

L. Y. WILLIAMS.
DUST GUARD.
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1,203,670.

Patented Nov. 7, 1916.

Fig. 1.

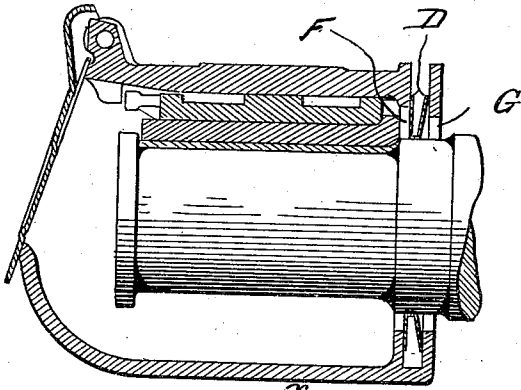


Fig. 4.

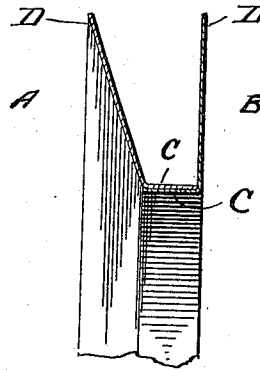


Fig. 3.

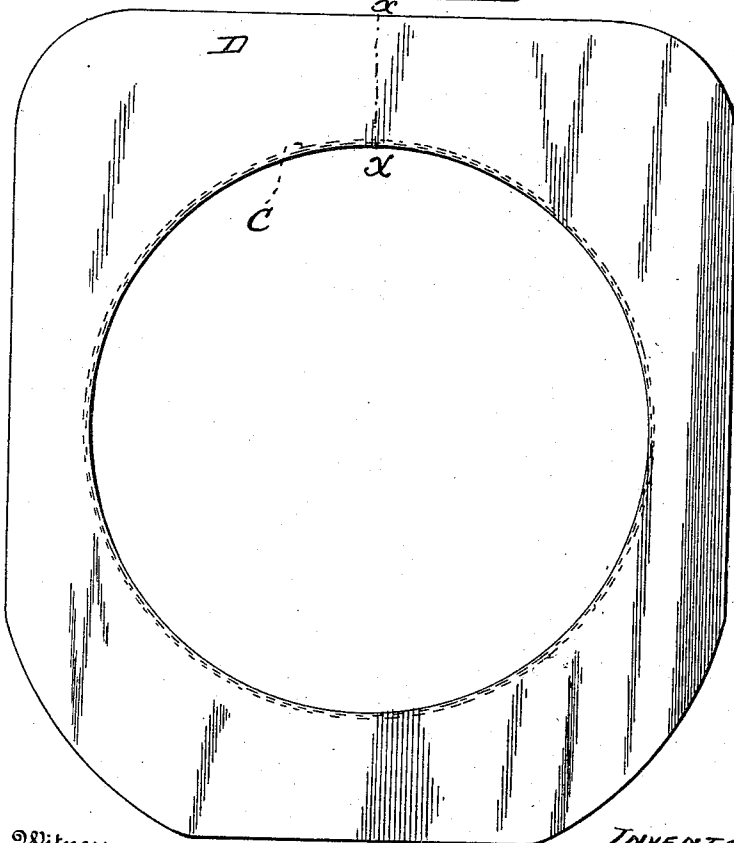


Fig. 2.

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DUST-GUARD.

1,203,670.

Specification of Letters Patent.

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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 a metallic dust guard for car journal boxes which shall be effective in excluding dust and dirt from the interior by closing the rear of the box, durable in service, simple in construction, and which can be manufactured cheaply and sold at a relatively low price.

The invention consists in stamping to the required shapes from thin metal plates two complementary parts, each having a flange bounding an opening and adapted to surround a journal and a flange at approximately right angles thereto, one of said latter flanges preferably being slightly dished, and uniting said parts by passing one flange bounding the opening within the other similar flange.

It further consists in certain novelties of construction and in the combination 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 shows a journal box in vertical section, a journal in elevation, and one of my improved dust guards in the chamber and also in section. Fig. 2 is an enlarged face or plan view of a complete guard. Fig. 3 is an edge view of Fig. 2. Fig. 4 is a section on line $x-x$ of Fig. 2.

The guard is comprised of two complementary parts A and B, each of which may be, and preferably is, fashioned by cutting to shape a relatively thin resilient metal blank with a circular opening therein, bending or stamping a flange C from the metal surrounding the opening thus forming a unit having in addition to the flange C another flange D substantially at right angles to flange C and then uniting said parts by passing the flange C of one part within the flange C of the other part, the combination constituting a complete guard having a circular double thickness of metal to sur-

round and frictionally engage the journal and two flanges extending therefrom and spaced apart, said flanges respectively being adapted to engage the opposite inner surfaces of the metal defining the dust guard chamber.

The flanges C C may be of the width of the box chamber, that is, approximately seven-eighths of an inch wide when both flanges D D are at right angles to the flanges C C. However, to cause both flanges D D to contact with the inner surfaces of the box dust guard chamber under pressure and thus form tight joints one of the flanges D may be slightly dished or occupy a position relative to a flange C at slightly less than a right angle, as shown by the figures of the drawing. When one of the flanges is so dished the flanges C C are slightly of less width than seven-eighths of an inch, as is obvious. The exterior outline of the guard is determined by the shape of the chamber within which the guard is to be inserted and may vary accordingly.

Upon reference to Fig. 1 it will be seen that a flange C is in frictional contact with the dust guard bearing of the journal, one of the flanges D in contact with the inner surface bounding the dust guard chamber closing the opening F, and the edge of the other dished flange D in contact with the opposite surface closing the opening G, both flanges being pressed against opposite surfaces by the resilience of the metal so that any foreign substance such as dust or dirt cannot enter the box by way of the journal or by way of the chamber either at the top or bottom. The guard is first inserted within the dust guard chamber of the box and the journal then passed through the opening in the guard in the usual manner. The flanges C C might be united by solder or otherwise but it is preferable that they be separate so that should one part be bent or broken another similar part can be substituted therefor.

What I claim is:

1. The combination with a journal box provided with a dust guard chamber with openings F and G, and a journal within said box, of a metallic dust guard having a circular flange engaging the journal and two flanges extended outwardly from said circular flange at substantially right angles

thereto, said latter flanges engaging the vertical surfaces of the metal bounding the dust guard chamber and closing the opening F from the dust guard chamber to the interior of the box so dust cannot pass.

2. A dust guard of resilient metal having a circular flange to engage a journal, and two flanges extending outwardly around said circular flange one of said two flanges being slightly dished, for the purpose set forth.

3. A metallic dust guard of resilient metal comprised of two parts each having a circular flange and a flange extending outwardly from said circular flange, and the circular flange of one part disposed within the circular flange of the other part; one of said outwardly extended flanges being

dished or at less than a right angle relative to the circular flanges.

4. The combination with a journal box provided with a dust guard chamber, of a metallic dust guard having an opening for a journal, said opening being bounded by a circular flange, a flange extending outwardly from and around said circular flange and frictionally bearing against the surface of the inner wall defining the dust guard chamber, and means forcing the last mentioned flange and holding it in contact with the surface of the wall, said latter means bearing against the surface of the outer wall of the dust guard chamber.

In testimony whereof I affix my signature.

LACEY Y. WILLIAMS.

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