

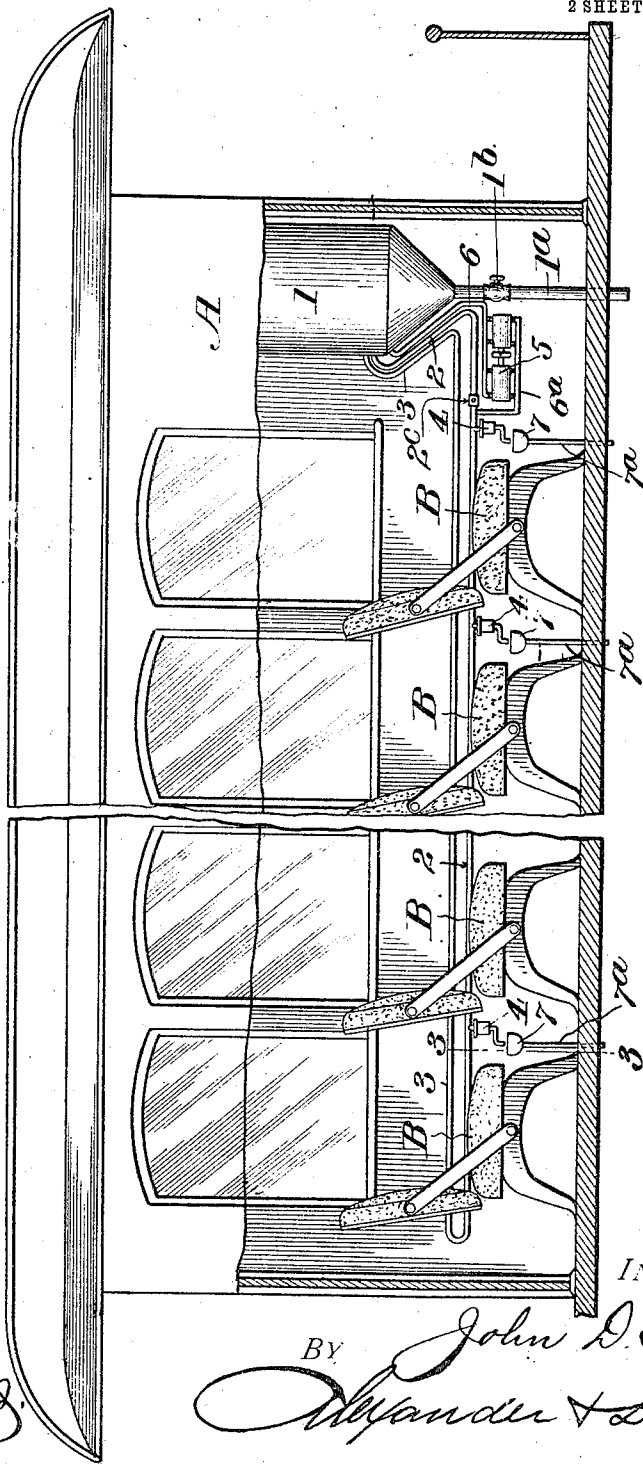
J. D. CARTER.
 WATER SUPPLY SYSTEM FOR PASSENGER CARS.
 APPLICATION FILED MAY 25, 1911.

1,009,279.

Patented Nov. 21, 1911.

2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES:

C. M. Barker
Jan. B. Mansfield

INVENTOR

BY

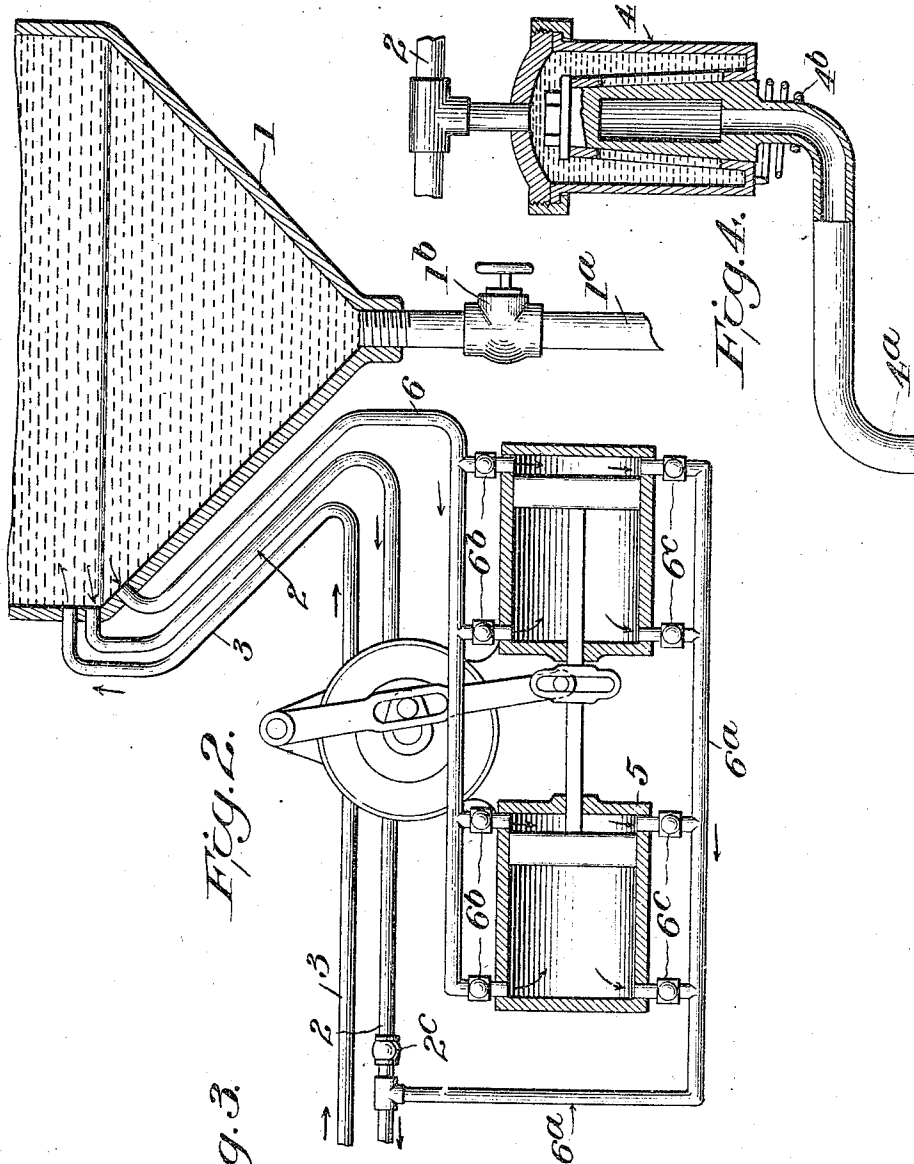
John D. Carter
Alexander & Small
 Attorneys

J. D. CARTER.
 WATER SUPPLY SYSTEM FOR PASSENGER CARS.
 APPLICATION FILED MAY 25, 1911.

1,009,279.

Patented Nov. 21, 1911

2 SHEETS-SHEET 2.



WITNESSES:

Chas. Baker
James P. Mansfield

INVENTOR

John D. Carter
 By: *Alexander*
& Sowell Attorneys

UNITED STATES PATENT OFFICE

JOHN D. CARTER, OF LAWTON, OKLAHOMA.

WATER-SUPPLY SYSTEM FOR PASSENGER-CARS.

1,009,279.

Specification of Letters Patent.

Patented Nov. 21, 1911.

Application filed May 25, 1911. Serial No. 629,480.

To all whom it may concern:

Be it known that I, JOHN D. CARTER, of Lawton, in the county of Comanche and State of Oklahoma, have invented certain new and useful Improvements in Water-Supply Systems for Passenger-Cars; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to railway passenger cars, and is a water-supply system particularly intended for use in day coaches, parlor, and sleeping cars. Its object is to provide the car with a water supply system whereby the various passengers, while in their seats or berths in different parts of the car may be supplied with fresh drinking water without having to go to either end of the car or ring up a porter in order to get it.

Another object of the invention is to insure that the water supplied to each passenger at any point will be fresh and cool.

The invention as embodied in said system comprises a water tank; a series of pipes leading from said tank along or in the walls of the car to the several seats in such car, and provided, adjacent each seat, with a faucet from which water can be drawn by the passenger in such seat; means whereby the water may be continuously circulated from the tank through the pipes past the several faucets and returned to the tank, thus enabling fresh cool water to be always delivered to any passenger at any seat at any time. There should be a system of water and circulating pipes on each side of the car, but each such system may be supplied with water from the same tank, or from separate tanks as may be found preferable or most economical.

I will now describe the invention briefly with reference to the accompanying drawings which illustrate conventionally a railway passenger coach equipped with my novel water supply system.

In said drawings—Figure 1 is a longitudinal sectional elevation through part of an ordinary passenger coach equipped with my novel water supply system. Fig. 2 is an enlarged view showing the connections between the tank and water supply and return pipes, also indicating a motor and connections for circulating water through the system. Fig. 3 is an enlarged section on line 3-3, Fig. 1, showing the faucets. Fig. 4 is

an enlarged sectional view of one of the faucets.

As shown in the drawings A represents part of the body of an ordinary passenger coach, and B the seats which are arranged as usual on the side of the car.

A water tank 1, which may be of any suitable construction, may be placed at one end of the car; and is provided with a drain pipe 1^a closable by a valve 1^b.

Extending along the length of the car, in or attached to the side wall thereof, is a distributing pipe 2 which extends from the tank past the several seats and which is connected at the end of the car opposite the tank with a return pipe 3 which opens into the tank adjacent the pipe 1 so that water can pass out of the tank through pipe 2 and back into the tank through pipe 3. Connected with the distributing pipe 2 adjacent each seat B is a faucet 4 by which the occupant of the seat can draw water from the tank whenever he so desires, without having to leave his seat.

In order to circulate water through the pipes 2 and 3 a suitable pumping device, indicated at 5 in the drawings may be used. The inlets of this pump are connected to the tank by means of a pipe 6 and the outlets of the pump are connected with the distributing pipe 2 by means of a pipe 6^a.

Check valves 6^b may be placed in the pipe 6 between the tank and the pump inlets to prevent back flow of water from the pump into the tank through pipe 6; and check valves 6^c may be placed between the outlets of the pump and the pipe 6^a to prevent back flow of water from the distributing pipe 2 into the pump. A check valve 2^c may be placed in the distributing pipe 2 between the connection of pipe 6^a therewith and the tank so as to prevent the water short-circuiting through the pipe 6^a back to the tank 1 through pipe 2.

The particular construction of the pump is not claimed herein and may be varied; it could be operated either by spring or by gearing from the car axles or by an electric motor if electricity is supplied. The pump does not have to operate rapidly, nor force water in quantities, its sole purpose being to maintain a mechanical circulation of water from the tank through pipes 2 and 3 back to the tank, so that the water supplied to every seat, at any point, will be kept fresh and cool at all times.

The faucets 4 may be of any suitable construction; but I prefer the kind indicated in Fig. 4; the nozzle 4^a of which can be swung outward when it is desired to draw water therefrom, this outward turning of the nozzle opening the faucet and letting water flow, and when the nozzle is released a spring 4^b is provided to return the nozzle to position under the pipe out of the way and close the faucet. Nozzles of this type are well known and do not need any particular description herein, and moreover I do not consider the invention restricted to any particular form of nozzle.

15 If desired a drain cup 7 may be arranged beneath each faucet 4 so as to catch any water that may drop therefrom, and water may be drained from this cup to the outside of the car through a pipe 7^a.

20 Obviously a water supply system of this kind can be applied to day coaches, parlor cars, and sleeping cars. It is particularly designed for ordinary day coaches, and will be of great convenience to the passengers and reduce liability of accidents to passengers, particularly women and children walking through the cars in order to get water from the coolers, ordinarily provided at the ends of the cars.

30 It will also be quite useful for any passengers who are ill or faint, as they can procure water for themselves without annoying others; and will also keep passengers out of the way of the trainmen passing through the cars.

35 What I claim is:

1. In combination with a passenger coach or car having a series of seats at each side, a tank in said car, a water distributing pipe leading from said tank along each side of the car past the several seats, a return pipe

connecting each distributing pipe with the tank, and faucets attached to the distributing pipe adjacent the respective seats in the car.

45 2. In a water supply system for passenger cars having a series of seats at each side, the combination of a tank at one end of the car, water distributing and return pipes leading from the tank along the side of the car and past the several seats at the side of the car; and draw-off faucets connected with the distributing pipe adjacent the respective seats; with means for mechanically circulating the water from the tank through the delivery pipe past the several faucets and through the return pipe to the tank.

3. In a water supply system for a passenger coach or car having a series of seats along its sides; the combination of a tank at one end of the car, a water distributing pipe leading from said tank along the side of the car and below the windows past the several seats at the side of the car, a return pipe parallel with the distributing pipe and connected to the distributing pipe and tank; a pump connected with the tank and with the distributing pipe below the tank for forcibly circulating water from the tank through the distributing and return pipes, check valves for preventing short-circuiting of water from the pump back to the tank, and faucets attached to the distributing pipe adjacent the several seats in the car.

75 In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

JOHN D. CARTER.

Witnesses:

L. S. ECKLES,
W. D. TURNER.