R. C. MORRIS.

Cooler for Railroad-Car Journals.

No. 217,544. Patented July 15, 1879.

Fig. 1.

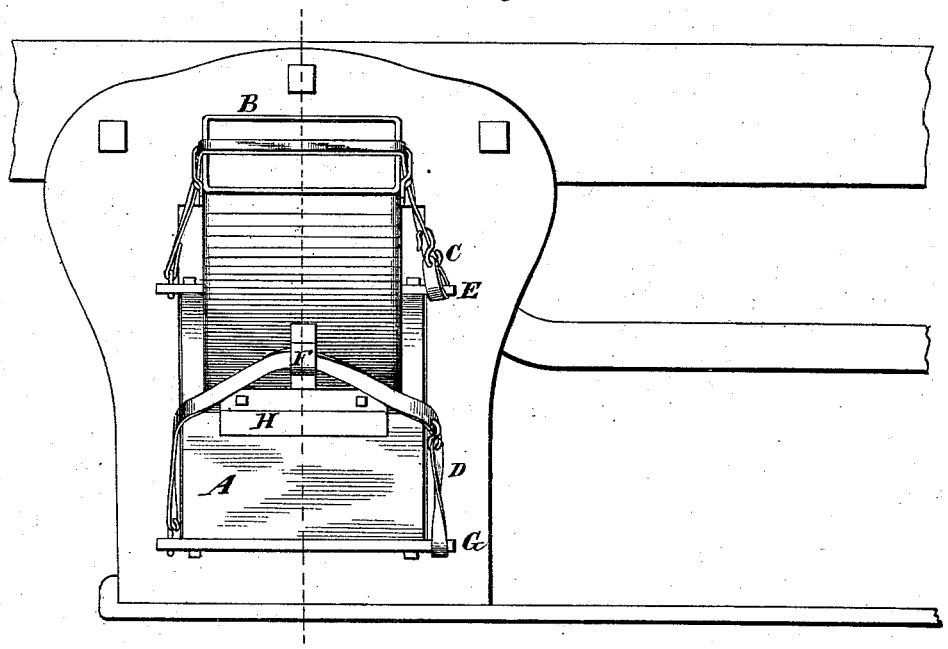


Fig. 2.

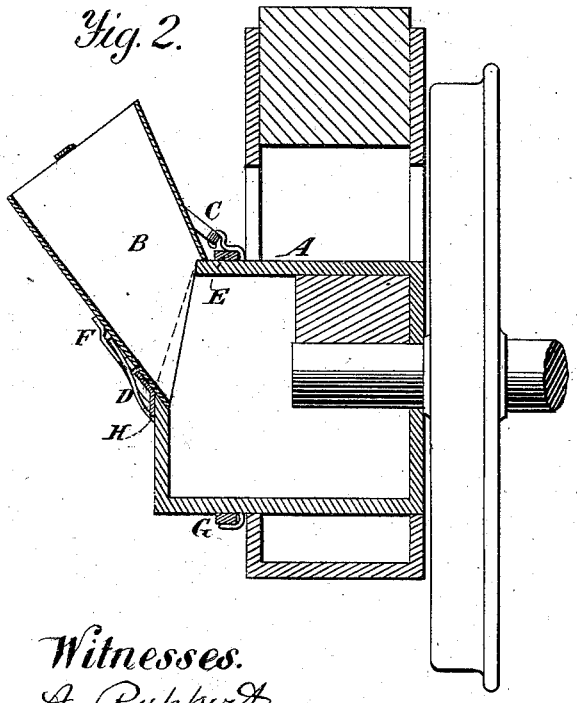
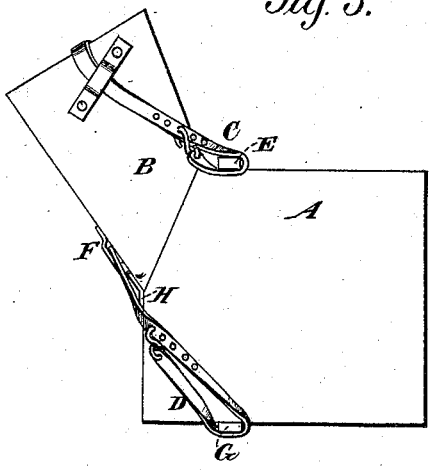


Fig. 3.



Witnesses.

A. Ruppert,

C. M. Connell

Inventor.

Robert C. Morris

Per. Jas. M. Blanchard

Attorney

UNITED STATES PATENT OFFICE.

ROBERT C. MORRIS, OF OLNEY, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO HIRAM H. McLANE, OF SAN ANTONIO, TEXAS.

IMPROVEMENT IN COOLERS FOR RAILROAD-CAR JOURNALS.

Specification forming part of Letters Patent No. **217,544**, dated July 15, 1879; application filed January 9, 1879.

To all whom it may concern:

Be it known that I, ROBERT C. MORRIS, of Olney, in the county of Richland and State of Illinois, have invented certain new and useful Improvements in Railroad Journal-Coolers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 letters of reference marked thereon, which form a part of this specification—

Figure 1 being a front view of my improved journal-cooler, showing also a portion of the frame-work of the car-truck, one of the jaws, and the housing. Fig. 2 is a transverse vertical view, showing a wheel, a portion of an axle, the housing with the cooler attached thereto, and the jaw in which the housing moves; and Fig. 3 is an elevation of the housing and cooler attached thereto, showing also the straps by which the cooler is held in position.

Corresponding letters denote like parts in all of the figures.

This invention relates to an apparatus for cooling the journals and boxes of railroad-cars and other vehicles which have become heated from want of proper lubrication or from excessive friction; and it consists in a reservoir for ice, water, or other cooling material, to be permanently attached to the housing of a journal-box or temporarily secured thereto, and so arranged that it may be filled with ice or other cooling material, which, when the journal becomes heated, shall be caused to flow in the form of a liquid into the housing, and thus surround the journal and its box, for the purpose of cooling them by absorbing the heat contained therein, and at the same time acting as a lubricant for the journal.

In applying my improvement to cars I prefer to adopt the method shown in the drawings, which consists in applying to the housing A of a journal-box a removable reservoir, B, which is secured to said housing by means of straps C and D, the former of which passes across the upper end of the reservoir, and through loops or other suitable devices upon its sides, and from thence to and around a bar, E, secured to the housing, or it may be to projections formed thereon. The strap D is designed to hold the lower end of the reservoir in position, it being passed through a loop or staple, F, secured to it, from whence it passes to and around a bar or projections, G G, secured to the lower portion of said reservoir. These straps are to be supplied with buckles or other means for changing their lengths, and for convenience in securing them to the bar or projections E and G. The reservoir B is provided with a flange, H, for preventing it from entering too far into the housing, it being set at such an angle with reference thereto as to allow it to be conveniently filled with the cooling material.

It is apparent that instead of being made detachable from the housing, as shown and described, the reservoir B may be cast upon or otherwise permanently secured thereto, and have its outer end provided with a hinged cover, which will exclude dust, and at the same time allow the ordinary lubricants to be poured in at that point.

If found necessary, bars may be placed across the interior of the reservoir, near its lower end, to prevent the too rapid falling of the ice, in which case the melting will be more gradual, and the effect, under certain circumstances, improved.

It is also apparent that when it is desirable to use a liquid cooling substance, a partition may be placed in the reservoir at such a point as may be desirable, and a valve or cock arranged in it, so that the flow of the liquid may be regulated at pleasure.

I am aware that liquids of various kinds have been used for cooling journals of railroad vehicles, and that these have been applied, or have been rendered capable of being applied, when such vehicles are in motion; and hence I do not claim, broadly, such application; neither do I limit myself to any particular method of attaching the reservoir to the housing, nor to the material to be used therein; but,

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

1. In combination with the oil and waste chamber of a car-journal housing, a reservoir for the reception of ice, said reservoir being arranged with reference to the chamber, substantially as shown and described, whereby the water resulting from the melting ice is made to flow directly into it, and thus be brought into contact with the wearing-surface of the journal.

2. The combination of the housing A, reservoir B, and the straps C and D, all arranged substantially as and for the purpose set forth.

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

ROBERT CORWIN MORRIS.

Witnesses:
M. B. RUSH,
SIMEON PEARSON.