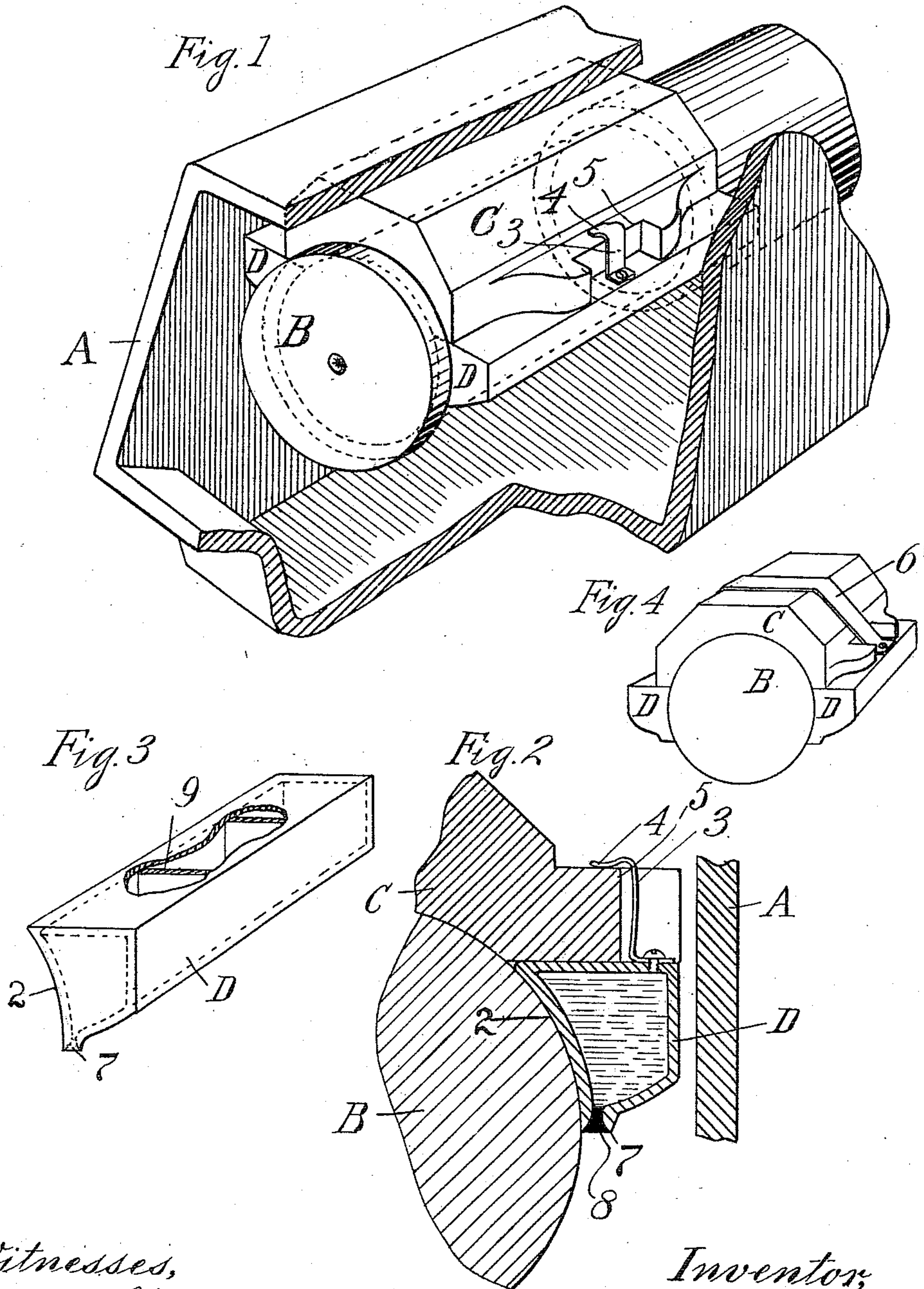


J. L. HENDERSON.
LUBRICANT RESERVOIR FOR JOURNAL BOXES.
APPLICATION FILED SEPT. 9, 1908.

995,459.

Patented June 20, 1911.



Witnesses,
George Voelker
Hattie Smith

Inventor,
John L. Henderson
by Rothrop & Johnson
his Attorneys.

UNITED STATES PATENT OFFICE.

JOHN L. HENDERSON, OF MINOT, NORTH DAKOTA.

LUBRICANT-RESERVOIR FOR JOURNAL-BOXES.

995,459.

Specification of Letters Patent. Patented June 20, 1911.

Application filed September 9, 1908. Serial No. 452,279.

To all whom it may concern:

Be it known that I, JOHN L. HENDERSON, a citizen of the United States, residing at Minot, in the county of Ward and State of North Dakota, have invented certain new and useful Improvements in Lubricant-Reservoirs for Journal-Boxes, of which the following is a specification.

My invention relates to improvements in lubricant reservoir for journal boxes, and has for its object to provide improved emergency reservoir for holding a reserve quantity of lubricant so that it will be automatically discharged into the journal box alongside the journal when the journal begins to run hot, thus cooling off the box and saving the brass.

To this end the invention consists in the features of construction, combination and arrangement of parts hereinafter described and claimed.

In the accompanying drawings forming part of this specification, Figure 1 is a perspective view of a fragment of a journal box and axle journal fitted with the invention; Fig. 2 is a vertical cross section through the lubricant reservoir and the adjacent fragments of the journal box, journal and bearing brass; Fig. 3 is a perspective view of the lubricating reservoir alone, with the top partly broken away, and Fig. 4 is a perspective view of the axle journal, bearing brass, and lubricant reservoirs showing another way of supporting the reservoirs.

In the drawings A represents a journal box of usual construction, B the car axle journal and C the bearing brass. Suspended from the bearing brass upon one or both sides of the axle below the brass is a lubricating reservoir D, having its inner side curved to conform to the periphery of the axle so as to fit about it. In Figs. 1 and 2 each reservoir is shown independently and removably supported or suspended from the brass by means of a spring clip 3 bolted or otherwise secured to the top of the reservoir and having at the top a lip or hook 4 which springs or fits over the shoulder of the brass. Where two reservoirs are used, one on each side of the axle, they may be conveniently supported or suspended from the brass by means of a metal strap 6 passing over the brass and secured at one end to one of the reservoirs, and at the other end to the other reservoir, as illustrated in Fig. 4. The

reservoir is formed at the bottom alongside the axle with a longitudinal opening 7. When the reservoir has been supplied with lubricant this opening is filled or stopped with a plug 8 of suitable fusible material, such as wax, which will melt at a comparatively low temperature, preferably about 150 degrees Fahrenheit. The reservoir is preferably divided interiorly into a number of compartments by transverse partitions 9, as shown in Fig. 3.

In use the reservoirs are filled with lubricating oil through the slots or openings 7, which are afterward stopped by the plug, or through any other desired inlet openings after the discharge openings have been sealed. In order that the sealing plug may be more effectually held in the discharge opening 7, the walls about the opening may be shaped to dovetail with the plug as shown in Fig. 2. The reservoirs, when filled with lubricant, are then inserted into the journal box and hung upon the bearing brass as described. When the journal begins to run hot from lack of oil or other cause, the heat, when it reaches the requisite temperature, will melt the fusible plugs 8 alongside, whereupon the oil in the reservoir will flow through the opening 7 into the journal box upon the cotton waste or other packing therein contained and cool off the axle and journal box.

By having the opening 7 in the bottom of the reservoir arranged close alongside the axle, not only is the plug directly subject to the heat thereof and certain to melt as soon as the axle begins to run dry and hot, but the lubricant will be discharged upon or close to the axle. As will be seen from the drawings, the reservoir is adapted to be supported from an ordinary bearing brass and to be used in an ordinary journal box without requiring any change in the construction of either.

It will be seen from Figs. 1 and 2 that by arranging the lubricant reservoir alongside the axle below the bearing brass and hanging it upon the brass by means of a readily detachable clip or hanger, the reservoir can readily be drawn out lengthwise from the brass and journal box without first jacking up the car or journal box. This is an extremely important feature of the invention, making it possible to remove or replace the reservoir with the utmost ease and quickness.

Changes may be made in the details of

construction here shown and described without departing from the principle of the invention, the scope of which is defined in the claims.

5 I claim as my invention:

1. In a journal box, the combination with the axle and its bearing brass, of an emergency lubricant reservoir removably hung from the brass and shaped to fit the curvature of the axle, whereby the reservoir will lie alongside the axle below the brass, said reservoir having at the bottom a discharge opening extending lengthwise thereof in close proximity to the axle, and a fusible plug normally sealing said opening, whereby the heat of the axle will be communicated directly to the plug.

2. In a journal box, the combination with the axle and its bearing brass, of an emergency lubricant reservoir arranged at the side of the axle and below the brass, said reservoir having a discharge opening at the bottom in close proximity to the axle, and a

25 fusible plug normally sealing said opening, said reservoir being removably hung from the brass, and capable of being withdrawn lengthwise from the brass and journal box without jacking up the box.

3. In a journal box, the combination with the axle and its bearing brass, of an emergency lubricant reservoir arranged at the side of the axle and below the brass, said reservoir having a discharge opening in close proximity to the axle, a fusible plug normally sealing said opening, and a hanger secured to the reservoir and resting upon the brass, whereby the reservoir is removably hung from the brass and can be withdrawn lengthwise from the brass and box without first jacking up the box.

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

JOHN L. HENDERSON.

Witnesses:

CARRIE B. LINDERMAN,
SELMA E. HOLMES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
