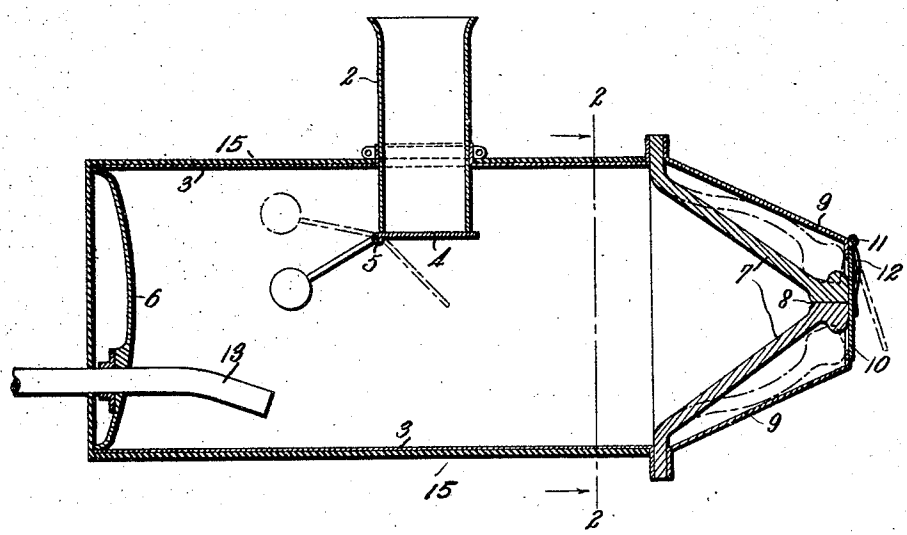
W. FRANK.

RAILWAY CAR WATER CLOSET.

APPLICATION FILED NOV. 26, 1921.

1,422,953. Patented July 18, 1922.

Fig. 1.



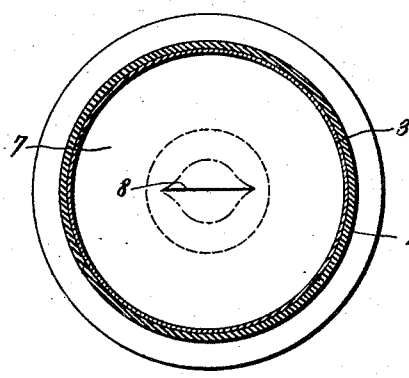


Fig. 2.

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WILLIAM FRANK, OF VANCOUVER, BRITISH COLUMBIA, CANADA, ASSIGNOR OF ONE-HALF TO WILLIAM TAYLOR, OF VANCOUVER, BRITISH COLUMBIA, CANADA.

RAILWAY-CAR WATER CLOSET.

1,422,953. Specification of Letters Patent. Patented July 18, 1922.

Application filed November 26, 1921. Serial No. 517,860.

To all whom it may concern:

Be it known that I, WILLIAM FRANK, citizen of the Dominion of Canada, residing at Vancouver, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Railway-Car Water Closets, of which the following is a specification.

This invention relates to a receptacle into which the discharge pipe from the water closet of a railway carriage delivers and in which it is retained until a convenient time or place is reached for its delivery to the right of way when the receptacle is forcibly emptied.

Delivery from a railway water closet direct to the tracks is open to many objections and particularly in the immediate vicinity of railway stations, a fact which is evidenced by the bar imposed on the use of such water closets while the train is at a station.

The invention is particularly described in the following specification, reference being made to the drawings by which it is accompanied, in which:

Fig. 1 is a longitudinal section of the device.

Fig. 2, a cross section on 2—2 in Fig. 1.

In these drawings 2 represents the delivery pipe which is either the existing discharge pipe from the water closet of a railway carriage or is permanently connected thereto. This pipe 2 projects into a cylindrical container 3, the inner projected end of the pipe 2 being closed by a valve 4 hinged at 5 to open downward into the container 3 and is lightly counterweighted to normally maintain a closed position.

One end of this container 3 is closed as at 6 and the other end has a rubber valve 7 secured to it by the flange of a frusto-conical end 9, the central opening of which has a valve 10 hinged at 11 to seat against its outer edge. This valve 10 is normally held closed by a spring 12. The rubber valve is of a form common in such use with a central slit 8 which will open by pressure from within.

Through the lower part of the closed end 6 of this container a steam pipe 13 projects a short distance and its inner end is turned slightly downward.

In use, the contents of the closet are delivered through the pipe 2 into the container 3, overcoming the counterweight of the valve 4 which closes thereafter. At stated intervals, or at certain prescribed localities, the porter in charge opens a valve and delivers steam under sufficient pressure through the pipe 13 into the container 3 and while the valve 4 tightly closes escape upward through 2, the contents of the container are forcibly expressed therefrom through the aperture 8 of the rubber valve and through the flap valve 10.

The device fully satisfies the requirements of the case, as it enables the closet to be freely used when the train is at or approaching a station, and as soon as the station is passed the container may be flushed with both water and steam by the attendant.

The container 3 may have a covering or jacket 15 of heat non-conducting material or be enclosed within a casing to prevent the consequences of exposure to extreme cold.

Having now particularly described my invention, I hereby declare that what I claim as new and desire to be protected in by Letters Patent, is:

1. The combination with the delivery pipe from the bowl of a water closet, of a container into which the lower end of the delivery pipe projects, a valve opening downward adapted to close the lower end of the delivery pipe, yielding means for holding said valve closed, a valve opening outward at one end of the container, and yielding means for holding that valve closed, and means for delivering a fluid under pressure into the container.

2. The combination with the delivery pipe from the bowl of a water closet, of a container into which the lower end of a delivery pipe projects, a valve seating upward on the lower end of the delivery pipe, said valve counterweighted to be normally closed, a valve opening outward seated around a delivery aperture from the container and held in the closed position by a light spring, and means for delivering a fluid under pressure into the container.

3. The combination with the delivery pipe from the bowl of a water closet, of a container into which the lower end of the de-

livery pipe projects, a valve opening downward adapted to close the lower end of the delivery pipe, yielding means for holding said valve closed, a frusto-conical end of rubber or the like closing one end of the container and having a central slit forming an outwardly opening valve, a frusto-conical casing outside the rubber end, said casing having a central aperture, and a valve seating on the outer edge of the central aperture of the casing, and yielding means holding said valve closed.

In testimony whereof I affix my siguature.

WILLIAM FRANK.