L. Y. WILLIAMS.

DUST GUARD.

APPLICATION FILED OCT. 25, 1913.

1,121,316. **Patented Dec. 15, 1914.**

FIG. 1.

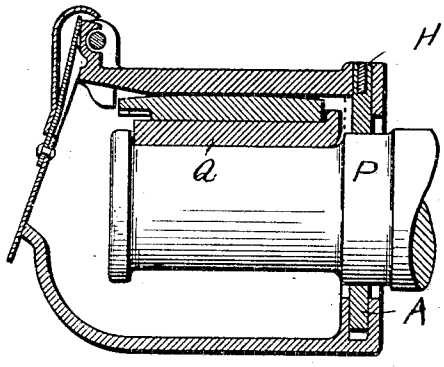


FIG. 2.

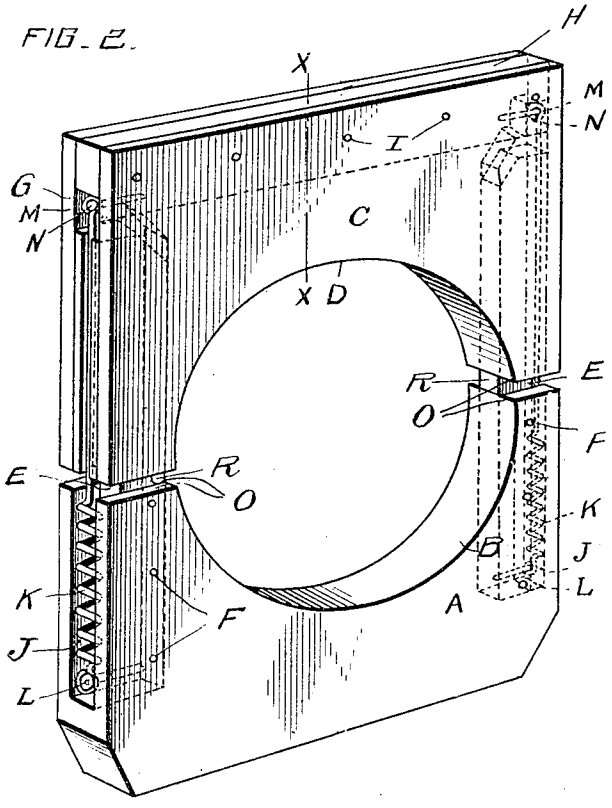


FIG. 3.



Witnesses
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DUST-GUARD.

1,121,316. Specification of Letters Patent. **Patented Dec. 15, 1914.**

Application filed October 25, 1913. Serial No. 797,247.

To all whom it may concern:

Be it known that I, LACEY Y. WILLIAMS, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Dust-Guards, of which the following is a specification.

The object of the invention is the production of an efficient and a relatively cheap spring actuated means for insertion within the chamber at the rear part of a car journal box to frictionally engage the exterior surface of the enlargement back of the journal so as to prevent the entrance of dust and dirt to and the escape of oil and waste from the journal box.

The invention consists in certain novelties of construction and combinations of parts as herein set forth and claimed.

The accompanying drawing illustrates an example of the embodiment of the invention constructed according to the best mode of procedure I have so far devised for the purpose.

Figure 1 is a vertical section of a journal box and the dust guard within the chamber at the back end of the box, the journal being shown in elevation. Fig. 2 is a perspective view of the guard removed from the chamber, the two halves being separated and under spring tension. Fig. 3 shows one of the springs detached from the guard.

The main parts of the guard are preferably of wood and comprise a lower half A having a curved edge B, and an upper half C having a curved edge D, said curved edges facing each other.

Grooves in the body of the wood are made with a saw at the side edges of the lower half and reinforcing strips E E inserted within the grooves and glued in place or secured by rivets F, as shown. The ends of the reinforcing pieces or strips extend a suitable distance beyond the said lower half and are loosely seated within grooves G G formed in the body of the upper half at the sides thereof. The groves end adjacent to a reinforcing strip H, which strip is seated within a groove and secured by glue or rivets I, the strip extending entirely across the end of the upper part and strengthening the same on the line x—x, where it is weakest and liable to split.

The sides of the reinforcing pieces E E are cut away at J J to form pockets for the helical springs K K. The lower ends of the springs are secured to the lower half of the guard by pins L L passed through the turned ends of the wire from which the springs are made. The wires of the upper ends of the springs are extended to the ends of the reinforcing strip H and provided with eyes M M which are secured by pins or screws N N to said strip.

When the guard is inserted within the chamber of the journal box the springs contract the guard so the edges O O are in contact. When the journal is inserted through the back of the box the halves of the guard are forced apart to the relative positions shown in Fig. 2 and the springs will then draw the curved edges into frictional contact with the bearing surface P back of the journal and close the opening which otherwise would exist around said bearing surface, an opening being necessary to allow the journal to move toward the top of the box as the brass bearing Q wears away.

It will be observed that the inner edges R R of the reinforcing strips engage the dust guard bearing surface P at the sides and with the curved edges B and D of the halves of the guard form a circle and that the bearing surfaces will wear equally and the guard perform its function for a long period of time.

What I claim is:

1. A dust guard comprised of two separate complemental body parts of substantially the same shape each having a curved edge less than a semi-circle to engage the dust guard bearing surface of a journal, one of said parts having grooves in its side edges and the other part being provided with reinforcing strips rigidly secured within grooves at the edges of said parts and which project into the grooves in the first named part, the edges R R of said reinforcing strips forming with the curved edges of the said two parts a complete circular bearing when the two separate complemental parts are separated a suitable distance so the edges O O thereof are out of contact, and two helical springs each secured at its opposite ends to said two body parts for drawing said parts toward each other.

2. A dust guard comprised of two separate complemental body parts each having a curved edge less than a semicircle, one of said parts having grooves in its side edges

and a reinforcing strip H, and the other part being provided with reinforcing strips E E, each secured within a slot at the edge of said part, and which project into the grooves in the other part, the edges R R of said reinforcing strips E E forming with the curved edges of the said two parts an entire circular bearing, and two helical springs having their coils located within pockets in one of said parts and each secured at its opposite ends to said two body parts for drawing said parts toward each other.

3. A dust guard comprised of two complemental body parts each having a curved edge less than a semicircle and said parts provided with reinforcing strips, each strip rigidly secured at one end within the body of one of the said parts and the other end projecting therefrom, and grooves to receive said ends for holding said parts in the same plane, the edges R R of said strips with the curved edges of the two parts forming an entire circular bearing, and helical springs located within pockets formed in the guard, each spring having its opposite ends secured to opposite parts of the guard and said springs adapted to hold the said curved edges in frictional contact with the dust guard bearing of a journal.

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

LACEY Y. WILLIAMS.

Witnesses:

F. C. LAUDERMAN,

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."