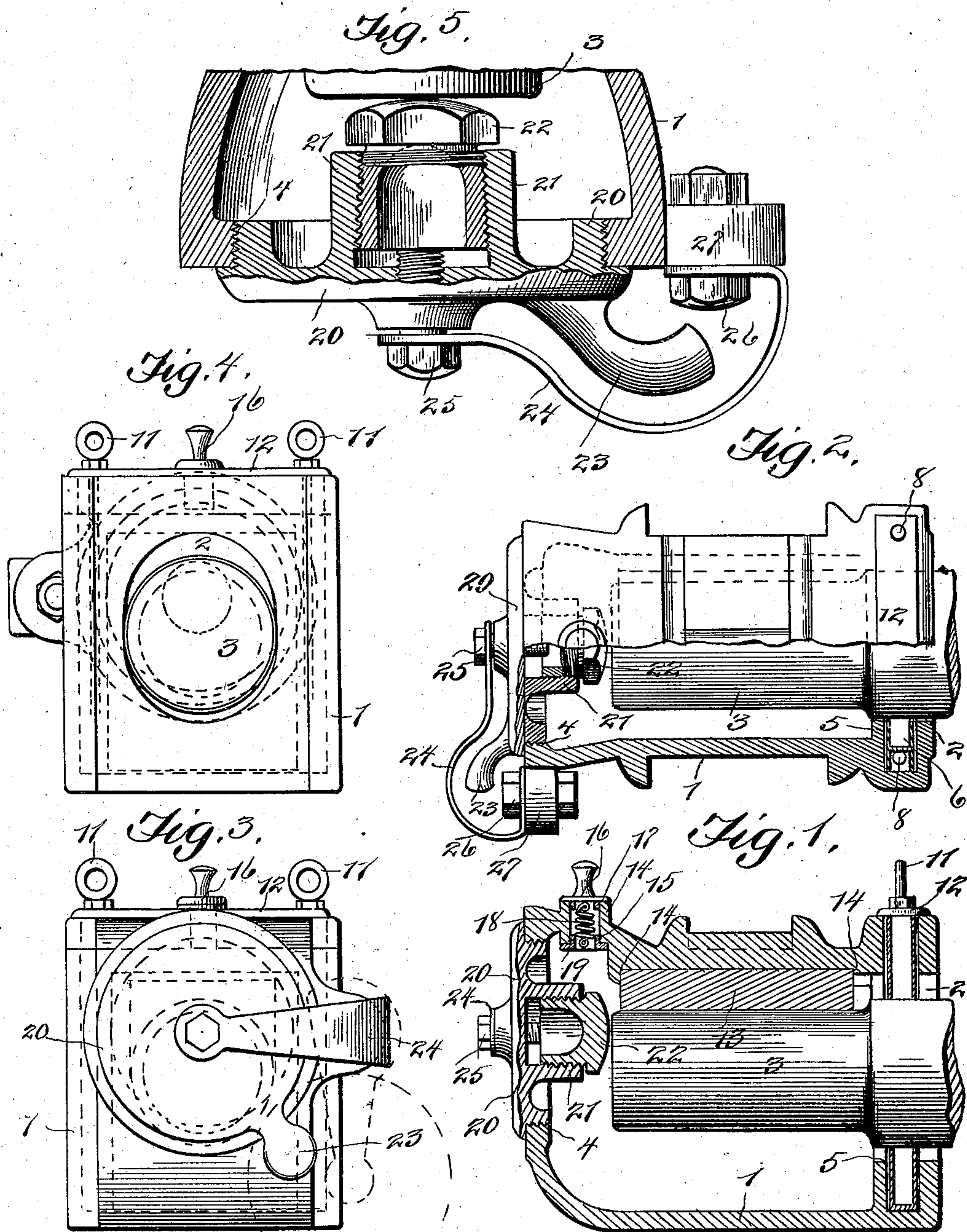


No. 847,992.

PATENTED MAR. 19, 1907.

M. P. NEWCOMB.  
JOURNAL BOX.

APPLICATION FILED OCT. 13, 1905.



Witnesses  
P. A. Powell,  
Martin A. Murray

Inventor  
Michael P. Newcomb.  
By J. P. Lalle.  
Attorney



# UNITED STATES PATENT OFFICE.

MICHAEL P. NEWCOMB, OF PRIEST RIVER, IDAHO.

## JOURNAL-BOX.

No. 847,992.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed October 13, 1905. Serial No. 282,682.

*To all whom it may concern:*

Be it known that I, MICHAEL P. NEWCOMB, a citizen of the United States, residing at Priest River, in the county of Kootenai and State of Idaho, have invented new and useful Improvements in Journal-Boxes, of which the following is a specification.

This invention relates to certain new and useful improvements in journal-boxes, having for its object a device of this type which shall be fire and dust proof, efficiently protecting the bearing against all foreign substances, and, further, one wherein the end thrust of the journal will be sustained by the box.

Referring to the accompanying drawings, wherein like characters of reference designate similar parts throughout the several views, Figure 1 is a longitudinal sectional view of a journal-box constructed in accordance with my invention. Fig. 2 is a top plan view, partly broken away and in section. Fig. 3 is a front elevation illustrating in dotted lines the cap or cover in open position. Fig. 4 is a rear elevation. Fig. 5 is an enlarged sectional view taken through the front end of the box, showing the cover and the spring thereof.

In practice I employ a casing (designated at 1) which at its rear is formed with opening 2 to receive the journal 3, the front end of the casing being spaced from the outer end of the journal and being formed with opening 4, which is eccentrically disposed with relation to the journal, the express purpose of which will hereinafter appear.

The rear end of the casing is provided with guideways 5, within which the dust-guard is received. The dust-guard is composed of two sections 6 and 7, each of which is formed of a hollow member semicircular in form at the mouth portion thereof, enabling the respective sections to engage the journal from diametrically opposite sides thereof, and thus completely encircle the same. Within these hollow members I preferably place oil-waste, facing the same with asbestos packing at such points as come into contact with the journal. Each of these sections at their sides are provided with threaded lugs, which project outwardly and receive in the perforations thereof a threaded stem 8, borne by adjusting-screw 10, the latter having a handle 11 at the upper end of the same, as shown. The upper section is provided with a top 12, which

projects beyond the ends and sides of the upper section to thereby provide a support for said section by engaging the top face of the box or casing 1, as illustrated in Fig. 1 of the drawings.

By simply adjusting the screws 10, there being two in number, which are arranged at opposite sides of the dust-guard, the sections may be brought to bear with varying degrees of pressure on the journal, and as they are movable in unison the adjustment may be readily determined by movement of the dust-guard in its guideways.

13 designates the journal-brass, which rests on the journal and which is retained against movement by the shoulders 14, formed on the box.

In connection with my invention I employ means whereby oil may be fed to the journal, these means preferably consisting of a tubular part cast integral with the box, this part being designated 14 and being located at a point accessible to the journal. The lower end of this part is closed by a disk which is formed with an annular shoulder on its upper face, by means of which engagement is effected with the tubular part. A removable cap 16, provided with a hand-grasp and with a depending annular shoulder 17, is employed at the upper end, a coil-spring being secured to the cap and to the disk, serving to cause the cap to firmly seat on the top of tubular part 14, but enabling the same to be lifted against the action of the spring when it is desired to oil the journal.

Opening 4 is threaded and receives the cap or closure 20, the latter being formed with an integral inwardly-extending and interiorly-threaded sleeve 21, which engages an abutment likewise threaded and designated at 22. The face of this abutment is preferably convex and, as shown in Fig. 1 of the drawings, engages the outer end of the journal, thus sustaining the end thrust of the journal. By virtue of the screw-threaded connection between the abutment and the cap or closure the abutment may be readily adjusted to bear with greater or less pressure on the end of the journal. It has been stated that the abutment is eccentrically related to the end of the journal, the purpose of which is to cause a changing point of contact between the abutment and the end of the journal whenever the two come into engagement. The journal describes a circular path of



movement about the abutment, and thus the points of engagement between the two will vary, though always being located at some point in the circular path of movement which the journal pursues.

Cap or closure 20 is provided with an operating-handle 23, by means of which the same may be removed and placed in position by turning. In connection with the cover I employ a flat spring 24, the function of which is to exert constant pressure on the cap or cover, and thereby prevent the same from turning. This spring is perforated at its end portions, one end being received on a screw 25, which threads into the cap or cover, and the opposite end is likewise received on a bolt 26, supported by a lug 27, cast with the box. The spring is bent into the form shown, enabling the handle to readily pass the same during the operation of removing the cap or cover. Fig. 3 of the drawings illustrates in dotted lines the cap or cover in inoperative position, wherein it will be observed that the spring performs a further function of supporting the cap or cover while the latter is in said inoperative position.

A journal-box constructed in accordance with my invention has been found to be extremely efficient, excluding all foreign matter, providing means which readily take up the end thrust and means which enable the journal to be oiled. The device is compact and embodies economically all of the essentials necessary to an efficient journal-box.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. A journal-box having a threaded opening, a cap within said opening, there being an interiorly-threaded sleeve carried by the cap, an abutment having a convex face and a threaded part engaging said threads of the sleeve, and a spring secured to the box and to said cap to prevent movement of the latter.

2. In combination with the axle, a journal-box having a threaded opening in its front end, a cap threaded into engagement with said opening, said cap having an inwardly-extending central sleeve on its inner face, said sleeve being threaded on its interior and extending adjacent the end of said axle eccentric thereto, and an abutment having a face of convex contour engaging said axle end and a screw-threaded inner end engaging said sleeve.

3. A journal-box having a threaded opening, a cap within said opening formed with a sleeve, an abutment engaging said sleeve, said box having a lug formed thereon, and a spring having one end secured to said lug and having its opposite end bent to overlie and be secured to the central outer portion of said cap.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

MICHAEL P. NEWCOMB.

Witnesses:

MARTIN A. MURRAY,  
E. O. KELLY.