

June 9, 1942.

J. H. SCOTT

2,285,784

SELF LUBRICATING CENTER PLATE

Filed Oct. 19, 1940

2 Sheets-Sheet 1

Fig. 1.

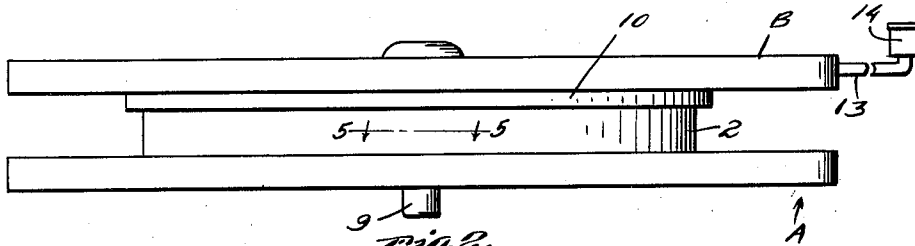


Fig. 2.

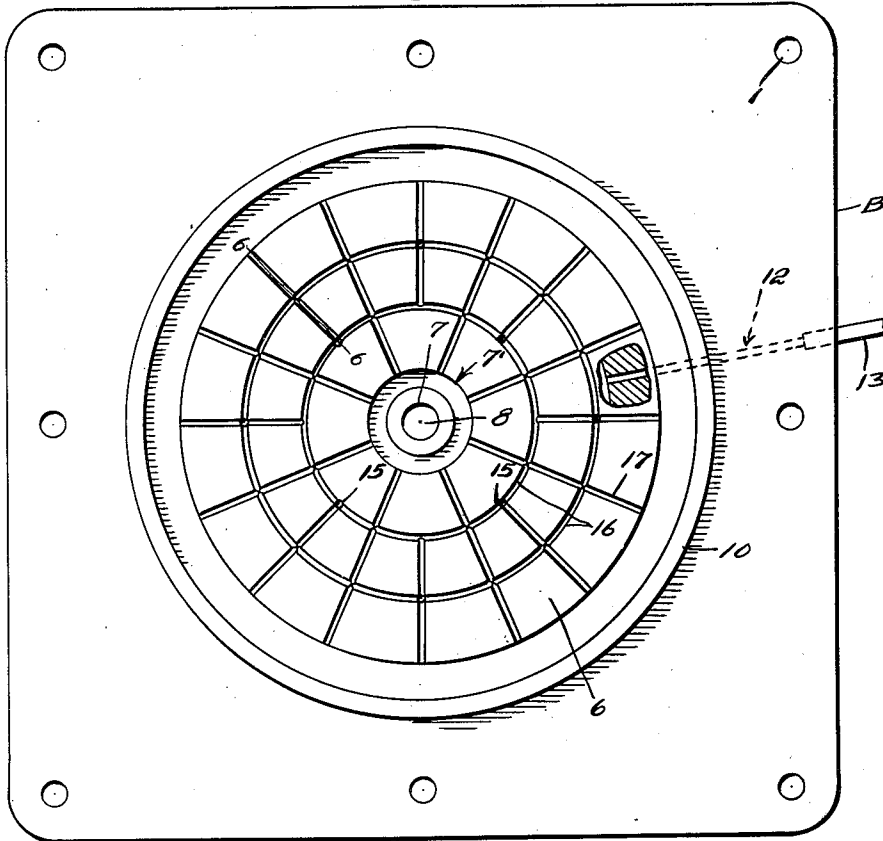
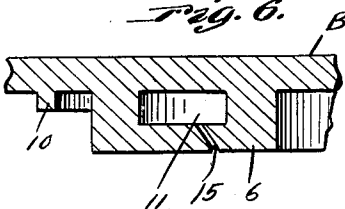


Fig. 6.



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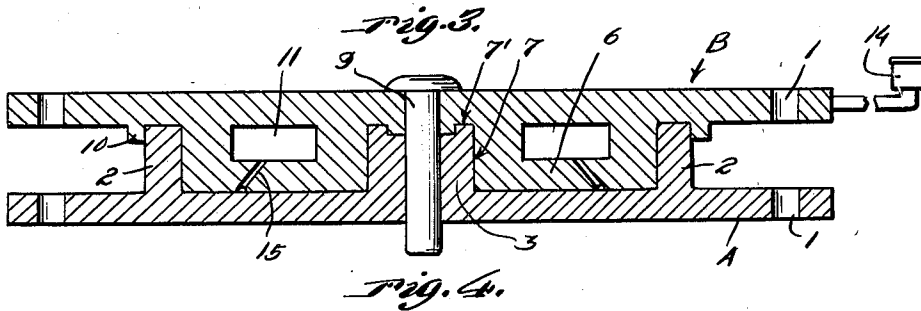
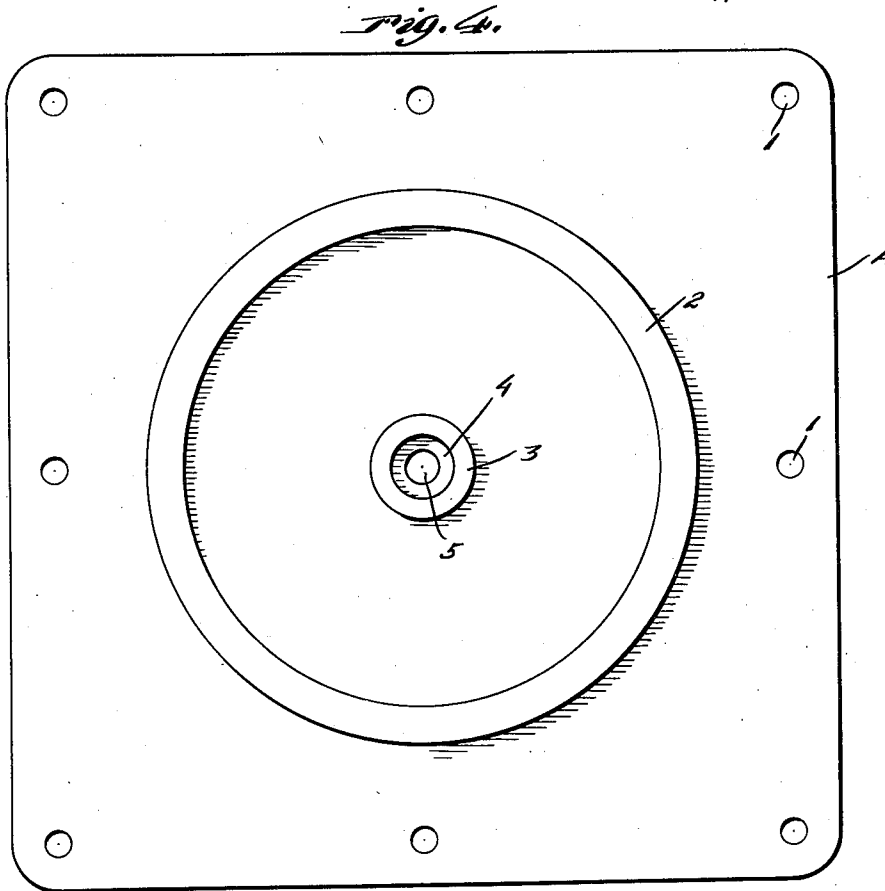
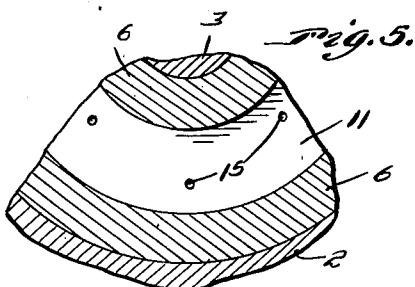
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SELF LUBRICATING CENTER PLATE

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2 Sheets-Sheet 2



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2,285,784

SELF-LUBRICATING CENTER PLATE

John H. Scott, Gary, Ind., assignor of one-third
to Homer E. Blair and one-third to John D.
Rossman, both of Gary, Ind.

Application October 19, 1940, Serial No. 361,956

1 Claim. (Cl. 308—137)

This invention relates to a self-lubricating center plate for the trucks of cars and wherever a plate of this nature is required, the general object of the invention being to provide a reservoir for lubricant in the top plate and conduits leading the lubricant from the reservoir to grooves in the under face of the top plate for lubricating the contacting parts between the top and bottom plates.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is an edge view of the center bearing members constructed in accordance with this invention.

Figure 2 is a bottom plan view of the top or male plate.

Figure 3 is a vertical sectional view through the two plates.

Figure 4 is a top plan view of the under or female plate.

Figure 5 is a section on the line 5—5 of Figure 1.

Figure 6 is a section on the line 6—6 of Figure 2.

In these drawings the letter A indicates the under or female plate and the letter B indicates the top or male plate. Each plate is provided with the holes 1 for fastening to the members which are to carry the bearing formed by the two plates and the under plate A is formed with an annular flange 2 and an upstanding boss 3 at its center, this boss having a recess 4 in its top and a hole 5 passes through the center of the boss.

The top or male plate is provided with an annular part 6 of considerable width and this part provides a central circular hole 7 which receives the boss and the top wall of the recess is formed with an annular recess 7' which receives the flange formed by the recess 4 at the top end of the boss. A hole 8 passes through the center of the plate B and registers with the hole 5, the two holes receiving the pivot pin 9. The wide annular part 6 fits in the annular space formed by the boss 3 and the flange 2 and a short annular flange 10 is formed on the plate B and is spaced from the wide flange 6 with the free edge of the flange 2 fitting in this space.

An annular chamber 11 is formed in the annular part 6 and a conduit 12 leads from this chamber through an edge portion of the plate B where it receives an end of a pipe 13 having a lubricant fixture 14 on its outer end so that

lubricant can be supplied to the chamber 11 through this pipe or conduit.

A plurality of downwardly and outwardly sloping ports 15 is formed in the lower portion of the member 6 for leading the lubricant from the chamber 11 to the under face of the member 6 and this under face is provided with a plurality of annular grooves 16 and radiating grooves 17, some of which are in communication with the ports 15 so that the lubricant from these ports is thoroughly distributed over the under face of the member 6 of the plate B and the parts of the plate A contacted by this part 6 of the plate B and the parts of the plate A contacted by this part 6 of the plate B.

Thus it will be seen that the contacting parts of the two plates are thoroughly lubricated.

It will also be seen that each of the plates A and B is formed of one piece of material which is preferably of cast metal and by providing the flange 10 on plate B and the flange at the top of the boss fitting in the annular groove 7' at the center of the top plate protection against dirt or moisture reaching the surfaces of the bearing is insured. By forming the parts of casting machine work is eliminated and the parts are of sturdy construction.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts provided that such changes fall within the scope of the appended claim.

Having described the invention, what is claimed as new is:

In a bearing of the class described, an under plate having a centrally arranged boss extending upwardly from its top face and an annular flange extending upwardly from its top face and forming with the boss a wide annular space, a top plate having a wide annular part on its under face fitting in said space for rotary movement and said wide annular part forming a recess for receiving the boss, a pin passing through the center of the top plate and through the boss for pivotally connecting the plates together, an annular flange at the upper end of the boss forming a central recess in the top of the boss and the central part of the under face of the top plate having a groove therein for receiving the flange, with that part of the under face of the top plate surrounded by the groove fitting in the recess in the top of the boss, said wide annular part having a lubricant receiving chamber therein, and the lower part of said wide annular part having ports in its lower part for leading the lubricant from the chamber to the bottom of said wide annular part.

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