

No. 795,828.

PATENTED AUG. 1, 1905.

J. C. FRITTS.
JOURNAL BOX.
APPLICATION FILED MAR. 1, 1905.

Fig. 1.

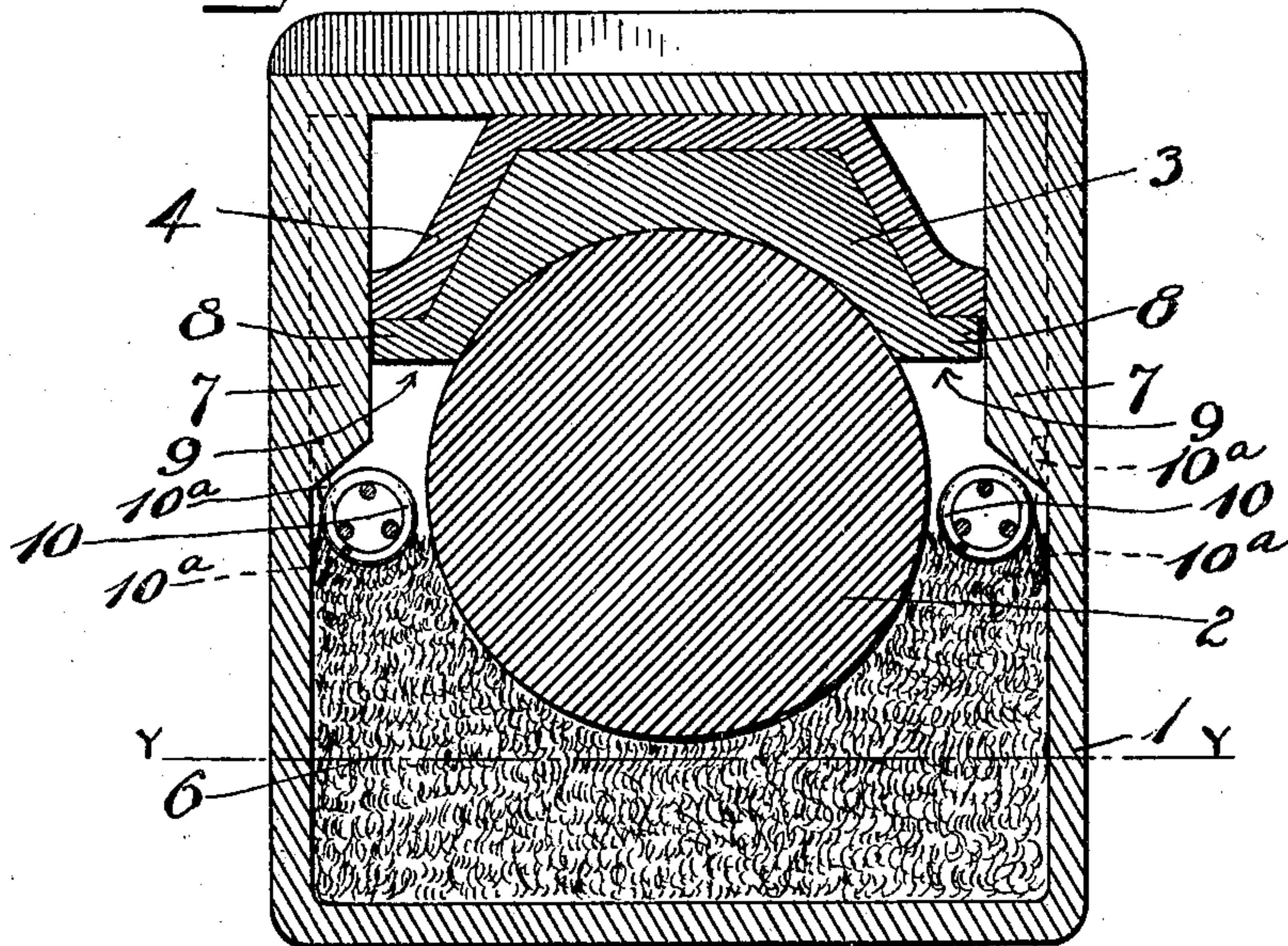
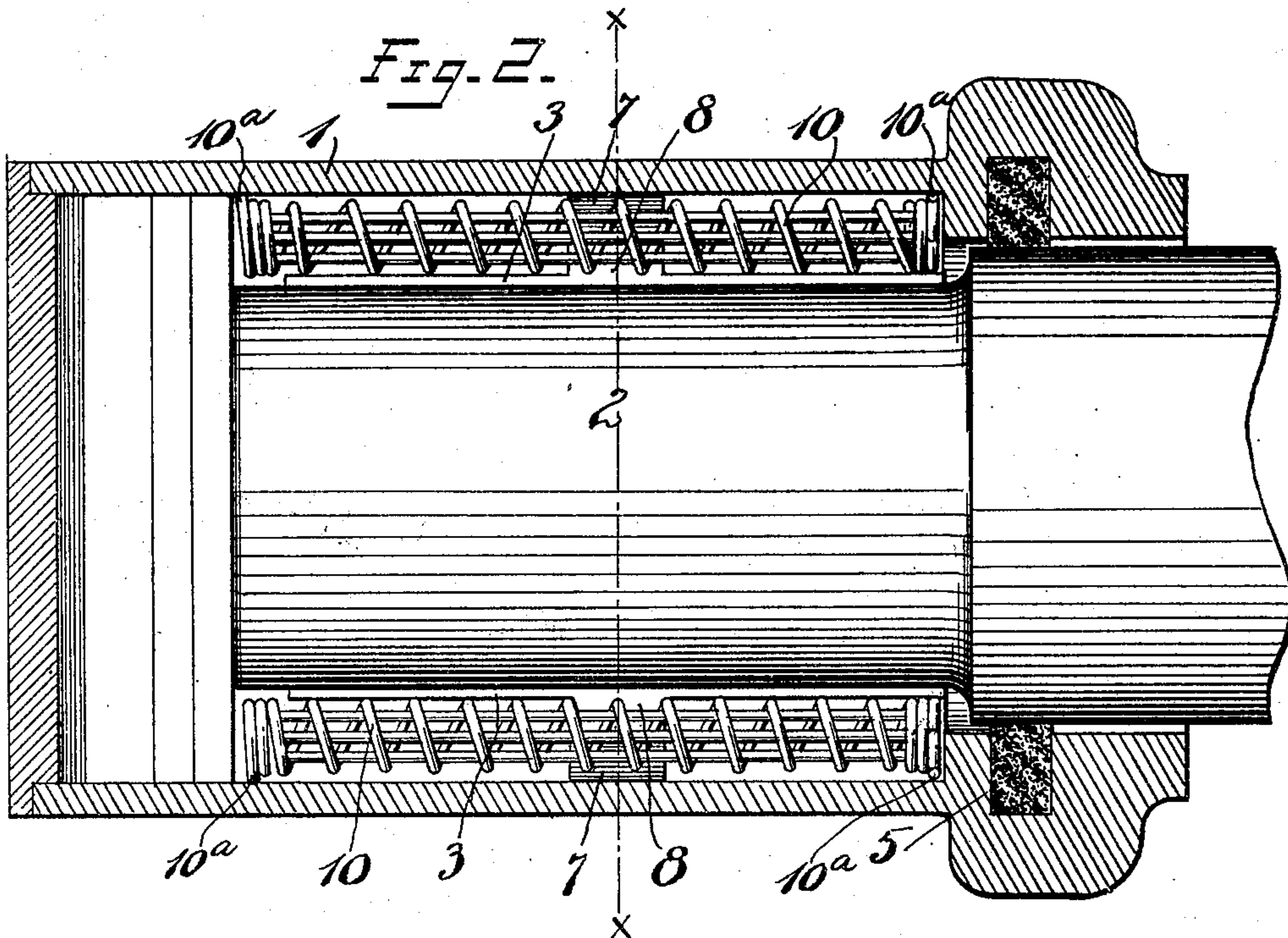


Fig. 2.



Witnesses
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JOURNAL-BOX.

No. 795,828.

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To all whom it may concern:

Be it known that I, JAMES CLARK FRITTS, a citizen of the United States, residing at Newark, Hudson county, New Jersey, have invented certain new and useful Improvements in Journal-Boxes, of which the following is a full, clear, and exact description.

My invention relates to improvements in journal-boxes, principally for cars, the main object being to provide simple, inexpensive, and effective means to prevent overheating.

In the accompanying drawings I have conventionally illustrated only such portions of a journal-box as are necessary to an understanding of the invention.

Figure 1 is a cross-section on the plane of the line X X, Fig. 2. Fig. 2 is a cross-section on the plane of the line Y Y, Fig. 1, looking up, the waste being removed.

1 is the box.

2 is the journal.

3 is the journal bearing or brass.

4 conventionally represents the upper part of the stop-wedge.

5 is the usual dust-guard felt.

6 conventionally represents a mass of oil-soaked waste.

7 7 are the usual lugs or shoulders on opposite sides of the box extending part way down and intermediate the length of said box.

8 8 are the usual lugs on the opposite edges of the journal bearing or brass, said lugs being located approximately midway in the length of said brass 3, so as to bear against the shoulders or lugs 7 7 in the usual way.

I have thus far described certain features of an ordinary journal-box. Practical experience has demonstrated that in use the oil-carrying waste is liable to work up into the spaces indicated at 9 9 and be there pressed so tightly against the lugs 8 8 and the adjacent walls that the oil in said waste cannot flow with the necessary freedom, with the result that the adjacent parts of the bearing are not properly lubricated and become hot. It is to prevent overheating from this cause that my invention is mainly intended.

Broadly speaking, the invention comprises means located above the waste and below the lugs 8 8, so as to prevent the waste from working into the aforesaid dangerous position, which means at the same time is of such

construction that said waste will not become compressed or compacted to any dangerous degree against the same. This means in the form shown comprises a skeleton-like guard 10, placed above the waste between the journal 2 and the side wall of the box 1 and below said lug 8. In the form shown I have provided two of these guards, one for each side of the journal, thus preventing the waste from working up on either side of said journal no matter in what direction the same is revolved. The guards 10 10, as shown, are placed directly under the ends of the lugs or shoulders 7 7. The length of each guard 10 is preferably about the length of the journal-brass 3; but obviously the particular dimensions are not material so long as said guard serves the desired purpose. By the term "brass" I mean that member through which the weight of the car is sustained upon the journal 2.

I preferably form the guards of some such metal as brass or copper, since such metal better withstands the wear of the journal. The particular construction of each guard shown in the drawings comprises a wire coil reinforced by longitudinal stiffening-strips, as plainly seen in Fig. 2. The ends of the coil may be offset tangentially, as in 10^a 10^a, to prevent the guard from revolving, although this is not essential to the broad invention.

In operation the guards rest above the oil-soaked waste on each side of the journal, and any tendency of the waste to work up, as above described, is prevented. These guards being of skeleton formation permit any oil which might be forced out of the waste temporarily to collect in a body just above the waste and be distributed uniformly over the journal, so that the latter will always be properly lubricated. Because of the skeleton formation of the guard it is impossible for the waste to pack hard against the same, as it would if it were permitted to encounter the solid under face of the lugs 7 or 8.

It should be understood that the particular construction of each guard is immaterial so long as it serves the purpose of a resisting medium or check to prevent the oil-soaked waste from being compressed in the manner before described and does not prevent the

proper circulation or flow of the oil carried thereby. As shown, the guards may be readily inserted or removed.

What I claim is—

1. In a device of the character described, a box, a journal, a brass, the walls of the box below the journal being spaced apart therefrom to receive oil-soaked waste, and a removable means to prevent said waste from being compressed by the rotation of the journal in the space adjacent to the sides of the latter and against the brass.

2. In a journal-box, a journal-brass and a guard arranged below said journal-brass and spacing the latter away from the waste in the lower part of the box, said guard being supported upon said waste.

3. In a journal-box, a journal-brass, a centering-lug carried thereby, a removable guard arranged below said lug and above the waste contained in the lower part of the box to prevent said waste from being compressed against said lug.

4. In a device of the character described, a journal-box having a shoulder or projection within and at the side of the same, a journal-

brass engaging with the aforesaid lug, a removable skeleton guard arranged below the said shoulder and journal-brass and adapted to prevent any waste within the box from being compressed against the lower surfaces of said shoulder or brass.

5. In a device of the character described, a box, a journal, a brass, the walls of the box below the journal being spaced apart therefrom to receive oil-soaked waste, and removable means to hold said waste away from said brass, said means being supported by said waste.

6. A guard for a journal-box comprising a removable skeleton member supported by the waste and between the inner sides of the box and said journal, and having oil-passages there-through.

7. A removable guard for a journal-box comprising an open coiled spiral member, and a longitudinal reinforcement for the same.

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Witnesses:

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