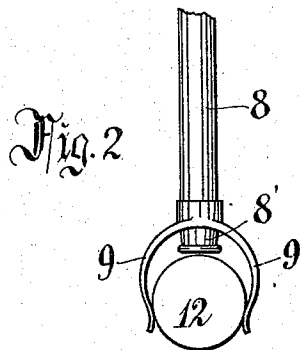
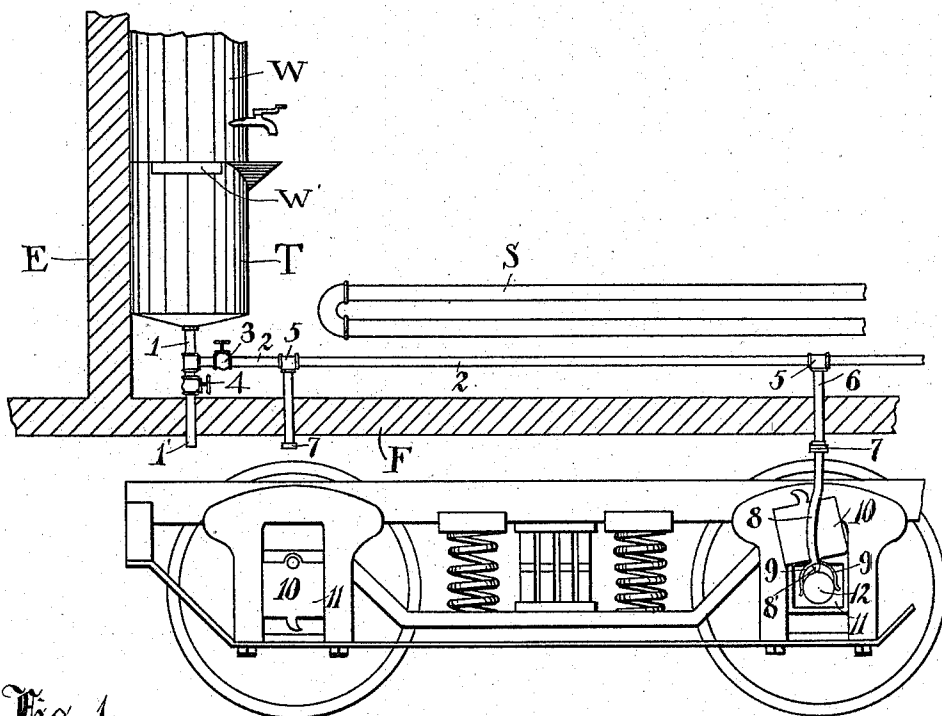


(No Model.)

G. C. TOBEN.
DEVICE FOR COOLING HOT BOXES.

No. 570,519.

Patented Nov. 3, 1896.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE C. TOBEN, OF BAY CITY, MICHIGAN.

DEVICE FOR COOLING HOT BOXES.

SPECIFICATION forming part of Letters Patent No. 570,519, dated November 3, 1896.

Application filed March 30, 1896. Serial No. 585,428. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. TOBEN, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Devices for Cooling Hot Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to and is a device for cooling hot boxes and journals on railway-trains, either passenger or freight, being especially designed for passenger-coaches, but may be applied to the ordinary freight-cars by a different arrangement than that shown.

Figure 1 is an elevation of part of the passenger-coach provided with my invention, the frame of the coach being sectional. Fig. 2 is a detail of part of the same.

In the drawings, E is the end of the coach, and F the floor.

W is the water-tank upon the inside of the coach.

My invention consists in placing underneath the water-tank a tank T, which may be so arranged as to receive the drip from the water-tank or it may be entirely independent thereof. Connected to this lower tank T is the pipe l, extending downward to the floor, having an extension-pipe l', passing through the floor of the car, and is provided also with the stop-cock 4, and is for the purpose of letting the water out of the tank and its connecting-pipes when desired.

2 is a horizontal pipe lying along the car-floor, on each side thereof and underneath the steam-pipes S, and connected in the usual manner to the pipe l and provided with the stop-cock 3 for the purpose of letting the water into the pipe 2 from the pipe l and tank when desired. As previously stated, this pipe 2 extends along the floor of the coach to a point nearly opposite the end of the car over the rear axle of the rear truck. A similar pipe extends along the opposite side of the car and is connected to a tank which may be located in any convenient place upon that side of the

car, or the two pipes may be connected across the end of the car by a pipe sunk in the floor. When disconnected, each side pipe will require a separate tank, which may be located, as previously mentioned, in any convenient part of the car.

Connected to by the coupling 5 and extending downward from the pipe 2 are pipes 6 6, which pass through the floor of the car directly over the axles of each of the trucks, the lower ends of these pipes 6 being provided with a valve or stop-cock, (not shown,) closing the pipes when not in use.

11 is the box surrounding the car-axle and journal, in which the waste and grease (not shown) are placed, 10 being the cover, such as is common, and is adapted to slide up out of the way, leaving the ends of the box open, as shown in the rear axle of Fig. 1.

8 is a rubber hose or tube adapted to be connected to the end of the pipe 6 by coupling and extends down to and into the box 11 to the top of the axle 12, and is provided with a spring-fork 9, adapted to engage the axle 12 and hold the end of the hose 8' over it. The hose 8, as previously stated, is adapted to be disconnected from the pipe 6 when not in use and carried in the car.

When a box becomes hot, the train is stopped, the lid drawn to one side, and the hose adjusted and connected, as described, in the hot box to the axle. Then turning the stop-cock 3 allows the water or any other liquid that may be desired to pass from the tank T through the pipes and out of the nozzle 8' and onto the hot journal 12. The train may then be started with the cooling device adjusted as mentioned, the continual dripping of the water cooling the hot box and axle while the train is in motion and without delaying the progress thereof.

When the box has become sufficiently cooled, the attachment 8 is easily taken off while stopping at stations, the journal reoled, and the train ready to proceed without having been delayed, as is usual, by the hot box.

I do not desire to confine myself to the special device shown or to the arrangement described, and desire to broadly claim the application of water or other liquid by means of a drip-pipe to a hot journal.

Having therefore described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

In a device for cooling hot boxes, the combination with the water-fountain in the car and the drip-reservoir underneath, and a discharge-pipe therefrom having a stop-cock, and laterally-extending pipes connected to the discharge-pipe above the stop-cock and having also a stop-cock thereon, the pipe extending along the floor of the car and the pipes passing through the car-floor above the car-axles and connected to the lateral pipes, and a tubing connected to the end of the pipes below the car and extending into the car-axle

boxing, a nozzle on the end of the tubing, two spring-tines secured to the end of the nozzle and extending beyond the same upon opposite sides thereof and adapted to pass upon each side of the car-axle and clamp themselves around it and hold the nozzle above the axle, substantially as and for the purpose set forth.

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

GEORGE C. TOBEN.

Witnesses:

A. H. SWARTHOUT,
JAS. RING.