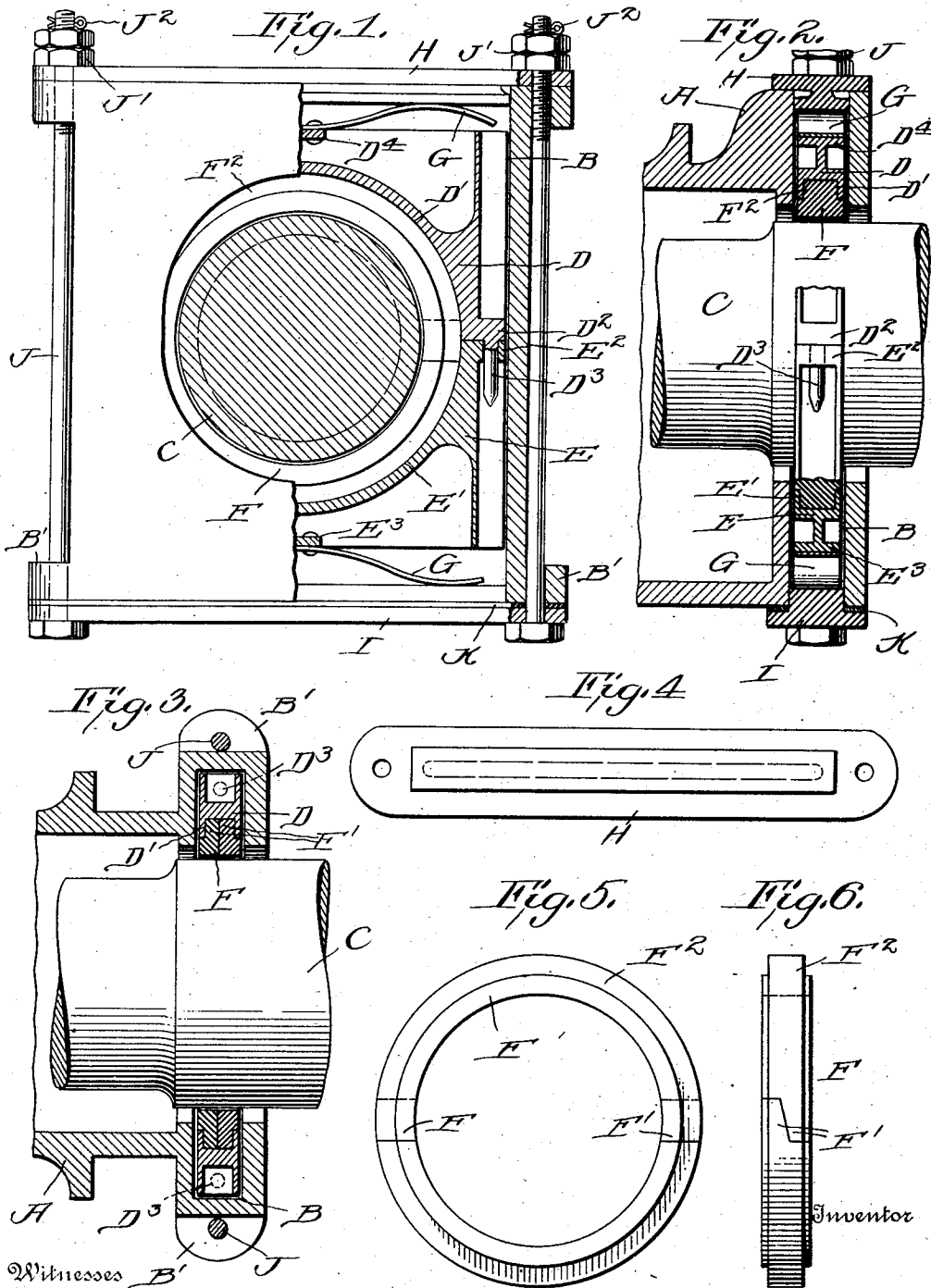


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DUST GUARD FOR JOURNAL BOXES.
APPLICATION FILED FEB. 9, 1910.

1,011,359.

Patented Dec. 12, 1911.



Witnesses
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DUST-GUARD FOR JOURNAL-BOXES.

1,011,359.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MICHAEL P. NEWCOMB, a citizen of the United States, residing at Sandpoint, in the county of Bonner and State of Idaho, have invented a new and useful Improvement in Dust-Guards for Journal-Boxes, of which the following is a specification.

This invention relates to certain improvements in dust guards for journal boxes and more particularly to dust guards especially adapted to be used in connection with my former Patent Number 847,992, granted to me March 19, 1907, the object being to provide a journal box with a dust guard which will exclude the dust from the rear or wheel end of a journal box.

A further object of the invention is to provide a dust guard which is so connected to a journal box that the same may be removed in order to repair the same without taking the truck from under the car or removing the boxes, from the axle.

A still further object of the invention is to provide a dust guard which is exceedingly simple and cheap in construction and one in which the parts are so arranged and connected together that they are not likely to get out of order in use.

Another object of the invention is to provide the dust guard with a pair of guard members having semi-circular shaped notches which are grooved to receive a sectional packing ring which surrounds the journal, said members being held tightly around the journal and ring by springs.

A still further object of the invention is to provide a chamber for the guard proper with an open top and bottom in order that the guard members can be easily and quickly placed in position or removed therefrom, said top and bottom being closed by top and bottom members which are secured in position by bolts.

With these various objects in view, my invention consists of the novel features of construction, combination and arrangement of parts hereinafter fully described, pointed out in the claim and shown in the accompanying drawings, in which,

Figure 1 is an elevation of the rear end of the journal box provided with my improved dust guard, the journal being shown in section and part of the guard broken away. Fig. 2 is a vertical section through the guard. Fig. 3 is a horizontal section

through the same. Fig. 4 is an inverted plan view of one of the closing plates. Fig. 5 is a side elevation of my improved packing ring. Fig. 6 is an edge elevation of the same.

Referring to the drawing, A indicates a portion of the casing of a journal box, such as shown in my former patent, the rear end of which is provided with spaced double walls forming a guard chamber B which is provided with an open top and bottom and with elliptical openings in its ends through which a journal C is adapted to pass in the ordinary manner, the above description being given so that the operation of my dust guard can be readily understood.

In carrying out the construction of my improved dust guard, I employ a pair of rectangular shaped guard members D and E which are provided with semi-circular shaped notches having a radius slightly larger than the radius of a portion of the journal C which it surrounds and these notches are provided with annular grooves D', E' in which is adapted to fit a bushing or packing ring F formed of some suitable material such as Babbitt metal and said ring is formed of two sections having lap joints F' and the ring is annularly reduced to form a rib F² which fits in the groove of the guard members and the inner face of the ring is adapted to fit tightly around the journal so as to prevent any dust or dirt from passing into the box from the same.

The guard members D and E are provided with grooved side edges terminating in lugs D², E², the lugs D² being provided with integral pin portions D³ which are adapted to fit in apertures formed in the lugs E² so that when the two guard members are forced together over the ring they will be held in their proper positions with respect to each other. Each of the guard members is cut away or reduced as clearly shown to form recesses in order to reduce the weight of the guard members and the top portions are provided with cross bars D⁴, E³ to which are connected flat springs G for holding the guard sections tightly around the ring as will be hereinafter fully described.

The casing of the journal opposite the chamber is provided with apertured lugs B' in vertical alinement and for closing the top and bottom of the chamber B I provide the top and bottom plates H and I which are

formed exactly alike, each plate being provided with a rib portion which is adapted to fit snugly within the chamber B and against which the springs G are adapted to bear, said top and bottom plates being provided with apertured ends adapted to aline with the apertures B' of the casing and through which bolts J are adapted to pass upwardly from the underside as clearly shown on the upper ends of which are mounted lock nuts J' which bear against the top plate H and securely clamp the plates in the respective members of the guard, in position. For preventing the nuts from turning or being removed accidentally I provide the bolts with openings in which I place cotter pins J².

The ribs of the plates H and I are undercut as clearly shown and are adapted to receive a packing washer K and in the drawings I have only shown the packing washer K arranged on the bottom plate I which will form the chamber oil tight so as to prevent any oil from leaking out through the bottom of the chamber but it is of course understood that the top can be provided with a similar washer if desired.

From the foregoing description it will be seen that I have provided a dust guard for a journal box comprising a pair of sections which are snugly fitted within a chamber, each section being provided with a semi-circular notch which has a radius slightly larger than the radius of the journal, said notches being annularly grooved to receive the annular rib of a sectional packing ring which fits snugly around the journal so as to prevent the dust from passing in to the journal box from the rear end. It will also be seen that the guard members will be held up tightly around the sectional ring by the springs so that as the packing ring wears the ring will be forced tightly

around the journal and it will also be seen that I provide means for holding the guard members in their proper positions within the chamber with respect to each other.

By constructing the chamber with an open top and bottom the dust guard can be readily removed from the journal without removing the truck from the car and it will also be seen that the springs will hold the guard in the proper position and at the same time allow the guard to oscillate freely within the journal box.

What I claim is:—

In a dust guard for journal boxes having a chamber at its rear end provided with an open top and bottom and having elliptical openings formed in its ends through which the journal is adapted to pass, a pair of rectangular shaped guard members arranged within said chamber, said members being provided with semi-circular notches having annular grooves, lugs formed on the side edges of said sections, one of said lugs being provided with an aperture and the other with a pin adapted to pass through said aperture, a sectional ring of Babbitt metal arranged within the grooves of said sections, lugs formed on said journal box, top and bottom plates provided with apertured ends arranged over the top and bottom of said chamber, bolts extending through the lugs of the journal box and said plates, said plates being provided with ribs extending into said chamber, washers arranged on said ribs and springs carried by the guard members, bearing against said ribs for holding said guard members in their proper positions.

MICHAEL P. NEWCOMB.

Witnesses:

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