

J. RHOADS.
Car-Axle Box.

No. 162,950.

Patented May 4, 1875.

Fig. 1.

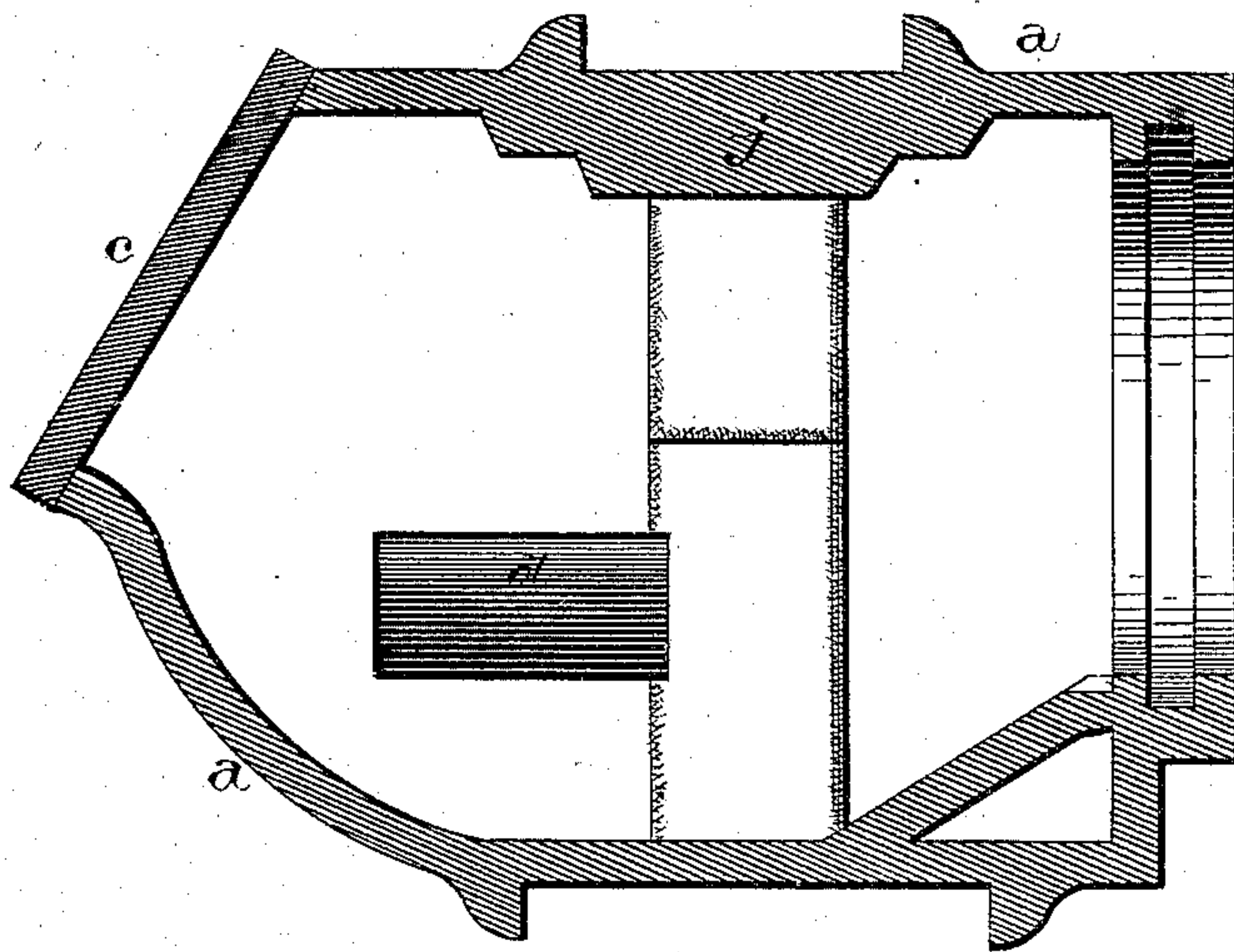
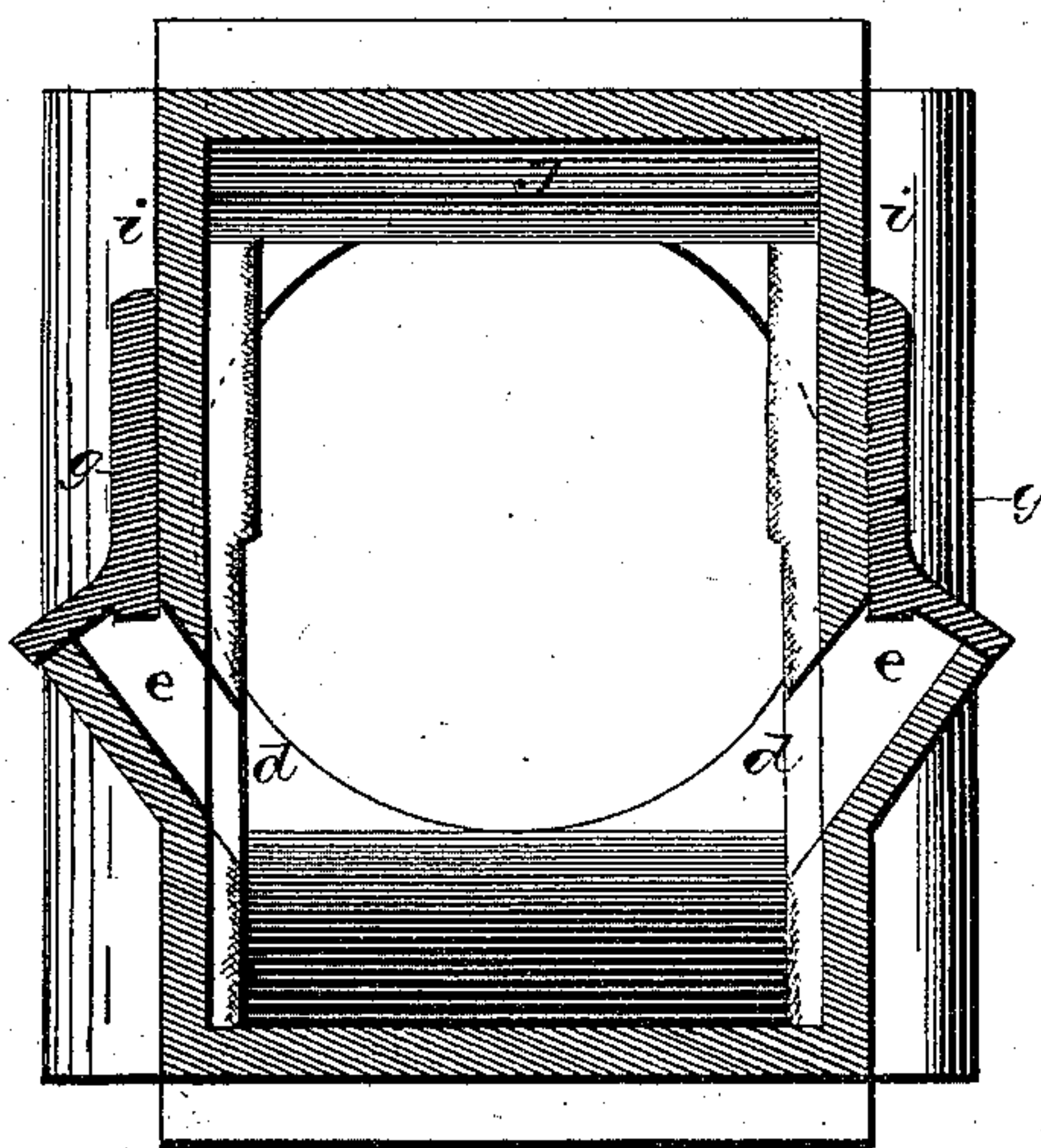


Fig. 2.



WITNESSES.

J. W. Garner,
C. Lemon.

INVENTOR.

Jno Rhoads
per
F. A. Lehmann,
att'y.

UNITED STATES PATENT OFFICE.

JOHN RHOADS, OF HARRISBURG, PENNSYLVANIA.

IMPROVEMENT IN CAR-AXLE BOXES.

Specification forming part of Letters Patent No. **162,950**, dated May 4, 1875; application filed January 8, 1875.

To all whom it may concern :

Be it known that I, JOHN RHOADS, of Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Journal-Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in journal-boxes; and it consists in small boxes made in the sides of the journal-box, and which are to be filled with tallow or grease, so that when the lubricating-oil has been exhausted, and the box begins to heat, this tallow or grease, which has been held in reserve, will be melted and lubricate the bearings.

The accompanying drawings represent my invention.

a represents the journal-box, having both of its ends inclined downward toward the center on its inside, so that all the oil poured into the box through the usual cover *c* on its outside end will flow down to the center and lubricate the journal at this point. Through the sides of the box are made the openings *d*, outside of which are the inclined boxes *e*, which boxes are covered over with the slides or covers *g*, which move vertically in the dovetailed ways *i* on the side of the box. These boxes *e* are filled with tallow or hard grease, which is held in reserve until the oil in the box becomes exhausted and the bearings begin to heat, when this tallow or grease melts and runs down into the center of the box, takes the place of the oil, and lubricates the bearings. In the top of the inside of the box is formed a double shoulder or thickness, *j*, which fits down into the center of the brass, and causes the whole weight of the car to bear down evenly upon the whole of all

the brasses. Where this shoulder is not used the wear upon the brasses is uneven, and they generally have to be removed before they are half worn out; where it is used, the wear upon the brasses is so even and regular that they are entirely worn out before new ones are necessary.

The journal-boxes are only supplied with oil at the principal stations or cities, and if the cars were always kept in motion this would answer very well; but the cars are often run on the side tracks and left standing for a week or so. During this time the oil dries up, and then when the car is again brought into use the axles are not lubricated, and they at once begin to heat and burn. Where my boxes are used there is always a quantity of oil or grease held in reserve for just such occasions.

I am aware that an auxiliary box for containing lubricating-oil has been placed upon the journal-box, the said oil-box having holes through its bottom, which are plugged up with tallow, so that when the box heats the plugs will be melted and discharge the oil upon the axle; but in this case the whole quantity stored away is emptied into the box at once, while in mine the tallow is only melted as it is needed, and is not liable to evaporate while the car is standing idle on the side track.

Having thus described my invention, I claim—

A journal-box, in combination with a receptacle or receptacles containing solid grease, substantially as and for the purpose set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 5th day of January, 1875.

JOHN RHOADS.

Witnesses:

THOS. H. CLARKE,
JAMES RHOADS.