No. 812,523. PATENTED FEB. 13, 1906.

E. POSSON.

DUST GUARD FOR JOURNAL BOXES.

APPLICATION FILED AUG. 18, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

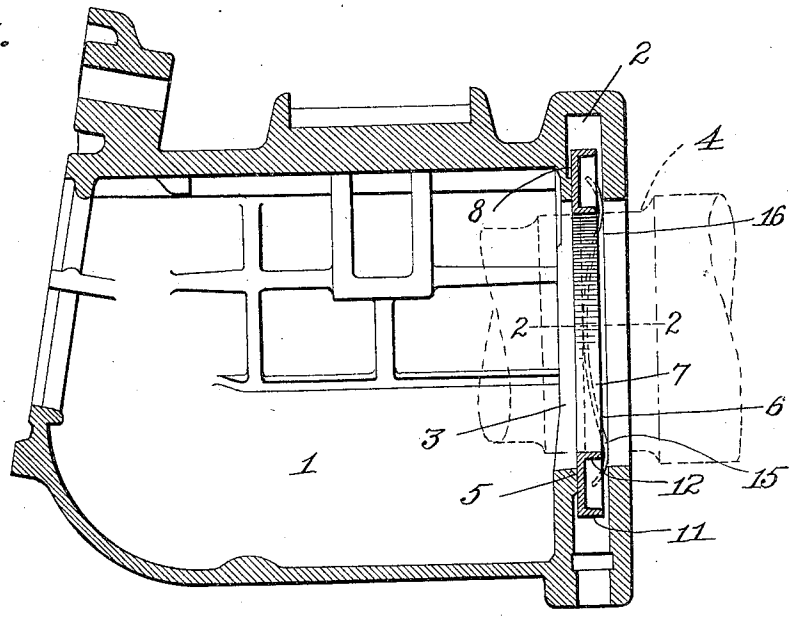
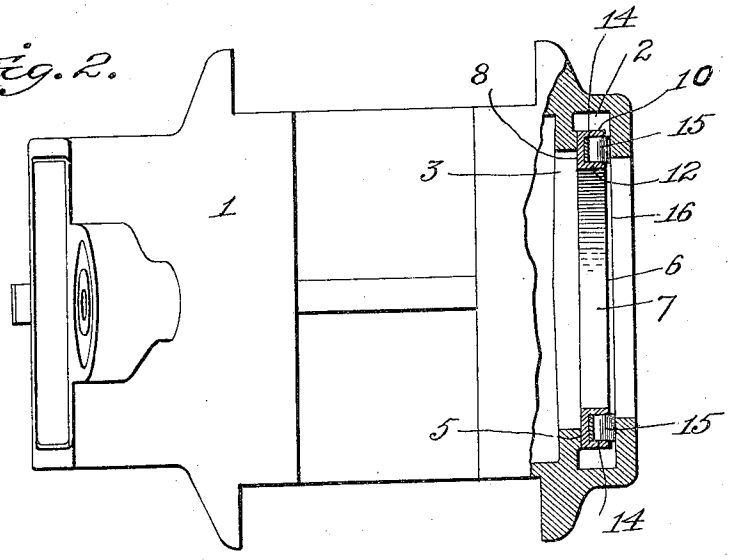


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

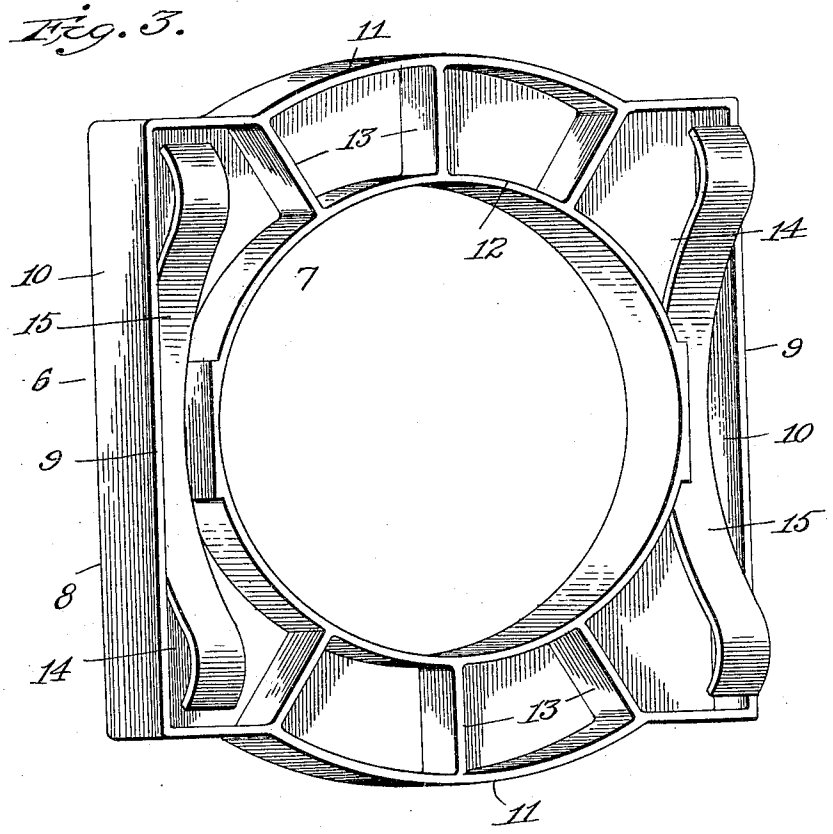
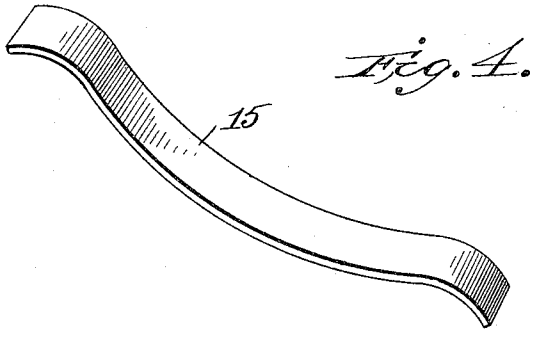


Fig. 4.



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UNITED STATES PATENT OFFICE.

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DUST-GUARD FOR JOURNAL-BOXES.

No. 812,523. Specification of Letters Patent. Patented Feb. 13, 1906.

Application filed August 18, 1905. Serial No. 274,662.

To all whom it may concern:

Be it known that I, EDWARD POSSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Dust-Guards for Journal-Boxes, of which the following is a specification.

My invention relates to improvements in dust-guards for journal-boxes, and has for its object to provide a guard for the rear end of the box which shall be of a single plate and to maintain the said plate in constant slidable contact with the machined face of the box as the relation of the axle and box varies, as necessarily occurs during the running of the car. By thus maintaining a constant contact between the guard-plate and machined face of the box all dust and dirt is practically excluded from that end of the box and the lubricant cannot flow out.

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

Figure 1 illustrates a vertical longitudinal section through one side of the box to show the guard-plate in slidable contact with the machined face at the rear end of the box. Fig. 2 shows a plan view of the box with a portion of the end broken away to show the guard-plate in position at the rear end of the box. Fig. 3 illustrates a perspective view looking at the rear side of the guard-plate with the pressure-plate springs in the vertical side recesses, and Fig. 4 is a perspective view of one of the spring-plates.

In the drawings, 1 designates a journal-box, which may vary in form and shape, but which has a vertical recess 2 at its rear end and a suitable opening 3, through which the journal 4 may project freely. The vertical face of the inner wall of the recess is provided with a raised bearing or boss 5 around the opening 3, and said bearing or boss is machined off to form a true flat bearing-surface, against which the guard-plate is to frictionally contact.

The guard-plate 6 comprises a single plate and is provided with a central perforation or opening 7, into which the axle fits snugly. The inner face 8 of this plate is machined off to form a perfectly true surface, and the outer side of the plate is provided with a rearwardly-projecting flange 9, which extends continuously around the four edges of the plate, being straight at the vertical edges 10, but is curved at 11 at both the top and bottom of the plate. A circular flange 12 also projects rearwardly toward the axle adjacent the circular opening of the plate, and the inner face of this flange is also machined, so as to present a broad smooth surface to the axle which projects through it. A plurality of strengthening-ribs 13 connect the circular flange 12 with the curved part 11 of the top and bottom flange that extends around the rim. These strengthening-ribs 13 have position at the upper and lower portions of the plate, and it will be noted that there are no ribs connecting the straight side flange 9 with the circular flange 12. A vertical recess 14 is formed at opposite edges on the outer side of the plate adjacent to the vertical edges 10 and between the straight flange 9 and circular flange 12, and these recesses are provided for the reception of spring-plates 15, which extend in a direction parallel with the flanges 9 at said straight sides.

In practice the guard-plate is inserted in the vertical recess 2 at the rear end of the box with the machined face or inner surface 8 in contact with the raised bearing-surface 5 of the boss on the inner wall of said recess. The spring-plate 15 is held in its position by fitting snugly between the two parallel sides of the recess at the outer side of the guard-plate and will become compressed between the guard-plate and the outer wall 16 of the box-recess and by means of such compression will maintain the guard-plate in constant contact with the bearing-surface 5 of the recess, but will permit the guard-plate to move with the axle independently of the box.

When the end of the axle or journal is inserted through the central machined opening 7 of the guard-plate and also through the circular opening 3 of the box, the guard-plate will be maintained in the recess of the box by the journal; but the spring-plates will permit the guard-plate to move in said recess.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A journal-box provided with an opening at its rear end and having a vertical recess adjacent to said opening and also having a raised smooth flat bearing, 5, in said recess and continuous around said rear opening; a dust-guard comprising a single plate perforated to

receive the axle snugly and having at one side a smooth face, 8, which is broader than the said raised flat bearing on the box, and at the other side having recesses each with two parallel sides, and a spring, 15, in each of the said recesses, said spring being held in position by fitting between the two parallel sides.

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

EDWARD POSSON.

Witnesses:
JOS. GRIFFITH,
DENNIS MURTAUGH.