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COOLING DEVICE FOR CAR JOURNALS AND THE LIKE.

APPLICATION FILED AUG. 29, 1914.

1,155,932. Patented Oct. 5, 1915.

Fig. 1.

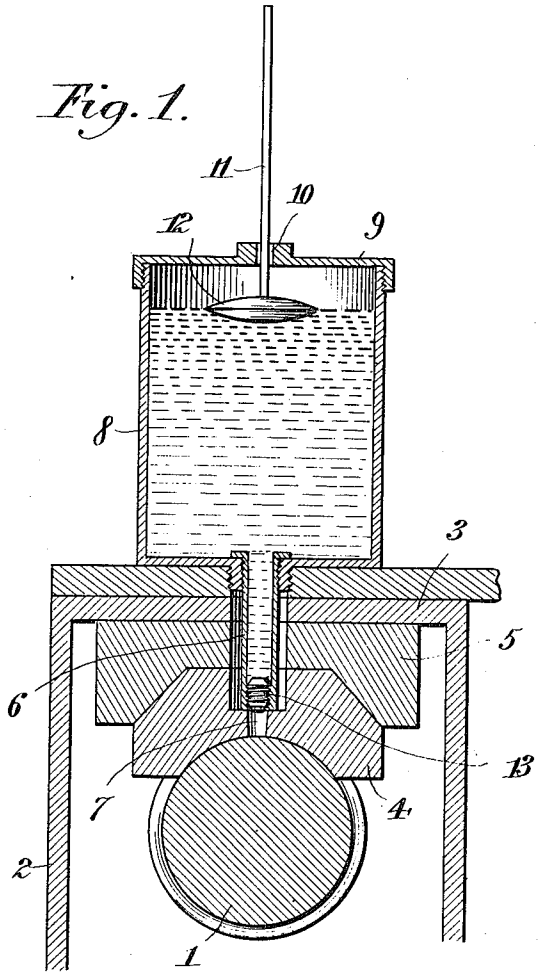


Fig. 2.

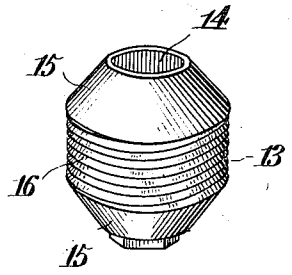
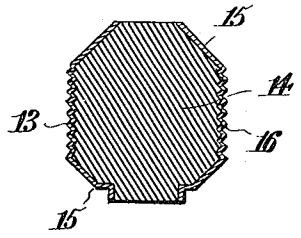


Fig. 3.



Witnesses:

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COOLING DEVICE FOR CAR-JOURNALS AND THE LIKE.

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To all whom it may concern:

Be it known that I, ALPHONSO DE CLAUDE KESSLER, a citizen of the United States of America, residing at Dunkirk, in the county of Chautauqua and State of New York, have invented new and useful Improvements in Cooling Devices for Car-Journals and the like, of which the following is a specification.

This invention relates to improvements in cooling devices for car journals and other movable parts and has particular application to an automatic cooling device.

In carrying out the present invention, it is my purpose to provide a cooling device for car journals and the like whereby the cooling fluid will be admitted to contact with the journal immediately that the latter becomes overheated and wherein such fluid will be held out of contact with the journal as long as the latter is running normal.

It is also my purpose to provide a device of the class described whereby communication between the journal and the cooling fluid will be controlled by means of a fusible plug adapted to be melted when the car journal overheats so as to enable the cooling fluid to flow over the journal.

A further object of my invention is to improve and simplify the general construction of cooling devices of this character and to provide a device which may be readily and quickly installed and operated at a minimum expense.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter set forth in and falling within the scope of the claim.

In the accompanying drawing: Figure 1 is a cross sectional view through a journal box equipped with a cooling device constructed in accordance with the present invention, the cooling device being shown in vertical section. Fig. 2 is a perspective view of the fusible plug. Fig. 3 is a longitudinal sectional view therethrough.

Referring now to the drawing in detail, 1 designates a car journal disposed within a journal box 2 embodying a top wall 3, a brass 4 resting upon the journal 1 and a wedge 5 interposed between the brass 4 and the top 3 of the journal box, as usual.

In accordance with my present invention, the top wall 3 of the journal box, the wedge 5 and the brass 4 are formed with vertically alining openings and passed through these openings is a tube 6 relatively small in diameter as compared with the diameter of the openings and having the lower end thereof threaded interiorly and alining with an aperture 7 formed in the lower portion of the brass 4 coaxial with the opening in such brass and contiguous the bottom wall of such opening whereby communication between the interior of the tube 6 and the surface of the journal 1 may be established. Threaded onto the upper end of the tube 6 is a reservoir 8 designed to contain a cooling fluid and of any suitable dimensions. This reservoir is provided with a removable top 9 and formed in the top 9 and approximately centrally thereof is an opening 10 through which is passed a stem 11 having the lower end thereof equipped with a float 12 disposed within the reservoir 8 and under the control of the fluid therein, the float holding the stem 11 elevated while the fluid remains in the reservoir and lowering such stem upon the release of the fluid from the reservoir.

In order to hold the fluid within the reservoir under normal conditions and release such fluid when the journal becomes overheated, I employ a fusible plug comprising a metallic shell 13 carrying a quantity of wax 14 or other fusible material and having the opposite ends thereof restricted as at 15 and formed with axially alining openings, the restricted end of the shell serving to hold the fusible material securely within the same. The central portion of the shell 13 is threaded exteriorly as at 16 to engage the threads on the inner surface of the tube 6 at the lower end thereof whereby communication between the reservoir and the journal is normally cut off. When the car journal overheats, the temperature melts the wax 14 or other fusible material and so establishes communication between the reservoir 8 and the journal so that the cooling fluid within the reservoir will flow over the journal, thereby reducing the temperature of the latter. As soon as the fluid within the reservoir is released, the float 12 descends, thereby lowering the stem 11 so that an inspector looking over the equipment will be advised as to the condition of the individual cooling devices.

I claim:

In apparatus of the class described, the combination with a tube leading from a cooling reservoir to a car journal, of a fusi-

ble plug in the journal end of said tube whereby communication between the reservoir and the journal will be established when the journal overheats, said plug comprising a metallic shell having the end portions thereof restricted and the central portion thereof screwthreaded to engage the particular end of the tube and fusible material within said shell and held therein by the restricted ends thereof.

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

ALPHONSO DE CLAUDE KESSLER

Witnesses:

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