Jan. 10, 1950 C. A. WRIGHT 2,494,423

OIL BOX LID

Filed Nov. 1, 1946

FIG_1_

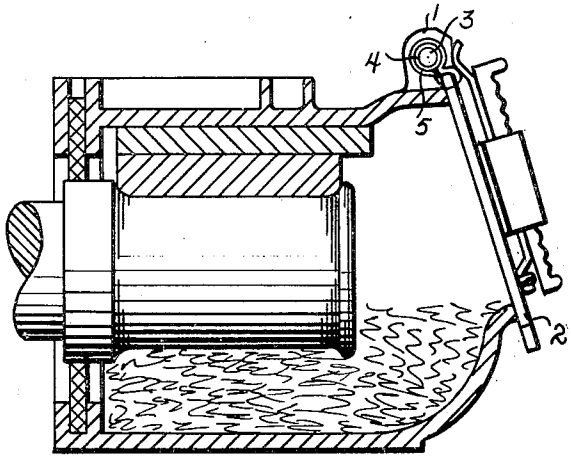


FIG_2_

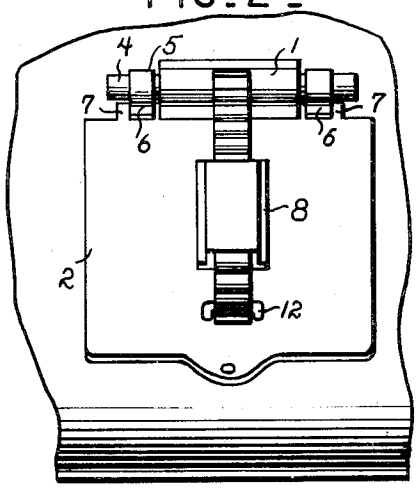


FIG_3_

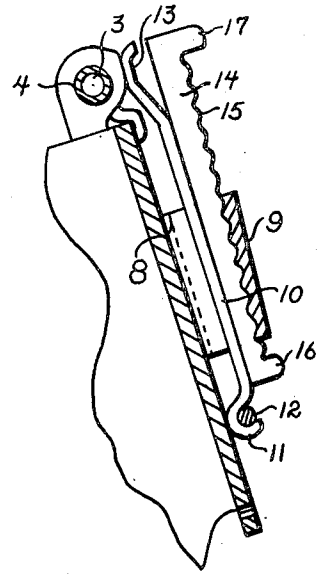


FIG_4

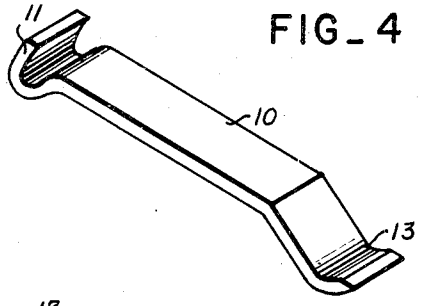
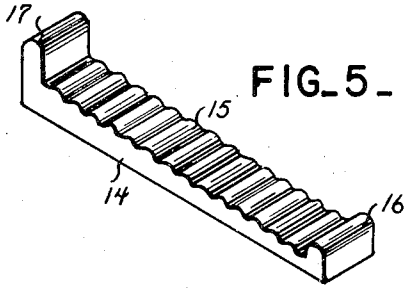


FIG_5_



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OIL BOX LID

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2 Claims. (Cl. 308—47)

1

This invention relates to journal boxes for railway cars, and more particularly to improvements in lids used on such boxes.

In railway cars the lids of journal boxes are subjected to considerable strain due to the vibration of the car, especially at the high speeds at which trains are operated at the present time. At present, lids on journal boxes are maintained closed by a pressure of about 40 to 50 pounds, which is insufficient to prevent wear caused by wrong fittings, looseness and clapping.

It is, therefore, an object of this invention to provide means for holding the lid of a journal box in position with a pressure of from 500 to 600 pounds, and thus eliminate all looseness and other damaging actions which might result from vibration and the like.

A further object is the provision of wedging means for holding the lid of a journal box tightly in place with a high pressure which is controlled by said means.

These and other objects are attained by the novel construction and arrangement of parts hereinafter described and illustrated by the accompanying drawings, forming a part hereof, and in which:

Fig. 1 is a sectional view of a journal box having a lid embodying the invention.

Fig. 2 is a plan view of the lid.

Fig. 3 is a side view, partly in section, of the lid and lid holding means.

Fig. 4 is a perspective view of a spring used in the device.

Fig. 5 is a perspective view of a wedge used in the device.

Referring to the drawings, in Fig. 1 is shown a journal box with a bolt lug 1 rising slightly above the lid 2 of the box. A bolt 3 passes through the lug 1 and has thereon sleeves 4 which are encircled by steel bands 5, the latter being welded to the sleeves 4. The bands 5 have hook portions 6 which are reecived by loops 7 providing ears on the lid to provide a hinge connection.

Welded or otherwise secured to the lid 2 is a U-shaped yoke 8 having a corrugated ceiling 9. Passing through the yoke is a flat spring 10 which is substantially parallel with the lid 2, and has at one end a hook 11 adapted to freely engage a U-shaped holder 12, which does not rise above the level of the main body of spring 10. The

2

other end of the spring has a bent portion or shoe 13 which bears against the lug 1. Passing through the yoke 8 is a wedge 14 having a corrugated surface 15 which engages the corrugated ceiling 9, the wedge bearing on the spring 10. The wedge is provided with a lug 16 at its lower end and a lug 17 at its upper end.

In operation, the wedge 14 is driven down by striking the lug 17, thus bearing on the spring 10 and applying a high pressure to the lid; and when it is desired to raise the lid, the wedge is driven upward by striking on the lug 16.

The wedging device enables the applying of a very high pressure to the lid. Pressures from 400 to 600 pounds are available with the wedge, the corrugations assisting in holding the wedge in a set position. The corrugated ceiling of the yoke has the same taper as the upper surface of the wedge. When the wedge is driven up, the spring is free and the lid can be easily raised.

The above description is to be considered as illustrative and not limitative of the invention of which modifications can be made without departing from the spirit and scope as denoted by the appended claims.

The invention having been described, what is claimed is:

1. In a journal box having a bolt lug and a lid, a yoke secured to the lid and having a tapered corrugated ceiling, a flat spring passing through the yoke and having a hook at its lower end, a holder loosely engaged by the hook, said spring having its upper end bent and engaging the bolt lug, and a wedge having a corrugated upper surface passing through the yoke and engaging the corrugated ceiling, said wedge bearing on the spring.

2. The structure set forth in claim 1 further characterized by the wedge and ceiling having substantially the same taper, and the main body of the flat spring being substantially parallel to the lid.

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REFERENCES CITED

The following references are of record in the file of this patent:

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