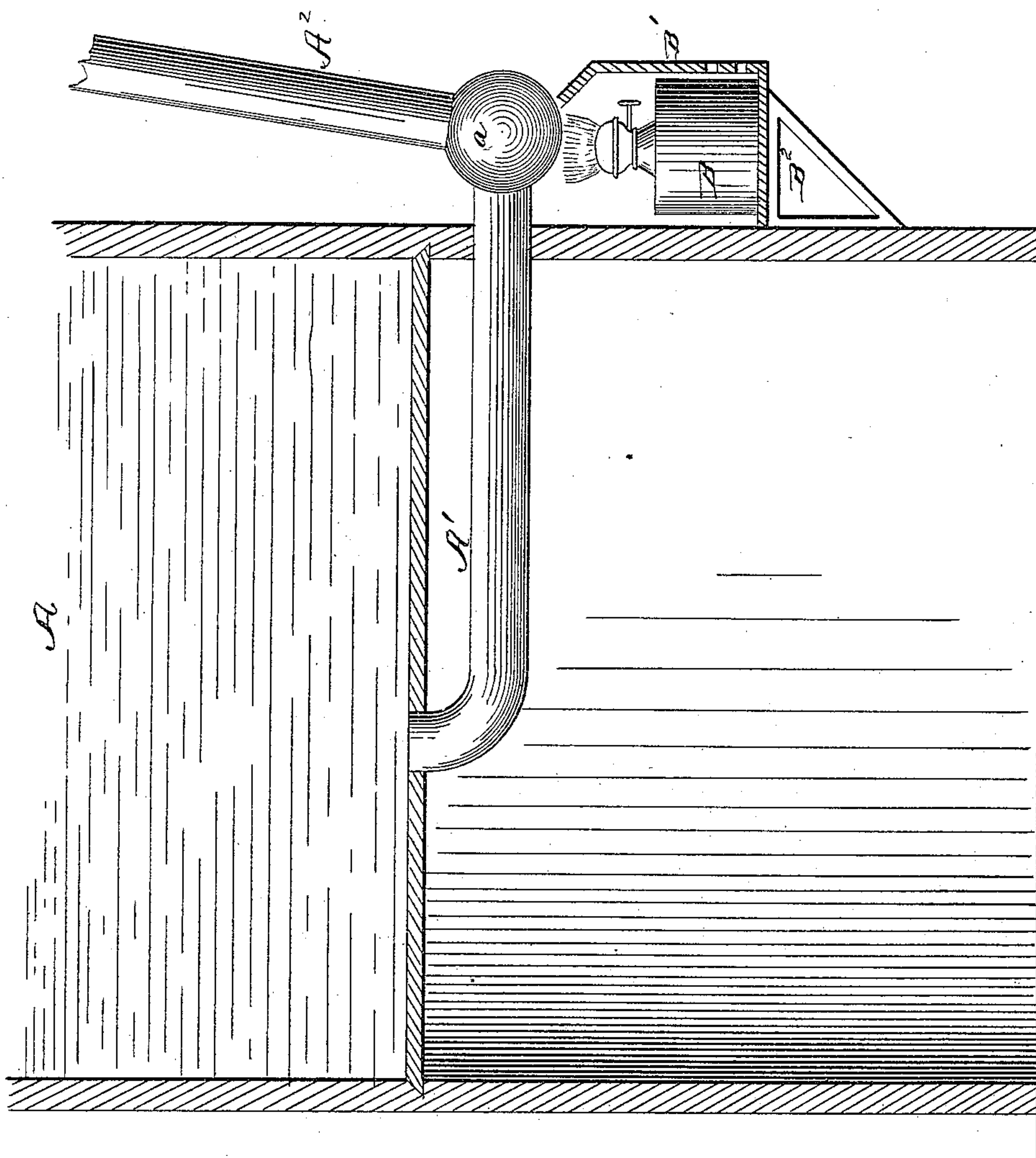


(No Model.)

A. E. LYTLE.  
RAILROAD WATER TANK.

No. 333,959.

Patented Jan. 5, 1886.



WITNESSES:

W. C. M. Arthur,  
Chas. Kressmann

INVENTOR.

Albert E. Lytle

PER.

H. Harrison

ATTORNEY.

# UNITED STATES PATENT OFFICE.

ALBERT E. LYTLE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-THIRD TO  
ROBERT B. SMITH, OF SAME PLACE.

## RAILROAD WATER-TANK.

SPECIFICATION forming part of Letters Patent No. 333,959, dated January 5, 1886.

Application filed December 18, 1883. Serial No. 114,963. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT E. LYTLE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Railroad Water-Tanks, of which the following is a specification, to wit:

This invention relates to railroad water-tanks; and it consists in certain peculiarities of construction and arrangement whereby the outlet-pipe is prevented from freezing in winter, substantially as will be hereinafter more fully set forth and claimed.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawing, which represents a vertical section of a portion of a water-tank with my invention in use.

A represents a water-tank, such as is commonly used upon railroad-lines to supply water to engines, and it is provided, as usual, with an outlet-pipe, A', extending through the side of the tank, and provided with a conducting-pipe, A<sup>2</sup>, which is hinged to the outlet-pipe by a joint, *a*, in such manner that it may be raised out of the way when not in use, or lowered, as desired, to conduct the water to the tender of the engine. The outlet-pipe will of course be supplied with a stop-cock or valve; but as this portion of the device is such as is in common use it has not been thought necessary to show more details in the drawing.

In cold climates the water remaining in the pipes A' A<sup>2</sup> after the engine has been supplied

often freezes in the pipe before the drip-pipe usually provided at the joint *a* can entirely drain it off, and this soon closes the pipes or renders it impossible to raise and lower the pipe A<sup>2</sup>. To prevent this and keep the pipes always in an operative condition, I place under the joint *a* a lamp, B, or similar heating device, which is inclosed in a case, B', supported upon a bracket, B<sup>2</sup>, as shown, so it cannot be extinguished by a strong wind or other causes. The heat from this device acting on the pipe and its joint always keeps it warm enough to prevent freezing, and the cost of oil for such a purpose is small.

I am aware that gutter-spout pipes on houses have heretofore been heated to prevent freezing, and also that pipes leading from ponds to water stock have been heated to prevent freezing, and I do not claim the same; nor do I claim, broadly, the heating of pipes to prevent freezing.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The tank A, outlet-pipe A', conducting-pipe A<sup>2</sup>, and joint *a*, in combination with the lamp B, case B', and bracket B<sup>2</sup>, all constructed and arranged to operate substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT E. LYTLE.

Witnesses:

W. C. MCARTHUR,  
CHAS. KRESSMANN.