H. T. CRONK.

APPLIANCE FOR RAILWAY CARS AND OTHER CONVEYANCES.

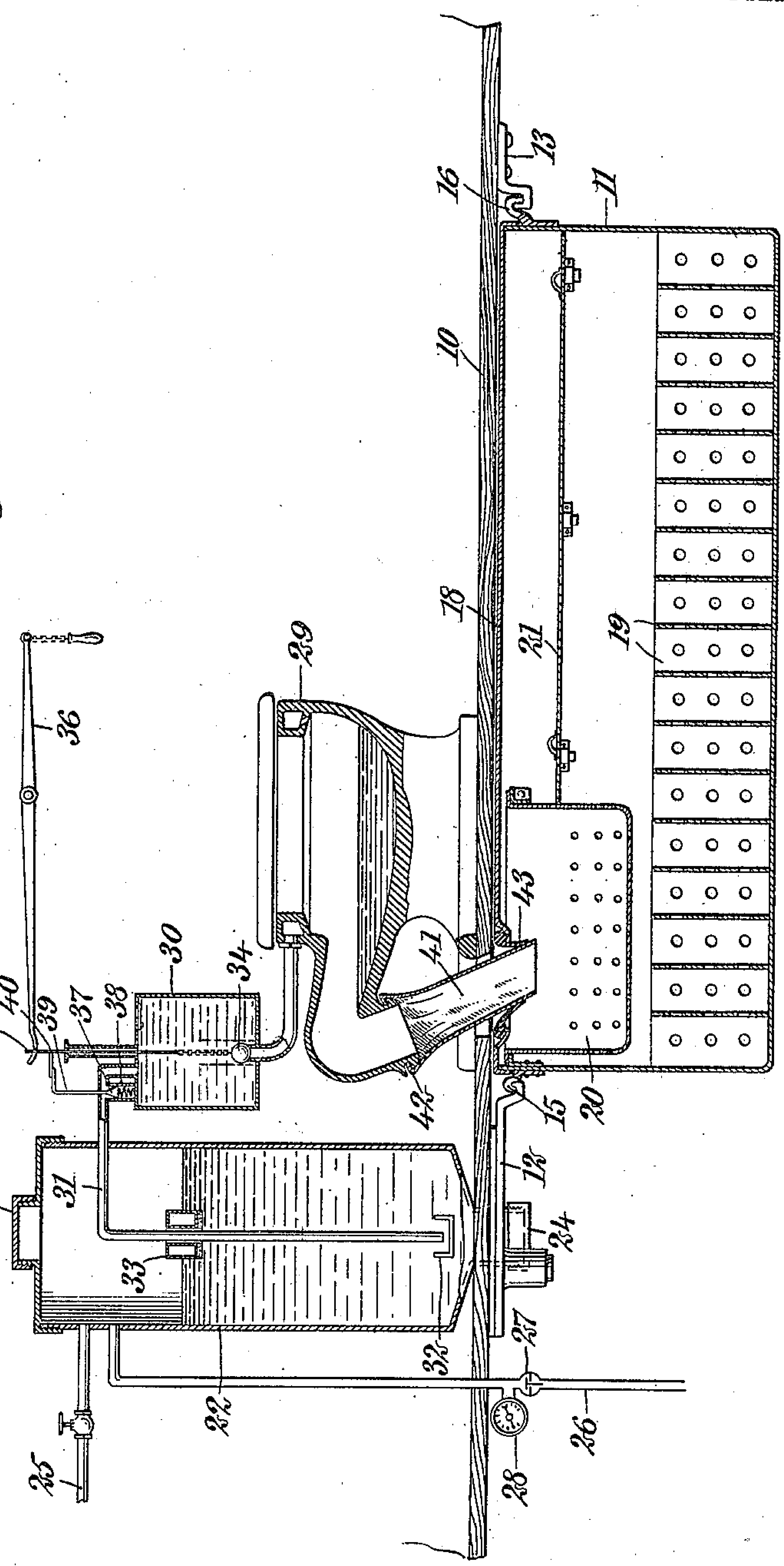
APPLICATION FILED MAR. 8, 1909.

964,217.

Patented July 12, 1910.

2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 2.

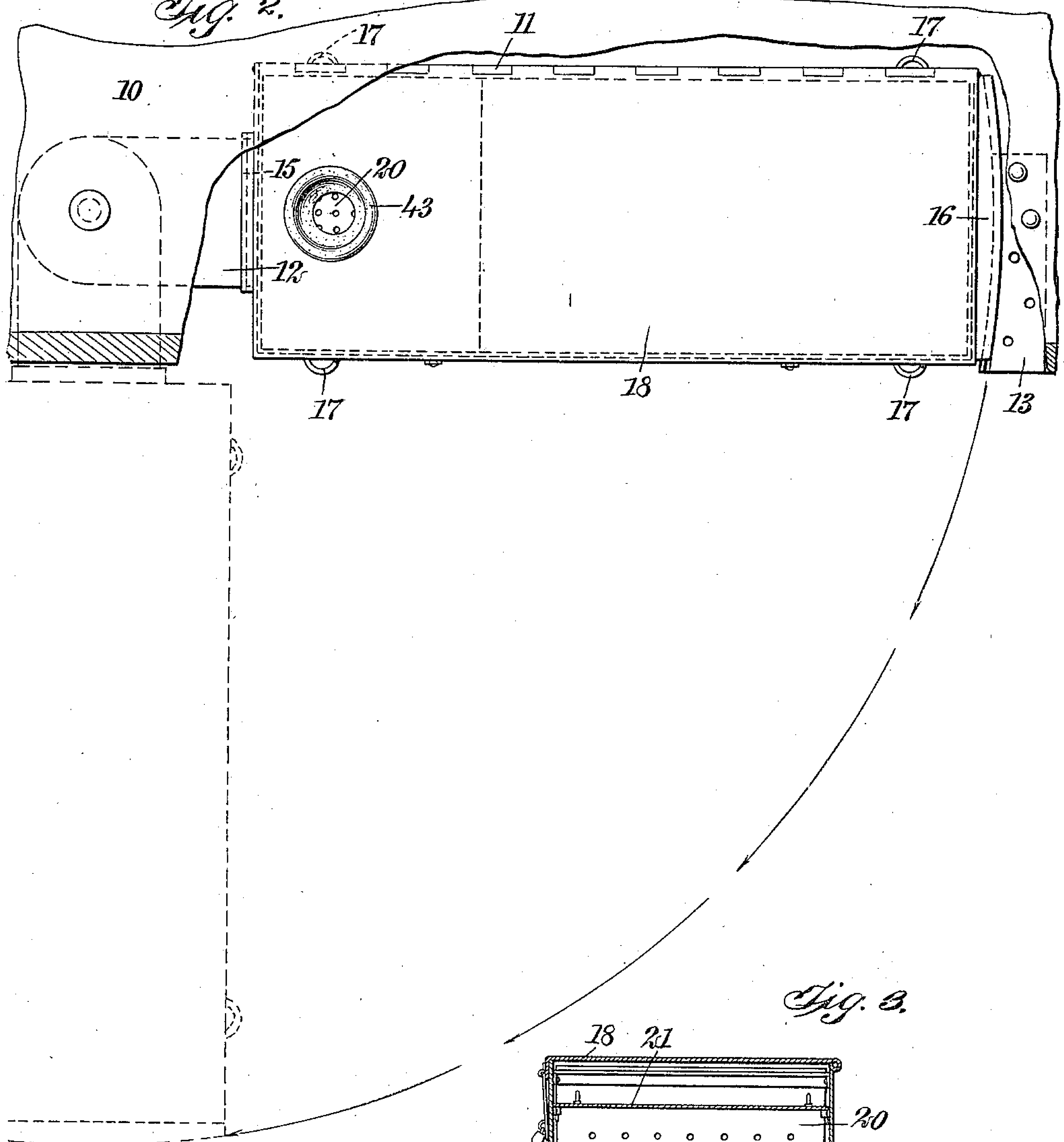
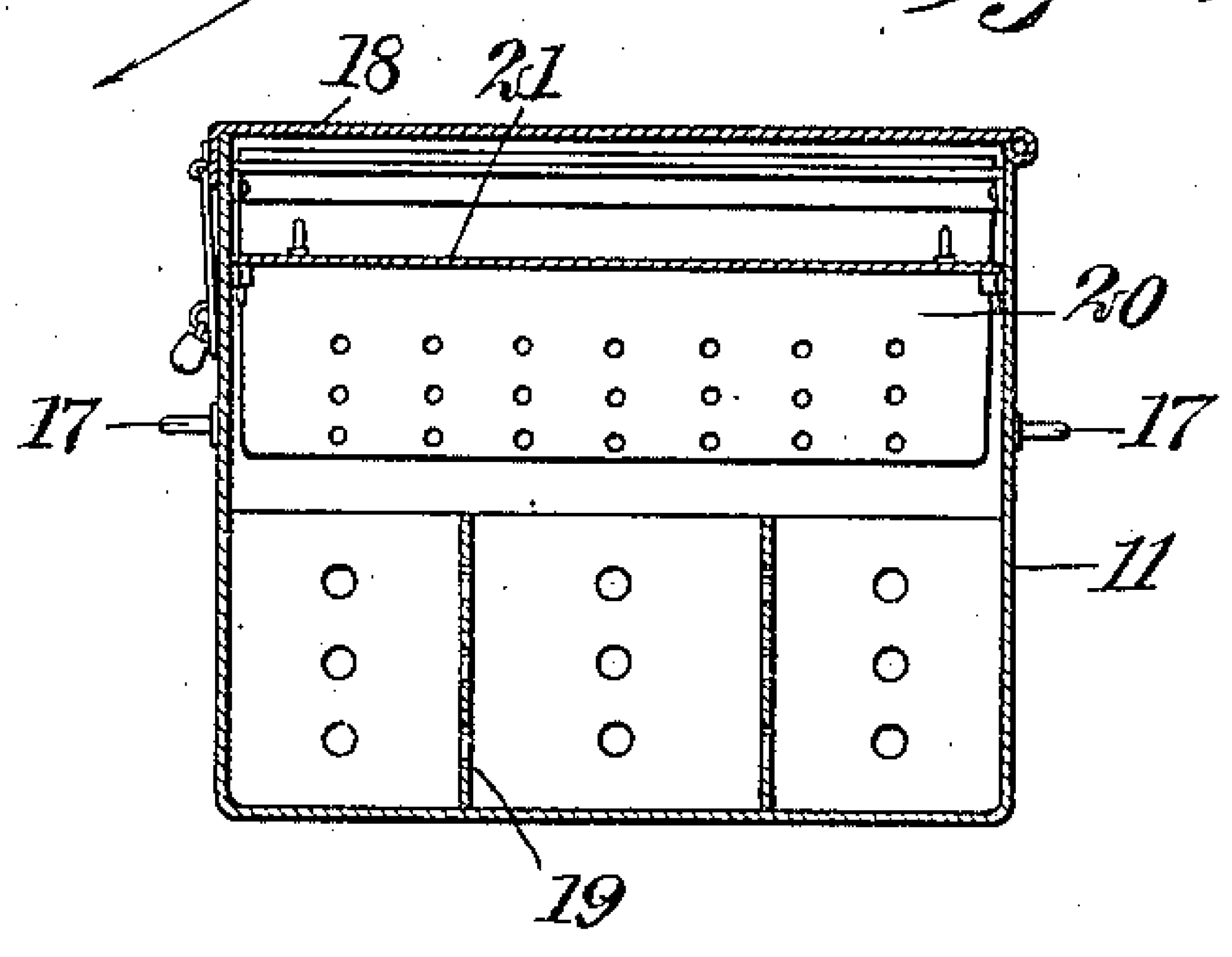


Fig. 3.



WITNESSES

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HARRISON TAYLOR CRONK, OF NEW YORK, N. Y.

APPLIANCE FOR RAILWAY-CARS AND OTHER CONVEYANCES.

964,217. Specification of Letters Patent. Patented July 12, 1910.

Application filed March 8, 1909. Serial No. 481,999.

To all whom it may concern:

Be it known that I, HARRISON TAYLOR CRONK, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Appliance for Railway-Cars and other Conveyances, of which the following is a full, clear, and exact description.

The invention has in view an appliance for railway cars, boats and other conveyances, both public and private, to collect and retain waste, refuse and offal as is usually indiscriminately disposed of along routes and highways, and to disinfect, render innocuous and prevent the communicability of any septic infections or diseases by said waste, etc. until proper disposal of the same can be made.

To this end I contemplate providing a tank or receptacle removably supported on the car, boat or other conveyance, to receive, hold and disinfect the waste and refuse during transit and such other times as said waste, etc. should not be disposed of in the open, the tank having an auxiliary perforated receptacle into which the refuse is initially discharged, and the solids therein retained while the liquids pass off into the surrounding tank.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 illustrates an appliance embodying my invention as applied to a railway car or other conveyance, the appliance being shown partly in longitudinal vertical section; Fig. 2 is a plan of the refuse tank in full lines in operative position and in dotted outline in position for removal, the car floor being partly broken away to better illustrate the construction; and Fig. 3 is a cross-section through the refuse tank.

At the under side of the car or other conveyance floor 10 is removably supported a refuse tank 11, the support of the tank being effected by a swinging arm 12 and a fixed bracket 13, each having an upwardly-directed hooked portion engaged by downwardly-turned hooked flanges 15 and 16, riveted or otherwise secured to the ends of the tank, the hooked flange 15 being turned down at the ends over the outer edges of the arm, as shown in dotted outline in Fig. 2, to prevent the lateral displacement of the tank at this end, and the hooked flange 16, as also the hook of the bracket 13, formed on a curve, the center of which is the point of pivotal support of the arm 12. This manner of supporting the tank enables the same to be swung from underneath the floor to the outside of the car, if applied to such, to the dotted position shown in Fig. 2. The tank is shown to be provided with handles 17 at each side adjacent to the ends, the handles next to the bracket 13 being grasped and the tank by them supported until swung to the outside of the conveyance, when the other set of handles is taken hold of and the tank lifted from the arm 12 and carried to the point of discharge. The tank has a close-fitting cover 18 hinged or otherwise removably applied, and in the lower portion thereof is provided with a series of perforated splash plates 19, arranged both transversely and longitudinally, forming a series of pockets, each pocket communicating with the adjacent pockets through the perforations.

Above the splash plates 19 an auxiliary receptacle 20 is removably supported in the tank, with the bottom and lower portion of its side walls perforated to permit of the liquid products passing off, while retaining the solid refuse. Above the line of perforations in the auxiliary tank 20 a false top 21 is removably supported within the tank 11, and prevents the contents of this tank from splashing against the removable cover 18. A water tank 22 is located at a convenient point on the conveyance, and is provided with a plug 23 at the top for the introduction of an antiseptic powder, and a discharge plug 24 at the bottom through which the tank may be washed out. A water supply pipe 25 leads into the tank 22 as also the train air pipe 26, the latter connecting with the tank above the normal water level and provided in its length with a check valve 27 and a pressure gage 28. A hopper 29 discharges into the auxiliary receptacle 20 and is flushed from a closet tank 30, the latter being supplied from the tank 22 through a pipe 31 which is shown to pass within a cupped valve seat 32 arranged near the bottom of the water supply tank. The pipe 31 has a vertical portion on which is slidably retained a float valve 33, which, when the water is substantially exhausted in the tank 22, seats on the cupped seat 32 and

prevents the escape of the train pipe air to the closed tank 30. The discharge pipe from the tank 30 to the hopper is normally closed by a valve 34 which has a vertical stem 35 passing through a tubular guide at the top of the tank 30 and connected with an operating lever 36. A valve 37 at the top of the flush tank 30 is pressed by a spring 38 in a direction to cut off the flow through the pipe 31, and has a stem 39 engaged by a finger 40 carried by the stem 35 and pressing the valve 37 from its seat when the valve 34 is seated. By this construction, the water supply tank 22 is in communication with the flush tank 30 when the flow is cut off from the hopper but is instantly cut off with the flush tank when the valve 34 is raised. The discharge neck of the hopper, which may if desired contain a trap in its length, is connected with the auxiliary receptacle 20 by a temporary collapsible tube 41, the same being preferably constructed of waterproof paper and having an inwardly-turned flange 42 at the top engaging within a circumferential groove in the neck of the hopper. The opening in the cover 18 through which the tube 41 passes is shown to be dished inwardly at the edge, forming a seat for a conical gasket 43 which forms a tight joint between the refuse tank and the tube 41.

The solids of the refuse which are washed into the auxiliary receptacle are therein retained, while the liquids flow off into the refuse tank 11, and are all rendered inodorous, innocuous and non-contagious by the antiseptic and disinfecting materials introduced into the water tank 22. When the refuse tank becomes filled or partially filled it is removed and emptied, as hereinbefore outlined, when a convenient point of discharge is reached, the temporary collapsible tube 41 being first pulled from the discharge neck of the hopper and crushed and forced into the receptacle 20.

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

1. In combination with a railway car, boat or other conveyance, two receptacles arranged one within the other, the inner receptacle to receive the waste, refuse and offal and having perforated walls for the discharge of the fluids therefrom into the outer receptacle.

2. In combination with a railway car, boat or other conveyance, a receptacle in which the waste, refuse and offal of the conveyance are discharged, and splash plates arranged in the receptacle to prevent the slopping of the fluids from said waste, etc. under the influence of the motion of the conveyance.

3. In combination with a railway car, boat or other conveyance, a refuse tank, a waste pipe, and a temporary collapsible tube detachably connected to the waste pipe and leading into the refuse tank.

4. In combination with a railway car, boat or other conveyance, a refuse tank, a waste pipe, a temporary collapsible tube detachably connected to the waste pipe and leading into the refuse tank, and an inwardly-dished gasket yieldingly bearing about the tube and forming a gas-tight joint between it and the tank.

5. In combination with a railway car, boat or other conveyance, a refuse tank having a series of perforated intersecting splash plates in the lower portion thereof forming a number of communicating pockets, an auxiliary receptacle supported within the tank above the splash plates, with the lower portion thereof perforated, and a waste pipe discharging into the auxiliary receptacle.

6. In combination with a railway car, boat or other conveyance, a refuse tank, a waste pipe, and a temporary collapsible tube connecting the waste pipe to the tank.

7. In combination with a railway car, boat or other conveyance, a refuse tank, a waste pipe, and a collapsible tube detachably connected to the waste pipe and discharging into the refuse tank and constructed to be pulled from the waste pipe and passed within the tank.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARRISON TAYLOR CRONK.

Witnesses:

D. J. Rioselli,

Frank A. K. Boland.