

L. C. CONDIT.
 MEANS FOR PACKING WASTE IN JOURNAL BOXES.
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936,704.

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Fig. 1.

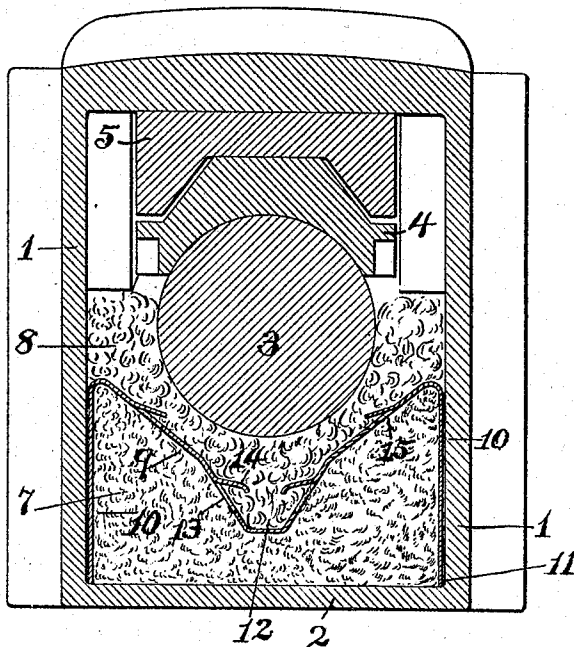


Fig. 2.

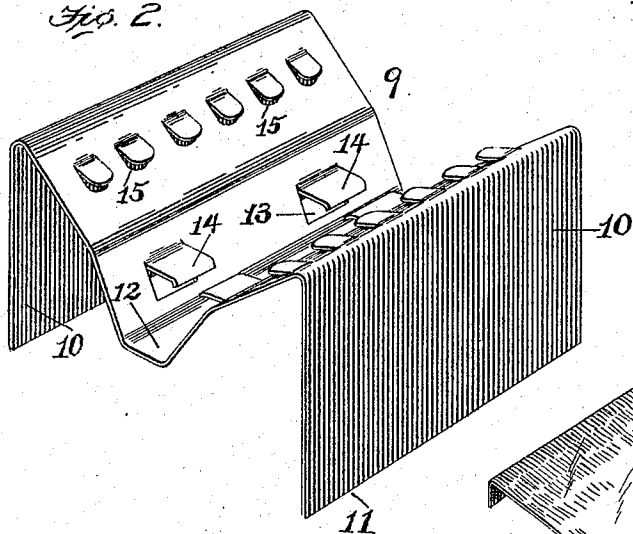
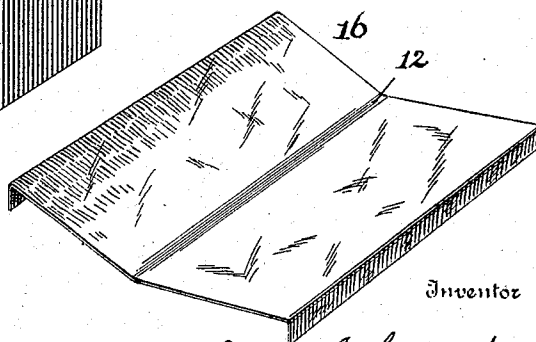


Fig. 3.



Witnesses

Edwin L. Bradford.
 S. Ferdinand Vogt.

By

Louis C. Condit
 Mann & Co

Attorneys.

UNITED STATES PATENT OFFICE.

LOUIS C. CONDIT, OF CATONSVILLE, MARYLAND.

MEANS FOR PACKING WASTE IN JOURNAL-BOXES.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LOUIS C. CONDIT, a citizen of the United States, residing at Catonsville, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Means for Packing Waste in Journal-Boxes, of which the following is a specification.

This invention relates to journal boxes for railroad cars and has reference to means that will separate the waste packing used in such boxes into two distinct parts—a lower part that will be saturated with the lubricating oil and an upper part that will place the oil in direct contact with the journal, and which will be removable whenever it becomes dirty.

One of the objects of the invention is to provide means that will economize in the use of waste packing that is employed in journal boxes.

The invention is illustrated in the accompanying drawing, in which,—

Figure 1 is a cross-section of a journal box of a rail-road car and also of the journal, and shows the diaphragm that separates the waste. Fig. 2 is a perspective view of the diaphragm that separates the waste packing into two distinct parts. Fig. 3 is a view of a diaphragm made of fabric.

The construction of the box is no part of the present invention, and therefore the drawing shows an ordinary journal box whose parts will readily be understood.

The numeral, 1, designates the two side walls of the box, 2, the bottom of the box, 3, the axle-journal, 4, the usual brass bearing resting on the journal, and, 5, the wedge at the top. The space around the journal in the box is commonly packed with cotton or wool waste which is saturated with lubricating oil. The space upon the bottom of the journal box serves as a receptacle for the lower part of the waste. While these boxes are provided with so-called dust guards it is found in practice quite impossible to exclude the dust; besides it often occurs that the hinged lids of these boxes are broken or knocked off and the saturated waste becomes fouled by dust, sand and cinders that find entrance to the box. Besides this the fine particles of metal produced by the abrasion and wear of the brass bearings and journal serve to foul the waste, and in a short time the latter has such an accumulation of dirt as to make a renewal of the waste necessary.

To effect an economy in the consumption of waste for packing journal boxes I have provided an improvement in the manner of packing waste into these boxes. I separate the waste into two distinct parts, the larger part, 7, being that which is in the lower spaces of the box, and the smaller part, 8, that which is in the upper spaces of the box, and place a diaphragm, 9, between the said lower and upper waste packings, to separate said packings, so that the upper packing when it becomes foul or dirty may be readily removed and replaced by new packing without disturbing the lower packing. I employ a diaphragm, 9, which is impervious to particles of dust and dirt passing in the downward direction, but is pervious to the upward passage of oil. A diaphragm having these characteristics is placed in position within the journal box after the lower waste packing, 7, has been properly placed therein. This diaphragm may be made of sheet-metal, as shown in Fig. 2, or it may be made of a porous fabric that will permit the upward passage through it of lubricating oil but will prevent the downward passage of particles of dust and dirt; an example of this diaphragm is shown in Fig. 3.

The sheet-metal diaphragm (Fig. 2) has two down-turned ends, 10, which serve as legs or supports, the lower extremities, 11, of which rest on the bottom, 2, of the box. The top of the diaphragm has a center depression, 12, which extends longitudinally in the direction of the axle-journal; particles of dust and dirt that pass downward through the upper waste, 8, will accumulate in this depression. On either side of the depression the inclined metal top has slots, 13, which may be produced by a punch which cuts three sides of the slot and forms a tongue, 14, which remains attached at the fourth or uncut side; this tongue, 14, is bent upward and partly covers the slot, 13, from which it was cut but does not close said slot. The open slot allows oil to pass upward and the tongue prevents dirt from above getting down through the slot into the lower waste, 7, below the diaphragm—the dirt settling on top of the diaphragm in the center depression, 12. The tongue, 14, also serves to engage with the upper waste, 8, and prevents the same from shifting on the top of the diaphragm. There are four of the slots, 13, and tongues, two of which latter point in one direction and two in the opposite direc-

tion. Other smaller slits, 15, are also provided, each having a tongue or bur projecting as a guard over the slits. Strands or fringes of the upper waste, 8, will project
 5 down the slots, 13, and slits, 15, and thereby the oil contained in the lower waste, 7, can ascend to the upper waste, 8.

Instead of being made of sheet-metal the diaphragm may be made of porous fabric
 10 as shown in Fig. 3, such as woven cloth, felt or fiber that will readily permit oil to pass upward through it and prevent particles of dirt passing downward. This fabric may
 15 have the form shown in Fig. 3 and will have position between the lower and upper waste packings and will keep them separated as shown in Fig. 1.

While a diaphragm or separator made of metal is deemed preferable for certain practical reasons, yet either the metal or the fabric diaphragm will serve the purpose of separating the lower body of waste, 7, from the upper body of waste, 8, and thereby permit the said upper waste to be removed without disturbing the lower waste. This device
 25 will effect an economy in the consumption of waste.

Having thus described my invention what I claim and desire to secure by Letters Patent is,—
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1. The combination of a journal box; an axle-journal; a body of waste packing filling the lower part of the box; an upper body of

waste packing, and a diaphragm between the said lower and upper bodies of waste
 35 packing and separating said two bodies—said diaphragm being provided with a closed central depressed portion and with means that will prevent particles of dirt passing downward but will permit oil to
 40 pass upward.

2. The combination of a journal box; an axle-journal; a body of waste-packing filling the lower part of the box; a diaphragm covering said lower body of waste-packing and
 45 having its ends down-turned and in contact with the side walls of the box and the lower extremities resting on the bottom of the box, and the top of said diaphragm having a closed central depressed portion; and a
 50 body of waste-packing resting upon said diaphragm and filling said central depression.

3. A separator for two bodies of packing waste in journal boxes, comprising a diaphragm whose top has a closed central depressed portion at opposite sides of which
 55 are inclined portions having slots each of which is provided with a tongue projecting over the slot and guarding the same.

In testimony whereof I affix my signature 60 in presence of two witnesses.

LOUIS C. CONDIT.

Witnesses:

CHAS. B. MANN.

G. FERDINAND VOGT.