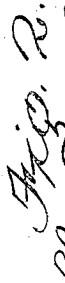


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WITNESSES
J. M. Williams

Thomas H. Symington.

Stewart & Stewart ^{ATTYS}

UNITED STATES PATENT OFFICE.

THOMAS H. SYMINGTON, OF BALTIMORE, MARYLAND.

JOURNAL-BOX LID.

952,481.

Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed December 9, 1908. Serial No. 466,717.

To all whom it may concern:

Be it known that I, THOMAS H. SYMINGTON, citizen of the United States of America, residing at the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Journal-Box Lids, of which the following is a specification.

The present invention relates to journal boxes of the type in which the lid is pivotally mounted on the box to swing from closed to open position, and vice versa. The lid to be described is held both in open and in closed position by means of a spring of such tension that it yields to pressure of convenient magnitude, to be exerted by the operator.

In such journal boxes, the pivotal bearing has been constructed with the stud free to rotate relatively to both the lid and box. Under these circumstances, if the stud is not true, its rotation relatively to both members causes variation of the position in which the lid rests when closed. In this way, the degree of tightness with which the lid fits is caused to vary at different closures and dust and other foreign matter is admitted. If the stud be secured to either the lid or the box to rotate therewith, the member in relation to which the stud rotates is provided with a journal bearing and no bearing surface on the other member is necessary.

An important feature of my invention is a new means by which rotation of the pivot or stud relatively to either the box or the lid is prevented. The stud is provided at any convenient point with a collar and a tongue on this collar engages a suitable recess in the member in relation to which rotation is to be prevented. In the device shown, the end of the stud is flattened to receive the collar. However, the collar may be otherwise applied, both as to position and the means by which it is secured.

The accompanying drawings show sufficient of a journal box to illustrate the application of my invention.

Figure 1 is an elevation showing the lid and hinge. Fig. 2 is a section on the line 2—2, Fig. 1, looking in the direction of the arrow.

The box 1 is provided with an opening 2 for the insertion of packing. The opening is surrounded by a lid seat 3 having a plane surface 4 transverse to the direction of the

opening. The lid 5 has a flat surface 6 adapted to cooperate with the bearing surface 4 when the box is closed. At one side of the opening, preferably above, is a lug 7 bored parallel to the adjacent side of the opening to form a journal bearing 8. The lid carries lugs 9, spaced a distance slightly greater than the length of the lug 7. These lugs are pierced at 10 with holes placed to register with the bore of the lug 7 and the stud 11 is passed through the lugs 9 and the intermediate lug 7, whereby the lid is pivotally connected to the box. To prevent rotation of the stud relatively to the lid, one end of the former is flattened at 12 and a collar 14, apertured to receive the flattened end of the stud, is placed thereon and the end of the stud up-set to prevent removal of the collar. The collar thus secured to the stud forms a shoulder which prevents longitudinal movement of the stud relative to the journal box. This collar is provided with a tongue 15 which extends into a recess 16 in the lug 9 of the cover.

The lid is controlled as to its position, that is, maintained in open or closed position when so placed by means of the spiral spring 17. This spring has an intermediate loop 18 which bears on the cam surfaces 19 and 20 of the lug 7, and its two extremities are alined with the loop, extending in the opposite direction. These extremities 21 are secured to the lid by means of brackets 22 apertured to receive the spring. Thus, the tension of the spring is exerted to press the loop 18 against the cam surfaces 19 and 20. When the lid is closed, the loop bears against the cam surface 20 and the lid is held in this position unless sufficient effort be exerted to open it, when the tension of the spring is overcome and the loop 18 slides over the cam until it cooperates with the surface 19 and the lid is held open. As the lid swings back and forth, the stud 11 rotates therewith so that at each closing of the lid, the stud is brought into the same relative position to the lid and box, so that irregularities on the surface of the stud will not cause variations in the position of the lid from time to time when closed.

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

In a journal box having an opening, a lid therefor, means pivotally connecting the lid

to the box, consisting of a stud and lugs on the lid and box, the lugs apertured to receive the stud, a head on the stud to prevent longitudinal movement thereof in one direction
5 relatively to the lugs, the other end flattened, a collar secured to the flattened portion to prevent motion of the stud in the other longitudinal direction, the lug adjacent the collar apertured and a tongue on the collar to

enter the aperture and to prevent rotation of the stud relatively to such apertured lug. 10

Signed by me at Baltimore, Maryland,
this 30th day of November 1908.

THOMAS H. SYMINGTON.

Witnesses:

J. MERCER GARNETT, Jr.,

E. JOHN NICHOLS.