

No. 723,069.

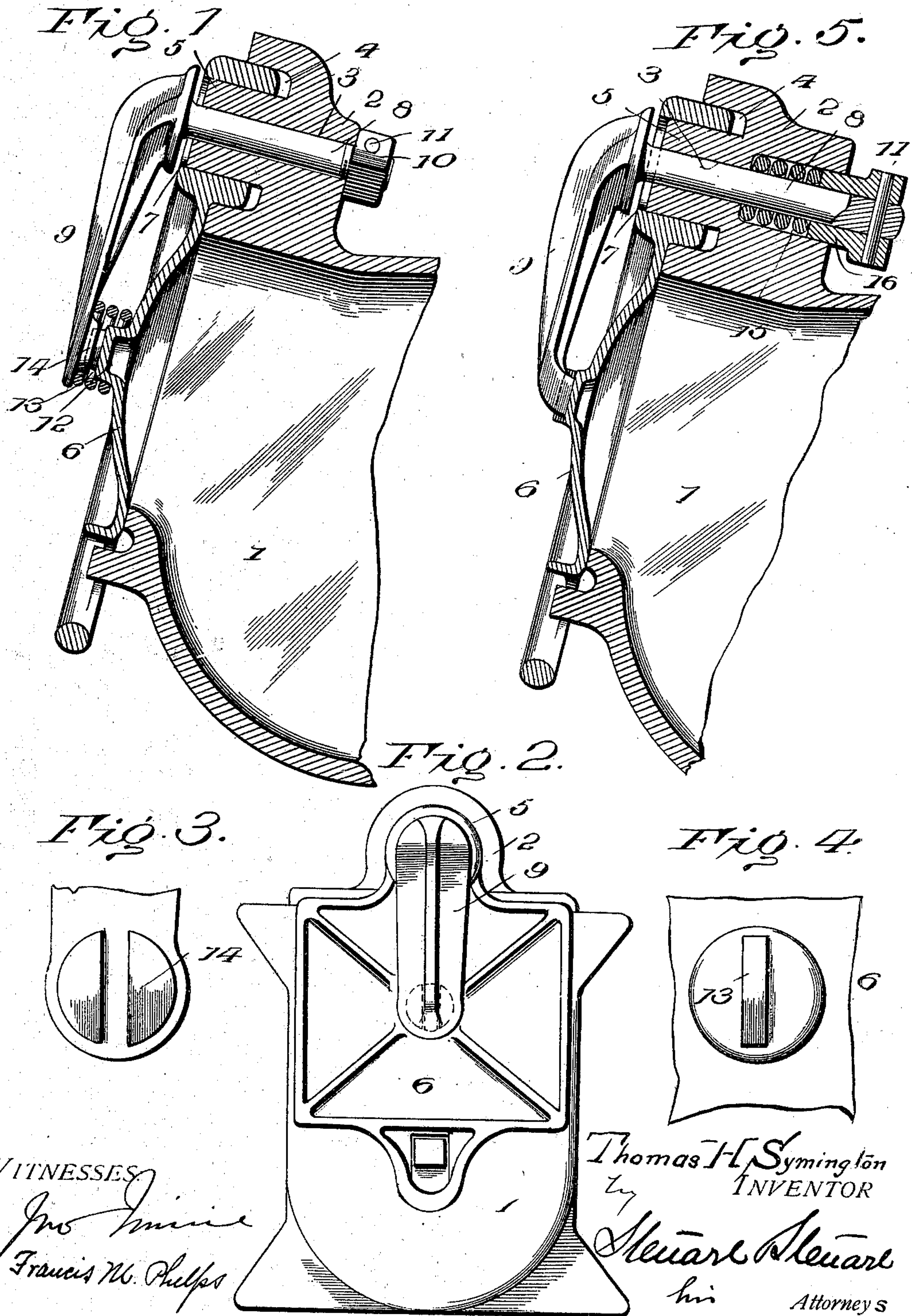
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T. H. SYMINGTON.

LID CONSTRUCTION FOR RAILROAD JOURNAL BOXES.

APPLICATION FILED NOV. 29, 1902.

NO MODEL.



WITNESSES

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LID CONSTRUCTION FOR RAILROAD JOURNAL-BOXES.

SPECIFICATION forming part of Letters Patent No. 723,069, dated March 17, 1903.

Application filed November 29, 1902. Serial No. 133,222. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. SYMINGTON, a citizen of the United States of America, and a resident of Baltimore city, State of Maryland, have invented certain new and useful Improvements in Lid Construction for Railroad Journal-Boxes, of which the following is a specification.

My invention relates to improvements in journal-boxes, and especially in journal-boxes for railroad-cars; and the object thereof is to provide an improved form of device to hold the lid in position.

More particularly, my invention is an improvement over that shown and described in my prior patent, No. 697,040, patented April 8, 1902; and the improvement consists, broadly, in substituting for the plate-spring shown in the prior patent above referred to an arm one end of which is secured to or formed integral with the pivot-bolt and a spring which coöperates with the arm to hold the lid to its seat.

Referring to the drawings which accompany and form a part of this specification, and in which like numerals designate like parts wherever they occur, Figure 1 is a sectional view of the journal-box of the type shown in my prior patent above referred to provided with my improvement. Fig. 2 is a front view of the box. Fig. 3 is a detail view of the arm, showing the lugs for causing it to turn with the cover. Fig. 4 is a view of the central portion of the lid, showing the part with which the lug on the arm coöperates; and Fig. 5 is a view similar to Fig. 1, showing a slightly-modified form of construction.

1 describes a journal-box which may be of any desired construction, the particular form and construction of the box forming no part of my invention. The box, like all similar constructions, has an opening on one side, which is surrounded by a seat, and on this seat rests a lid. The seat is in an inclined or vertical position, and the object of my invention is to so mount the lid that it will bear evenly on the seat all around and be maintained in constant contact therewith while it is supported on a suitable pivot on the side of the opening. The pivot may be above or on one side of the opening. In the

drawings of this case I have shown the pivot above the opening.

2 is a lug cast on the outside of the box above the opening. It is provided through its center with a hole 3, which may be cored or bored and the axis of which is perpendicular to the plane of the seat. Upon the front of the lug 2 is a circular recess 4, which is concentric with the hole 3. The central portion of the lug 2 inside of the annular recess projects forward a greater distance than that portion outside of the recess, forming a boss 5. The face of the lug outside of the recess is in the plane of the seat.

6 is a lid of a size to cover the aperture in the box and which rests upon the seat surrounding the aperture. On one side the lid is provided with an enlarged extension, which is of greater thickness than the lid and is perforated with a central aperture 7 of a size to fit loosely upon the boss 5 and project into the annular recess 4. The lid is thus securely supported upon the box and pivoted upon the boss 5.

8 is a bolt passed through the hole 3 and having upon its upper end an arm 9, which projects over the lid 6. On the rear end of the bolt is secured a nut 10, held in a set position by a pin 11, or a set-nut would be a full equivalent.

12 is a coiled spring mounted between the end of the arm 9 and the lid 6 and held in place by a lug 13 on the lid and interlocking lugs 14 on the end of the arm 9.

In the drawings the lugs 13 and 14 and the spring 12 are shown located at the center of the lid; but any other location would serve the same purpose so long as it was within the area of the seat. Probably in practice I should prefer to make the arm 9 as short as possible and to locate the lugs and spring nearer the axis of the pivot of the lid.

Referring to Fig. 5, a modification of structure is shown which embodies the same principle of construction as Fig. 1, but may have some advantages. In this structure the spring instead of being located between the lid and the end of the arm 9 is located within a recess 15 on the rear side of the lug 2 and surrounding the bolt 8 and is held in place by a sleeve 16, pinned to the bolt. It will be seen,

therefore, that this construction is adapted to be used in connection with a lid of a character shown in my prior patent and is a modification of the means there shown for holding the lid to its seat.

While I have described what I believe to be a preferred form of my invention, I desire to have it understood that I do not confine myself to the details of construction herein shown and described, for it is manifest that many changes and substitutions of parts might be made without departing from the spirit of my invention.

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

1. The combination with a journal-box provided with a seat, of a lid pivoted to the box so as to move in a line substantially parallel to the plane of the seat, a bolt, an arm on the bolt projecting over the lid, and a spring coacting with the arm to hold the lid to its seat, the pressure of the spring being exerted on the lid only at a point within the area of the seat, the lid and arm turning together when the lid is opened.

2. The combination with a journal-box provided with a seat, of a lid pivoted to the box so as to move in a line substantially parallel to the plane of the seat, a bolt, an arm on the bolt projecting over the lid, lugs on the lid, the arm adapted to coact with the lugs, to cause the arm and lid to turn together when

the lid is opened, and a spring coacting with the arm to hold the lid to its seat, the pressure of the spring being exerted on the lid only at a point within the area of the seat.

3. The combination with a journal-box provided with a seat, of a lid pivoted to the box so as to move in a line substantially parallel to the plane of the seat, a bolt, an arm on the bolt projecting over the lid and a spring interposed between the arm and the lid to hold the lid on its seat, the pressure of the spring being exerted on the lid only at a point within the area of the seat, the lid, and arm turning together when the lid is opened.

4. The combination with a journal-box provided with a seat, of a lid loosely pivoted to the box so as to move in a line substantially parallel to the plane of the seat, a bolt, an arm on the bolt projecting over the lid, coacting lugs on the lid and arm, adapted to cause the lid and arm to turn together when the lid is opened, and a spring surrounding the lugs, one end thereof pressing against the arm, and the other against the lid to hold the lid to its seat when the lid is closed, the pressure of the spring being exerted on the lid only at a point within the area of the seat.

Signed by me at Baltimore city, State of Maryland, this 24th day of November, 1902.

THOMAS H. SYMINGTON.

Witnesses:

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FRANCIS M. PHELPS.