided with the invention herein described is at all times free from internal pressure of gases, caused either by filling the tank with sewage- 90 matter or from fermentation of its contents.

I do not claim, broadly, the combination, with a vessel for the transportation of sewage, of a nozzle-pipe entering said vessel, provided with an air-space outside the pipe leading to 95 a deodorizer; but

I claim as my invention—

1. The combination, with a sewage-transportation tank, of a filling-nozzle casing, safety-valve, and deodorizer, comprised in one apparatus, the same consisting of an external casing or drum mounted on the tank, having an

internal closed-top pipe or box projecting downward into the tank, there being spaces left between the exterior of said box and the interior of said casing, the said casing being 5 also provided with a deodorizing-chamber at its upper end, and with filling-nozzles, all ar-

ranged substantially as specified.

2. The combination, with a sewage-transportation tank, of a filling-nozzle casing, safety-10 valve, and deodorizer, comprised in one apparatus, the same consisting of an external casing or drum mounted on the tank, having an internal closed-top pipe or box projecting downward into the tank, there being spaces left be-

tween the exterior of said box and the interior 15 of said casing, together with filling-nozzles attached to said casing, a deodorizing-chamber at its upper end, and a valve and cap, all arranged substantially as specified.

3. The casing B, having the deodorizing- 20 chamber a at its upper end, and provided also with the valve b and cap c, combined with the closed-top pipe or box C, filling-nozzles d, and auxiliary nozzle f, substantially as specified.

Witnesses:

225,850

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