July 17, 1928. 1,677,197

H. E. MYERS

PORTABLE DRIER

Filed Oct. 16. 1926

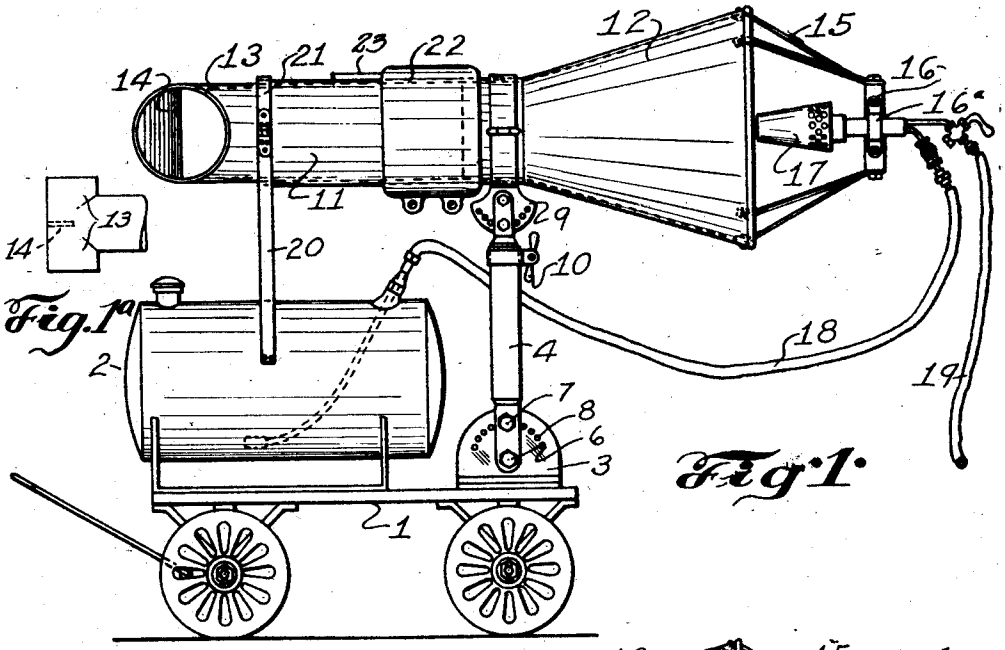


Fig. 1a

Fig. 1.

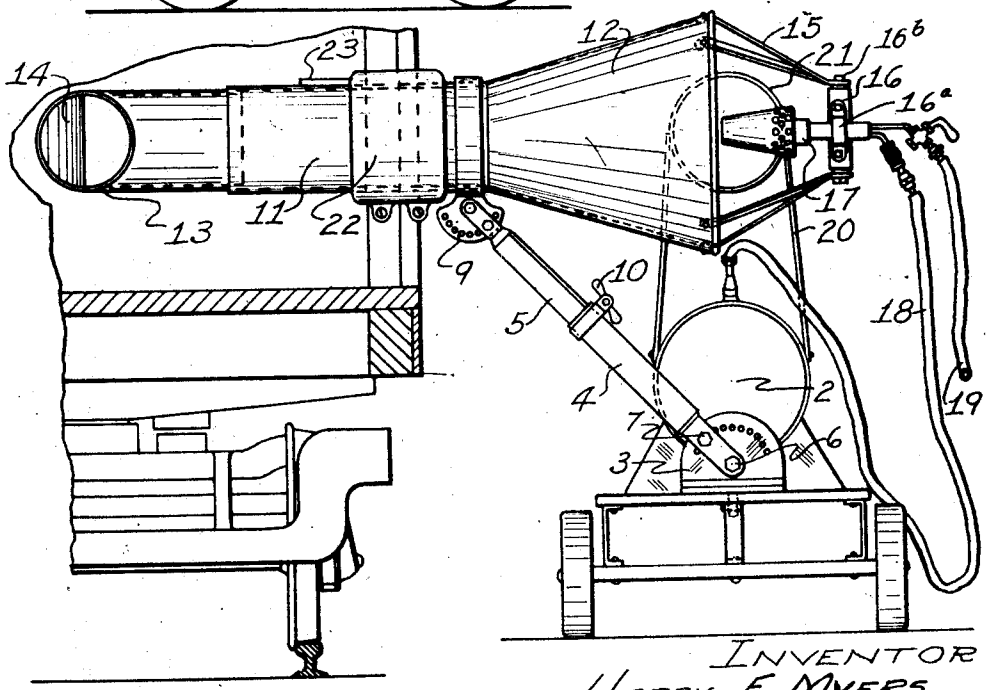


Fig. 2.

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UNITED STATES PATENT OFFICE.

HARRY E. MYERS, OF BUFFALO, NEW YORK.

PORTABLE DRIER.

Application filed October 16, 1926. Serial No. 142,041.

My invention relates to portable driers or heaters and consists in an improved device of that type particularly adapted to be used about railroad yards for drying railway cars which have been washed, or the interiors of which have become wet because of leaky roofs or other conditions, or for heating cars whether damp or not.

My invention may also be used to fumigate or deodorize cars which may require such treatment.

Some objects of my invention are to provide a portable drier which may be easily moved to a car and adjusted to function in position irrespective of the type or size of the car and the relative levels of the car track and the ground surface on which the drier may stand.

Another object of my invention is to provide an efficient and simple apparatus for creating a flow of heated air into a railway car.

In the accompanying drawings which illustrate a selected embodiment of my invention—

Figure 1 is a side elevational view of my drier and heater as it appears when not in use and adapted to be moved about the railway yard.

Figure 1ª is a fragmentary detail comprising a top view of the discharge end of the drier pipe.

Figure 2 is an end elevational view of my device showing the same adjusted to a position in which it may function to deliver a stream of heated air to the interior of a railway box car which is also partially indicated in this figure.

My apparatus is preferably mounted upon a four wheel truck 1 and includes a tank 2 for oil or other fuel mounted on the truck platform. The truck platform also mounts a rotatable quadrant 3 which carries a tilting standard formed of telescoping elements 4 and 5. The lower element 4 is pivoted to the quadrant at 6 and is adapted to be held in any desired inclined position by passing a bolt 7 through one of the quadrant holes 8. The upper element 5 of the standard pivotally supports a quadrant element 9 which corresponds generally to element 3. A hand screw 10 is provided for frictionally engaging elements 4 and 5 in any desired position.

The drier pipe includes a body portion 11 which is mounted on quadrant 9 and has a flaring or inwardly tapering inlet portion 12 and an outlet portion 13 extending at right angles to body 11 so as to provide oppositely disposed outlet passages. The outlet portion 13 is preferably adapted to be telescoped with the body portion 11 so as to adjust the length of the device to suit various conditions. The baffle plate 14 extends transversely of the outlet portion 13 and lies in the plane of the axis of the body portion and is adapted to facilitate the division of the air current passing through the latter.

The inlet portion 12 has frame elements 15 which support an upright 16 journaled on bolt 16ᵇ extending through the elements 15. An oil burner 17 is secured to the upright 16 by means of a strap 16ª easily loosened and tightened so as to adjust the burner to and from the pipe. The rotatable mounting of the burner permits the operator to start and adjust the flame without directing the same into the pipe. The burner is connected with the fuel tank 2 by means of a hose 18 and is also provided with the hose 19 for connection to a supply of compressed air, such as is generally available around railway yards.

An upright member 20 is mounted on tank 2 and is provided with a strap element 21. This member and element form supporting and securing means for the body of the pipe when the latter is not in use.

The body 11 is preferably provided with suitable lagging 22 so that the device may be placed against the post, sill, or door of a car without scorching the latter. This lagging will also permit an operator to handle the pipe readily even though it is heated.

Near the outlet portion 13 of the pipe the body 11 is provided with an opening having a door 23 for closing the same and this arrangement permits the ready insertion and removal of a container for fumigant or deodorant, particles of which will be carried into the car by the stream of air passing through the pipe.

It is believed that the operation of the device and the advantages attendant upon its use will be obvious to those who are familiar with the operation of railway cars and know the conditions to be met in preparing freight cars for shipment of grain and for similar purposes, particularly during severe winter weather. My device has been operated successfully and will com-

pletely dry the interior of a box car on a damp day with temperature below freezing in from five to ten minutes immediately after the car has been washed with a hose.

My drier is not limited to use in railway cars but may be used for drying or heating buildings, kilns, and other structures or for heating orchards or applying fumigants thereto, and obviously the particular embodiment of my invention may be varied in all of its details. Gas, electricity, and other fuels may be used in place of oil and any effective type of burner may be substituted for that shown.

Other modifications may be made without departing from the spirit of my invention, and I contemplate the exclusive use of all such variations as fall within the scope of my claims.

I claim:

1. A portable drier or heater comprising a wheeled truck, a fuel tank mounted thereon, a pipe adjustably mounted on said truck and adapted to have its discharge end inserted into a car body, a burner adjacent the other end of said pipe and connected with said tank adapted to project a flame into said pipe to create a flow of heated air through said pipe.

2. In a portable drier or heater, a wheeled truck, a fuel tank thereon, a standard on said truck, a pipe on said standard adapted to be turned over said tank or to be directed away from the same and to be inserted into a car body, and a burner mounted on said pipe and connected to said tank.

3. In a portable driver or heater, a wheeled truck, a fuel tank thereon, a rotatable standard on said truck, a pipe tiltingly mounted on said standard, adapted to be turned over said tank or to be directed away from the same and to be inserted into a car body, and a burner mounted on said pipe and connected to said tank.

4. In a portable drier or heater, a wheeled truck, a rotatable standard tiltingly mounted on said truck and comprising telescoping elements, a pipe tiltingly mounted on said standard and comprising telescoping elements and adapted to be turned to overlie said tank or to extend therefrom at any desired angle and to have one end inserted into a car body, and means for creating a flow of heated air through said pipe.

5. In a drier or heater, a wheeled truck, a standard tiltingly mounted on said truck and comprising telescoping elements, the upper element of said standard being rotatable in the lower element thereof, a pipe tiltingly mounted on the upper element of said standard and comprising a body portion and a discharge portion telescoping therewith, and means for creating a current of heated air through said pipe.

6. In a drier or heater, a supporting vehicle, a pipe carried thereby, a burner supporting frame carried by one end of said pipe, and a burner pivotally mounted on said frame so as to be turned to project a flame into said pipe or to be turned so as to project a flame away from said pipe.

7. In a portable drier or heater, a wheeled truck, a fuel tank carried thereby, a pipe mounted on said truck and rotatable about a vertical axis, and means carried by said tank for supporting and securing said pipe when the latter is over said tank.

8. In a device for drying or heating the interior of railway cars, a pipe adapted to be inserted into the car, means for creating a flame within said pipe for heating and passing air therethrough, and a belt of lagging material about said pipe for protecting car sills, doors, or posts from the heated air.

9. In a device of the class described, a pipe, and a burner for creating a flow of heated air through said pipe, said pipe having an opening therein between said burner and the outlet from said pipe for receiving a deodorant or fumigant container.

10. In a device of the class described, a pipe having a cylindrical body with an air inlet end, the other end of said pipe having oppositely disposed discharge outlet passages extending substantially at right angles to said body, there being a baffle plate extending transversely of said outlet passages in the axis of said body.

In testimony whereof I hereunto affix my signature this the 13th day of September, 1926.

HARRY E. MYERS.