

Nov. 23, 1937.

T. V. BUCKWALTER

2,100,065

TRUCK

Filed May 22, 1936

2 Sheets-Sheet 1

Fig. 1.

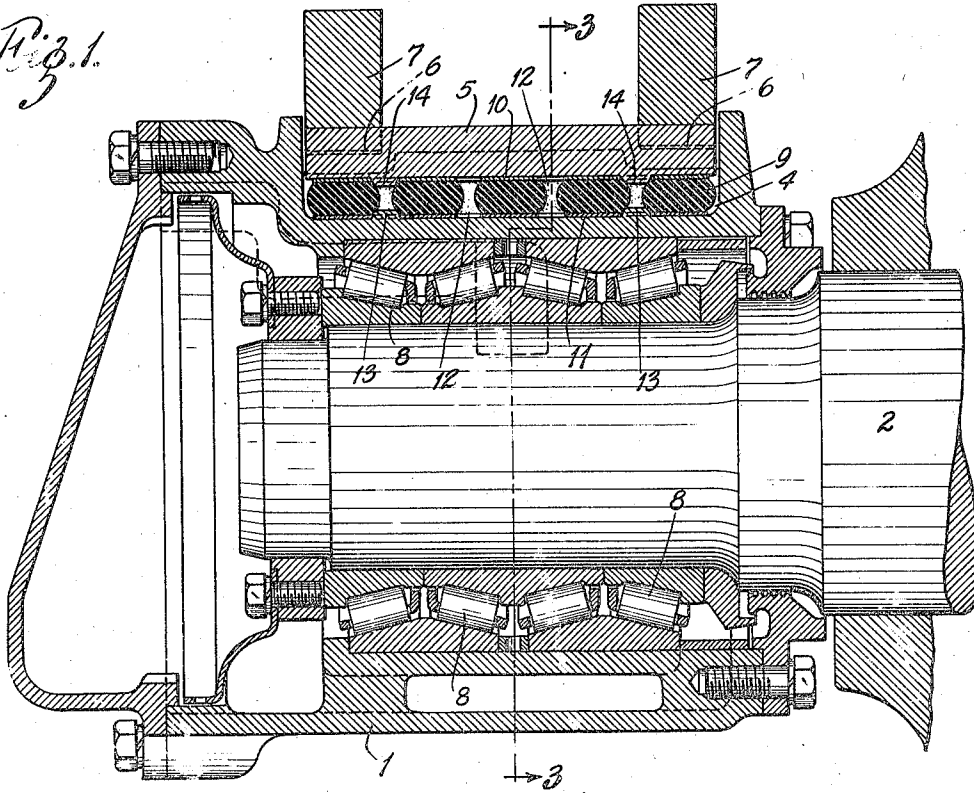
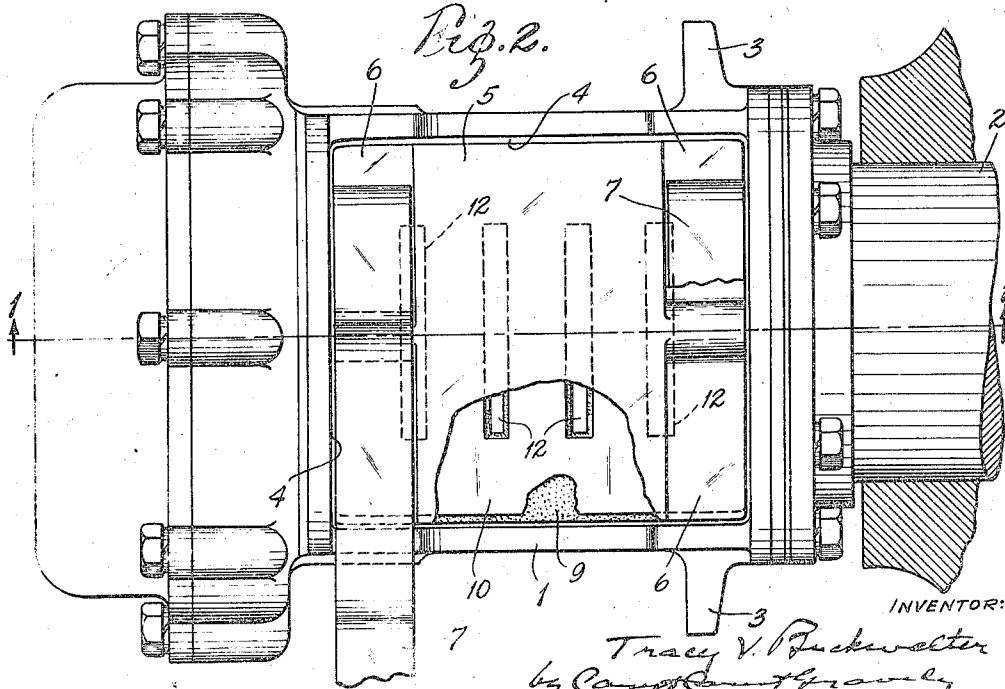


Fig. 2.



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Fig. 3.

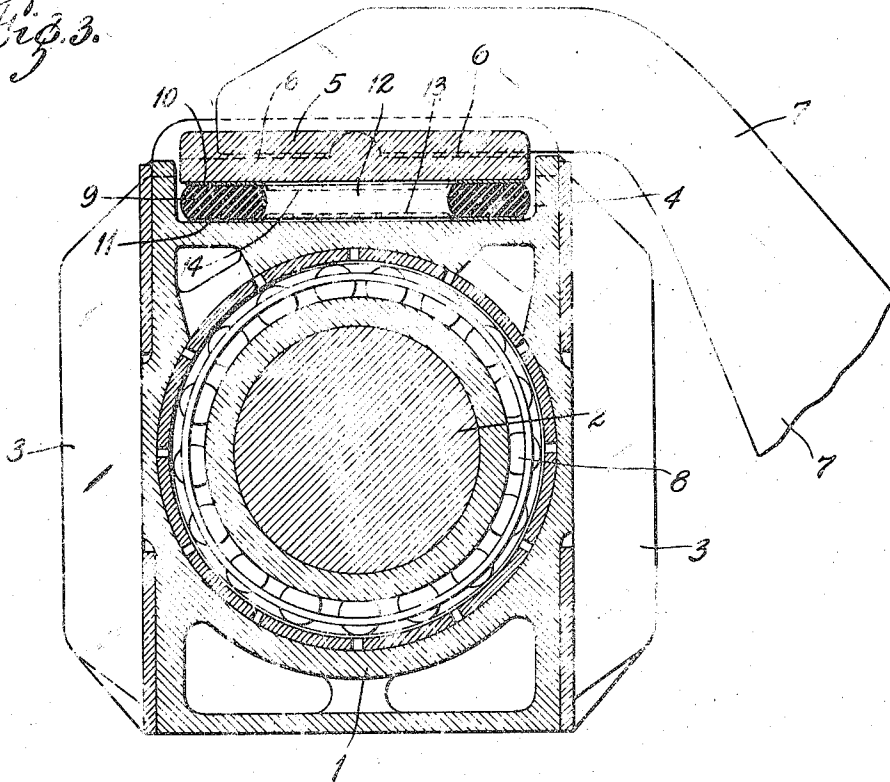
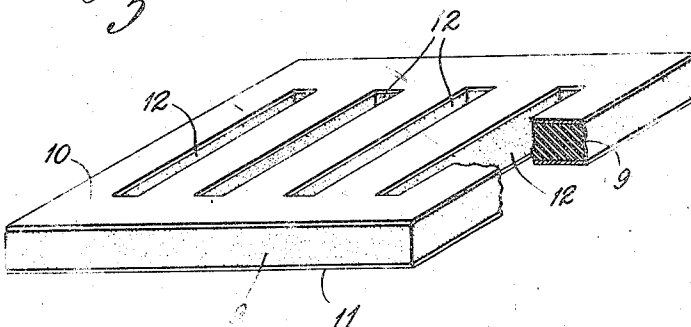


Fig. 4.



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UNITED STATES PATENT OFFICE

2,100,065

TRUCK

Tracy V. Buckwalter, Canton, Ohio, assignor to
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Ohio, a corporation of Ohio

Application May 22, 1936, Serial No. 81,209

1 Claim. (Cl. 105—218)

This invention relates principally to railway car trucks of the kind having a cushioning pad of rubber or the like interposed between the journal box and the equalizer plate to deaden noise, jar and vibration. The invention has for its principal objects to provide for ventilation and free working of the rubber, to prevent wear thereof, and to provide for holding the cushioning pad in proper position between the journal box and the equalizer plate. The invention consists in the cushioning pad and in the combinations and arrangements of parts hereinafter described and claimed.

In the accompanying drawings, which form part of this specification and wherein like symbols refer to like parts wherever they occur,

Fig. 1 is a vertical section through a railway car truck embodying my invention, the section being taken through the roller bearing journal box at one end of one of the truck axles on the line 1—1 in Fig. 2,

Fig. 2 is a plan view,

Fig. 3 is a vertical cross-section on the line 3—3 of Fig. 1; and

Fig. 4 is a perspective view of a cushioning pad.

In the accompanying drawings, my invention is illustrated in connection with a railway car truck comprising a journal box or housing 1 mounted on an axle 2 and provided at its sides with vertical flanges 3 adapted to cooperate with a truck pedestal (not shown) and at its top with a recess 4 adapted to receive a plate 5 provided with seats 6 for supporting the ends of equalizer bars 7. Antifriction bearings, preferably a series of taper roller bearings 8, are interposed between the journal box 1 and the journal portion of the axle 2.

Mounted in the recess 4 in the top of the journal box 1 between the bottom of said recess and the underside of the equalizer plate 5 is a cushioning pad comprising a block 9 of rubber or the like that is interposed between and vulcanized or otherwise secured to metallic top and bottom plates 10 and 11, respectively. The cushioning pad is provided with a series of spaced parallel elongated slots 12 that extend vertically through the rubber block and the metallic top and bottom plates of said pad and are preferably disposed transversely of the axle. The recess 4

in the top of the journal box has a pair of lugs or ribs 13 that project upwardly from the bottom thereof into the lower portions of the two outermost slots 12 in the cushioning pad; and the equalizer plate is provided with a similar pair of lugs 14 that project downwardly from the underside of said plate into the upper portions of said slots.

By the arrangement described, the cushioning pad serves to minimize jarring and jolting and to deaden noise; and it also allows for free and unrestricted operation of the bearings in proper alignment and thus prolongs the life thereof. The slots in the cushioning pad allow for ventilation and uniform flow of the rubber under load; and the metallic top and bottom plates of said pad prevent wear of said rubber. The upstanding lugs in the bottom of the recess in the top of the journal box extend into the slots in the cushioning pad and thus serve to properly center said pad in said recess; and the depending lugs on the underside of the equalizer plate engage said slots and thus serve to properly center said plate in said recess and on said cushioning pad. The cooperating lugs and slots also form quick detachable connections between the pad and the journal box and equalizer plate.

What I claim is:

On a car truck, a journal housing having a recess in the top thereof, a cushioning pad of smaller size than said recess mounted entirely therein, and an equalizer plate having a portion of smaller size than said recess supported therein on said pad, said pad comprising thin metallic top and bottom plates and a block of rubber interposed between and vulcanized thereto, said pad being provided with a series of spaced parallel elongated slots that extend vertically there-through from top to bottom thereof, said recess having a series of spaced parallel elongated ribs that project upwardly from the bottom thereof and snugly fit the lower portions of said slots and position said pad in said recess with a clearance around all its sides, said equalizer plate having a similar series of elongated ribs that depend therefrom and snugly fit the upper portion of said slots to position said equalizer plate on said pad and centrally of said recess with a clearance around all its sides.

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