

(No Model.)

W. C. READ & B. HAGER.  
WAGON OR CART.

No. 500,612.

Patented July 4, 1893.

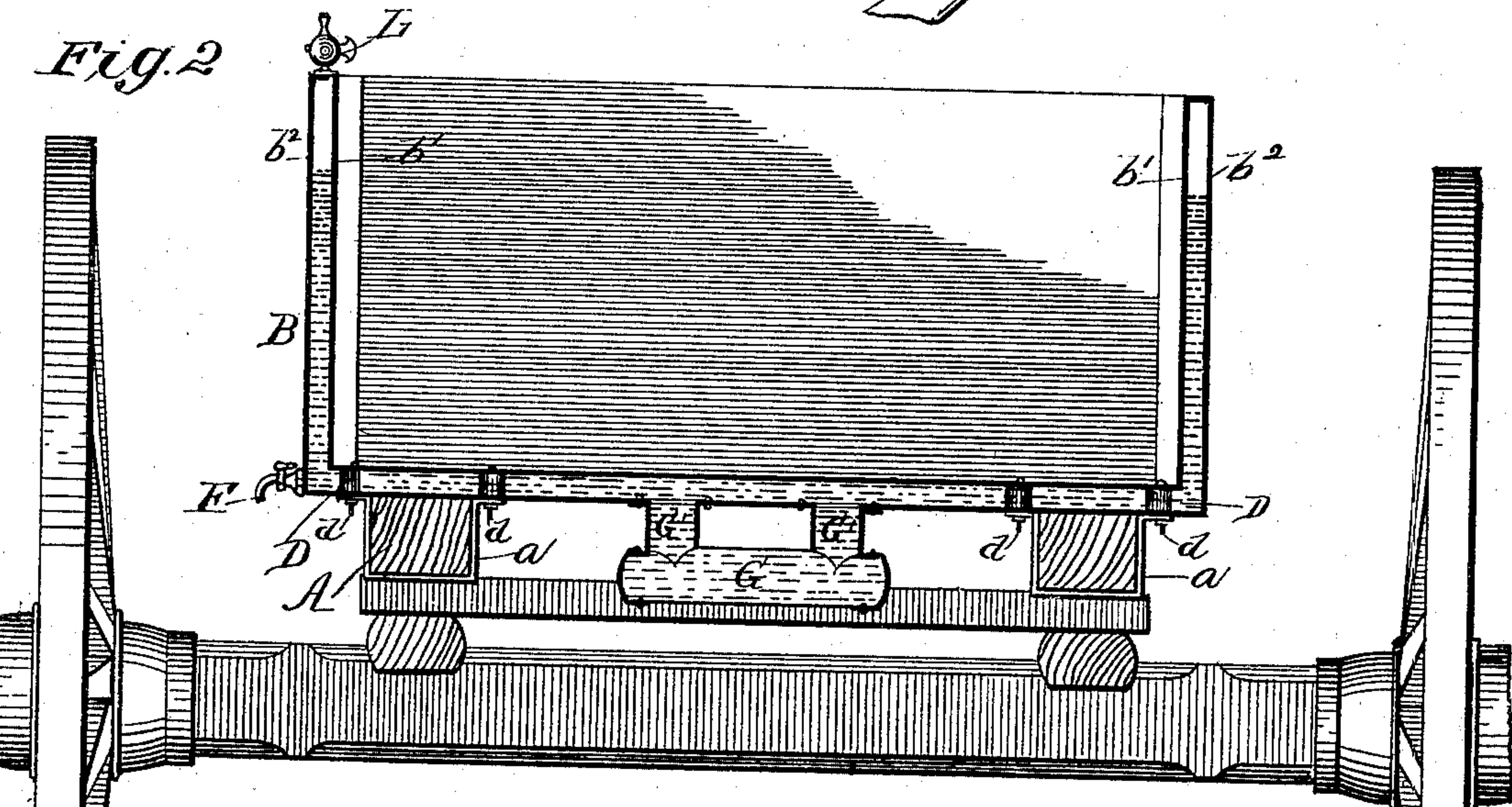
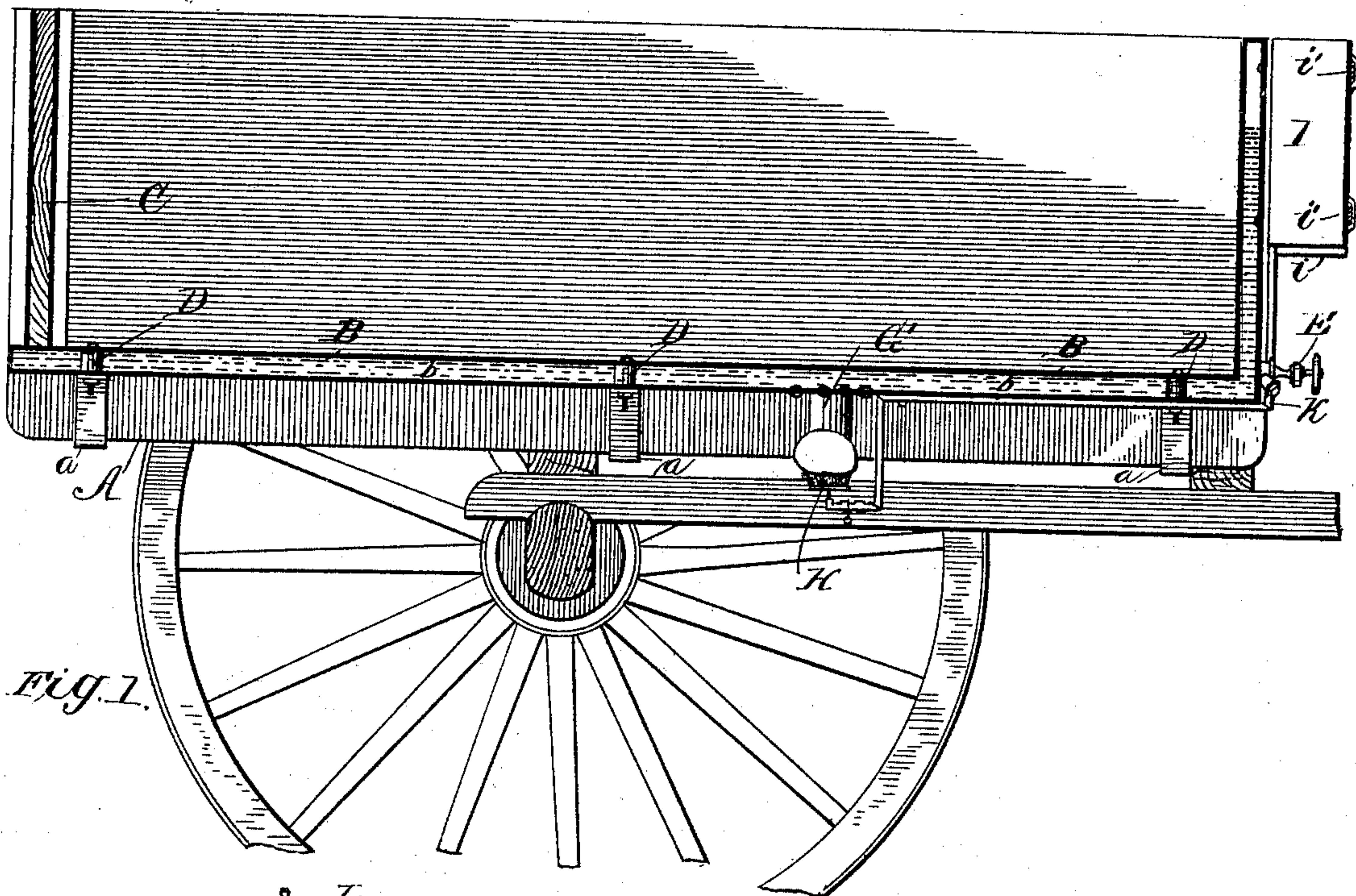
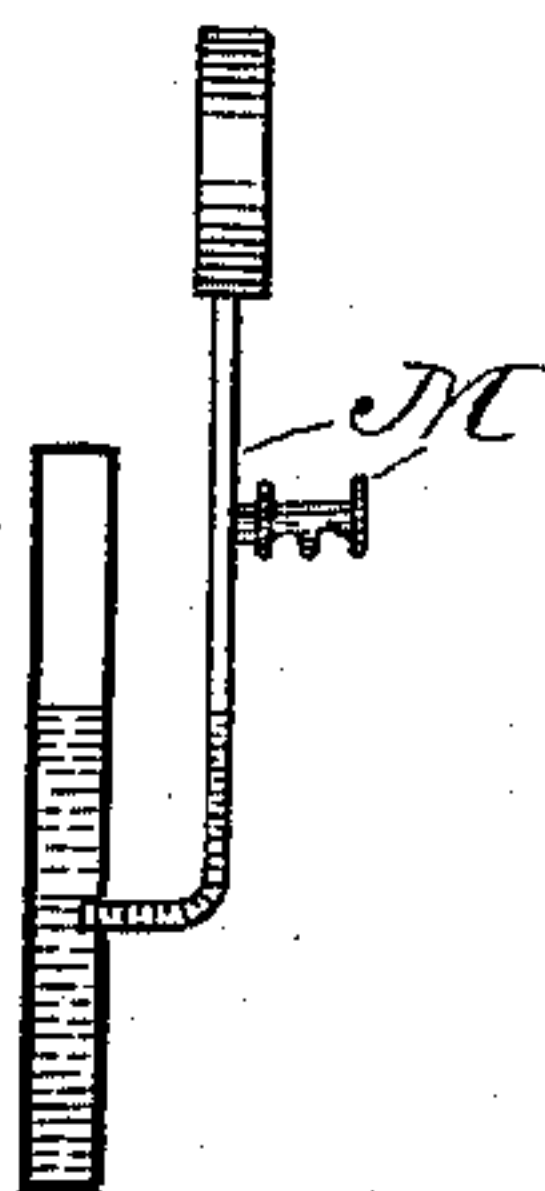


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE,

WILLIAM C. READ AND BEN HAGER, OF SALT LAKE CITY, UTAH TERRITORY.

## WAGON OR CART.

SPECIFICATION forming part of Letters Patent No. 500,612, dated July 4, 1893.

Application filed May 13, 1892. Serial No. 432,865. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM C. READ and BEN HAGER, residing at Salt Lake City, in the county of Salt Lake and Territory of Utah, have invented certain new and useful Improvements in Wagons or Carts, of which the following is a specification.

This invention relates generally to wagons and carts, and particularly to the construction of the body; the object of our invention being to provide an improved form of body for the transportation of material which must be maintained at a certain temperature irrespective of the condition of the atmosphere; and we accomplish this object by making a wagon or cart body with double sides and bottom, providing a water space between the walls of said sides and bottom and arranging a heater beneath the body thus constructed.

Our invention consists further in certain details of construction and combinations of parts hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification: Figure 1, is a vertical longitudinal section of our improved body as applied to a cart. Fig. 2, is a vertical transverse section of the same. Fig. 3 is a detail view of the water and steam gage and pit cock.

In carrying out our invention we employ the usual wooden wheels, axles, and shafts, and upon the axle is mounted a wooden frame A, upon which is secured our improved metallic body B, by means of the clips *a*. The bottom, sides, and forward end of the body are formed of sheet metal, and made double as shown, thus providing a water space *b* between the inner and outer walls *b'* and *b''*, of said bottom, sides, and end. The rear end of the body is closed by means of a wooden end gate C. The inner and outer walls of the bottom, sides, and end are kept the requisite distance apart by means of washers, D, interposed between the sheets, these washers being held in place by means of bolts *d*, passed through the sheets and said washers. A water supply pipe and cock E, are arranged at one end of the body, and through which water is introduced into the space *b*, and the body is also provided with a discharge cock F, by which water is with-

drawn when so desired. A pendent water drum G, is arranged beneath the body and communicates with the bottom water space by means of the pipes G', and beneath this drum G, is arranged a hydrocarbon burner H, said burner being supported beneath the drum, and connected with the reservoir I, by means of a pipe K. This reservoir is supported upon a bracket *i*, attached to the forward end of body, and the reservoir is secured thereon by means of straps *i''*, as clearly shown. The body is provided at one corner with a vent cock L, and also with a water and steam gage and pop cock M.

Now in operation water is introduced into space *b* through pipe E, and said space filled to the desired extent, which can readily be determined by examination of the water gage M. The burner is then lighted, heating the water in the drum which communicates with the bottom water space, and as the water space is a continuous one, there will be a complete circulation of the heated water throughout the entire body. Any material such as asphaltum deposited in said body will be kept warm during transportation thus avoiding the necessity of preparing it after transportation.

Steam can be discharged at any time through the vent cock L, and the water can be withdrawn at any time through discharge cock F.

The usual canvas cloth is used to cover the asphaltum while being transported in our improved cart.

Having thus described our invention, what we claim is—

1. The combination with a wagon or cart body having communicating water spaces in its bottom and sides, of a pendent water space, a heater arranged beneath the said drum and an oil reservoir carried on the body and connected with the heater substantially as shown and described.

2. The combination with a wagon or cart body having water spaces in its sides and bottom, of an oil reservoir carried upon said body, the burner arranged beneath the body and a pipe connecting the reservoir and burner substantially as shown and described.

3. The combination with a wagon or cart body having a water space of a pendent water

drum, connected with said space, and a heater arranged beneath said drum substantially as shown and described.

4. The combination with the wagon or cart  
5 body having double sides and bottom, of the pendent drum, the burner, pipe, and reservoir, the supply pipe, the discharge pipe, the

vent cock and water and steam gage all arranged substantially as shown and described.

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Witnesses:

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