

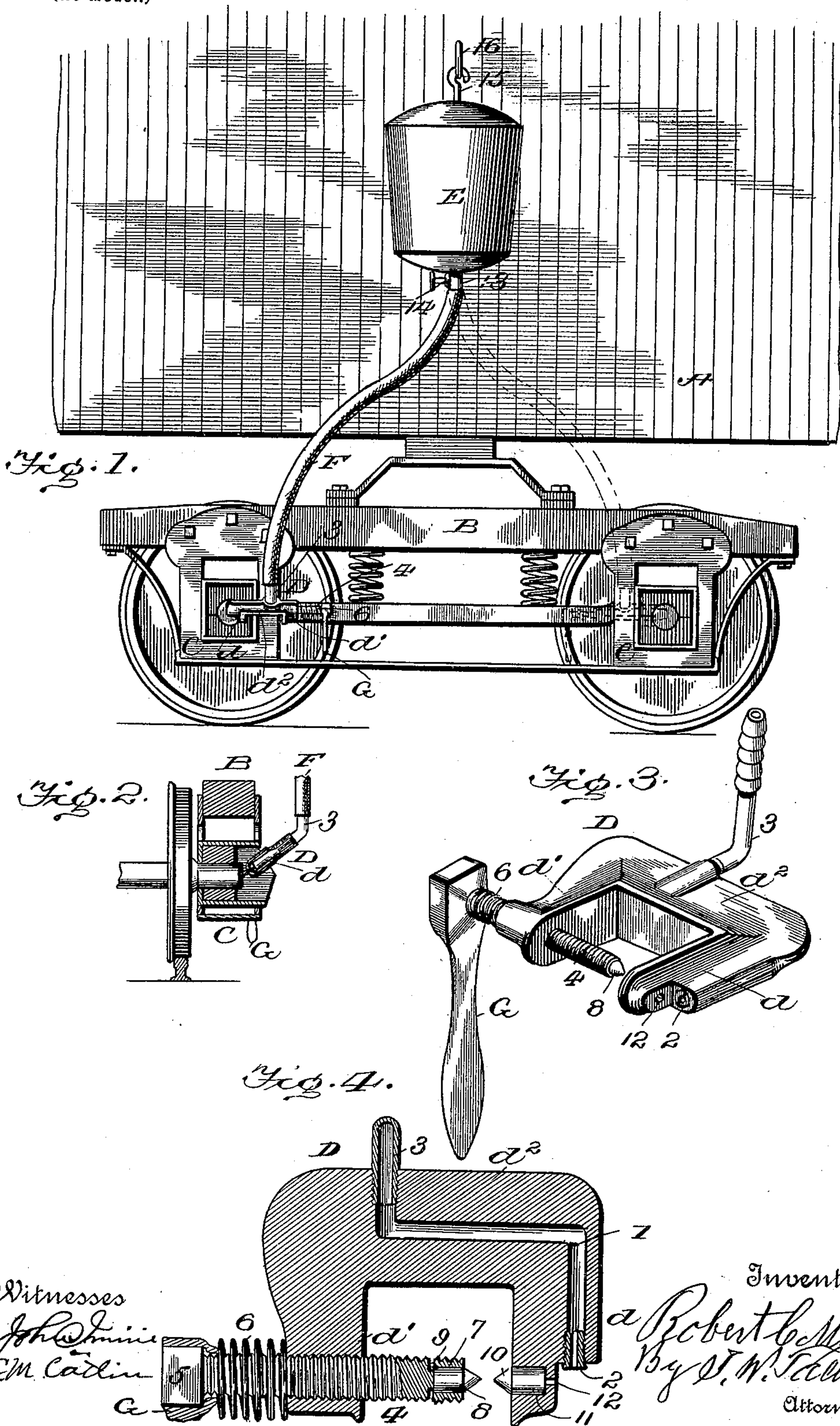
No. 614,486.

Patented Nov. 22, 1898.

R. C. MORRIS.  
JOURNAL COOLER.

(Application filed Feb. 12, 1898.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

ROBERT C. MORRIS, OF OLNEY, ILLINOIS.

## JOURNAL-COOLER.

SPECIFICATION forming part of Letters Patent No. 614,486, dated November 22, 1898.

Application filed February 12, 1898. Serial No. 670,070. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT C. MORRIS, a citizen of the United States, residing at Olney, in the county of Richland and State of Illinois, have invented new and useful Improvements in Journal-Coolers, of which the following is a specification.

My invention relates to an improvement in journal-coolers, it being designed especially as an improvement over the construction shown, described, and claimed in Letters Patent No. 207,336, granted to me August 20, 1878, inasmuch as the clamp which I now employ for connecting the water-delivery pipe with the journal-box is of such construction as to serve as a conduit adapted to direct the water onto the journal.

The invention will first be described in connection with the accompanying drawings and then pointed out in the claims.

Figure 1 of the drawings is a side elevation of a portion of a car provided with my improved journal-cooler. Fig. 2 is a broken sectional view, partly in elevation, illustrating the operation of my improved journal-cooler. Fig. 3 is a perspective view of the clamp provided with a metal tube for connecting the flexible tube with the clamp and also with a wrench for operating the screw. Fig. 4 is a horizontal sectional view of the same, the removable spurs and a portion of the screw, together with the tension-spring, being shown in elevation.

Referring to the drawings, A represents a portion of the side of a car, B one of the trucks, and C the journal-boxes, all of ordinary construction.

D represents my improved clamp, comprising two jaws  $d$  and  $d'$ , united at their rear ends by a bridge  $d^2$ . The bridge and the jaw  $d$  are cored out to form a channel 1, leading from the outer side of the bridge to and forwardly through the jaw  $d$ . Into the outer end of the channel in the jaw  $d$  is screwed a hollow plug 2 for reducing the stream of water designed to pass through the clamp, and into the channel-opening in the bridge is screwed a metal tube 3, connecting the flexible tube and the clamp. Horizontally through the jaw  $d'$  of the clamp is passed a clamping-screw 4, provided with a polygonal head 5, between which and the outer end of

the jaw  $d'$  is placed a tension-spring 6, encircling the screw, for a purpose hereinafter described. The inner end of the screw 4 is bored out for a short distance, as at 7, for the reception of a chilled or otherwise hardened steel spur 8, and transversely through the screw, on a line with the rear end of the spur when in place, is formed a small opening 9, into which a wire nail or the like may be driven to unseat the spur when desired to replace a worn one with a new one. In the jaw  $d$ , opposite the spur in the screw, is another hardened-steel spur 10, seated in a recess 11, and in the said jaw, behind the spur 10 when in place, is formed a small hole 12, through which a nail may be passed to force out said spur, this latter spur, it will be noticed in the drawings, being placed in a prolongation of jaw  $d$ , beyond the end of that portion in which the hollow plug 2 is seated.

E represents any suitable vessel for containing water, provided in its bottom with a coupling-tube 13, having a stop-cock 14. This vessel is suspended by a hook 15, engaging with a staple 16 on the side or end of the car. A flexible tube F connects at one end with the coupling-tube 13 and at its other end with the metal tube 3, screwed in the bridge of the clamp.

The clamp is designed to be secured over the edge of one of the sides of the journal-box, the screw being operated with sufficient force to sink the steel spurs into the metal of the box.

G is a wrench designed to fit tightly on the head of the screw, and when in place thereon will act as a counterweight to prevent the jarring of the car from loosening the screw, the area of the opening in the wrench being smaller on the inner side than on the outer side to prevent the wrench being jarred off the head of the screw, it being understood that the wrench G is inserted on the screw 4 before the latter is passed through the jaw  $d'$  of the clamp. The tension-spring 6 by bearing against the jaw of the clamp and the wrench serves to keep the wrench normally on the head of the screw ready for use.

In the use of my invention it is designed to keep the water vessel E filled with water and the clamp secured in place on the journal-box. Then when the journal becomes



heated the stop-cock 14 is opened, permitting water to flow through the clamp and out the opening in the hollow plug 2, it being understood that the opening into which the hollow plug is secured is turned so as to direct the water onto the end of the journal, as shown in Fig. 2. If desired, the discharge of the water onto the journal may be continuous, thus preventing the journal from becoming heated.

It will be seen that by forming a conduit or channel in the clamp I am enabled to simplify the construction of the cooler to a considerable extent, and also that by the use of the removable steel spurs the clamp may be fastened very securely to the journal-box casing, preventing any accidental displacement of the clamp through jarring of the truck.

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

1. In a journal-cooler, the combination, with a journal-box, a journal therein, and a water vessel supported above the journal, of a clamp secured to the journal-box, and a conduit leading from the water vessel to the clamp, the said clamp being formed with an

interior channel so as to direct the water onto the journal.

2. In a journal-cooler, the combination, with a journal-box, a journal therein, and a water vessel supported above the journal, of a clamp secured to the journal-box, a conduit leading from the water vessel to the clamp, said clamp being formed with an interior channel adapted to direct the water onto the journal, and a reducing-plug secured in the end of said channel.

3. In a journal-cooler, the combination with a journal-box, a journal therein, and a detachable water vessel supported above the journal, of a clamp secured to the journal-box, said clamp being provided with removable spurs for securing the clamp tightly in place, and a wrench normally secured on the head of the clamp-screw, said wrench being adapted to act as a counterweight against the jarring of the truck.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROBERT C. MORRIS.

Witnesses:

F. N. BOYER,  
J. B. MEYERS.