

J. P. PENNY & T. M. LE BLANC.

JOURNAL BOX.

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988,138.

Patented Mar. 28, 1911.

Fig. 1.

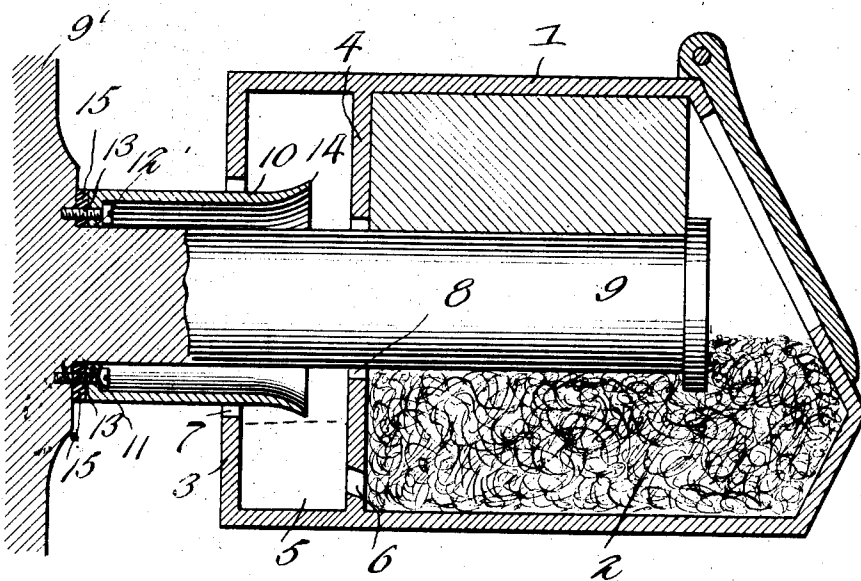
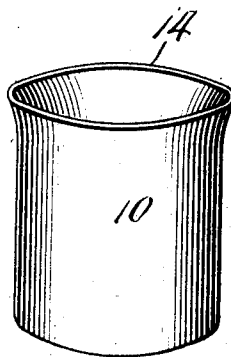


Fig. 2.



Witnesses

Hugh Hott

C. C. Hines

Inventors

James P. Penny
Thomas M. Le Blanc

By *Victor J. Evans*

Attorney

UNITED STATES PATENT OFFICE.

JAMES P. PENNY AND THOMAS M. LE BLANC, OF GARDNER, MASSACHUSETTS.

JOURNAL-BOX.

988,138.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JAMES P. PENNY, a subject of the King of Great Britain, and THOMAS M. LEBLANC, a citizen of the United States, residing at Gardner, in the county of Worcester and State of Massachusetts, have invented new and useful Improvements in Journal-Boxes, of which the following is a specification.

This invention relates to improvements in journal boxes of street railway and other cars, and particularly to journal boxes of the automatic lubricating type, the object of the invention being to provide a means whereby the oil contained within the box will be caught and retained and prevented from working back on the journal or axle spindle and running down on the outside of the box and thus becoming wasted.

The invention consists of the features of construction, combination and arrangement of parts, hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a central longitudinal section through a journal box embodying our invention. Fig. 2 is a perspective view of the guard or collecting cup.

Referring to the drawing, 1 designates a journal box of that type adapted to contain in its base a body of waste 2 saturated with oil or other lubricant, and having a rear wall 3 and an adjacent vertical partition 4, the latter forming an oil containing chamber 5 communicating with the body of the box through a passage 6, so that the oil may circulate therebetween. The wall 3 and partition 4 are respectively provided with openings 7 and 8 for the passage of the axle spindle or journal 9 which extends through the chamber 5 and into the body of the box and runs in contact with the body of oil-saturated waste therein. As is well known, the oil taken up by the spindle 9 ordinarily works back upon said spindle and drops out at the rear of the box, falling upon the adjacent parts of the car truck and becoming lost or wasted, as well as soiling said parts and causing dust and grit to adhere thereto, with a consequent objectionable wear upon the journal and other elements of the bearing.

The primary object of our invention is to provide a device which will prevent this escape of the oil and save it for further use,

as well as to avoid the aforementioned objections.

Surrounding the rear end of the axle spindle 9 and arranged partially within and partially without the chamber 5 is a guard or collecting cup 10, the rear wall 11 of which is provided with opening 12 for the passage of the spindle and which comes in close contact therewith and is arranged adjacent the outer face of the hub of the car wheel 9' to which it is fastened by screws 13. This cup extends through the opening 7 and is of greater diameter than the opening 8, and has its open end facing and spaced from the wall 4 and preferably outwardly flared or provided with an out turned lip 14 which serves to freely discharge the collected oil back into the journal box. In order to prevent leakage of the collected oil through the opening 12 or the space between the wall 11 and spindle 9, a gasket or packing ring 15 is provided which is secured between the wall 11 and the wheel 9' by the screws 13. The gasket bears snugly against the spindle 9, thus preventing the oil from working out at the aforementioned point. It will thus be understood that the oil working back on the spindle will be prevented from escaping and collected within the cup, so that it will again pass back into the box for further use, whereby the stated objections to journal boxes of ordinary construction will be effectually overcome.

We claim:—

The combination of a wheel having a spindle and a flat outer face surrounding the inner end of said spindle, a journal box receiving the spindle, said box having a vertical rear wall provided with an opening therein and a vertical partition separating said rear wall from the body of the box and forming an intervening oil chamber, said partition being provided with a feed orifice connecting said chamber with the bottom of the box at its lower end and with an opening arranged in alinement with the opening of the rear wall and of less diameter than the same, a collecting cup surrounding the rear end of the spindle and having its rear end formed with an inwardly extending flange and its front end extending through the opening in the rear wall into the oil chamber and flared, a washer surrounding the rear end of the

spindle between the flange of the cup and
the flattened face of the wheel, and fasten-
ing screws passing through the flange of the
cup and the washer and entering the face of
5 the wheel, said screws detachably connect-
ing the cup with the wheel and holding said
cup about the rear end of the spindle.

In testimony whereof we affix our signa-
tures in presence of two witnesses.

JAMES P. PENNY,

THOMAS M. LE BLANC.

Witnesses:

PETER A. BENGTON,

RUD LUNDBERG.