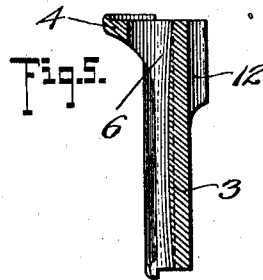
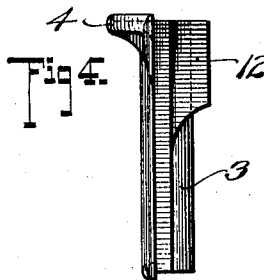
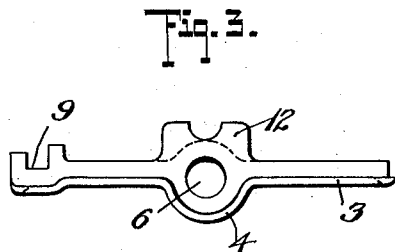
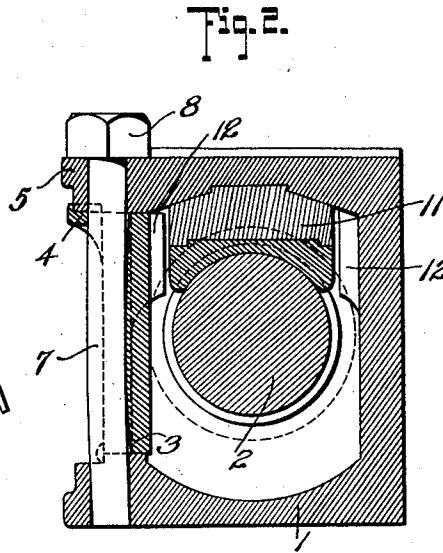
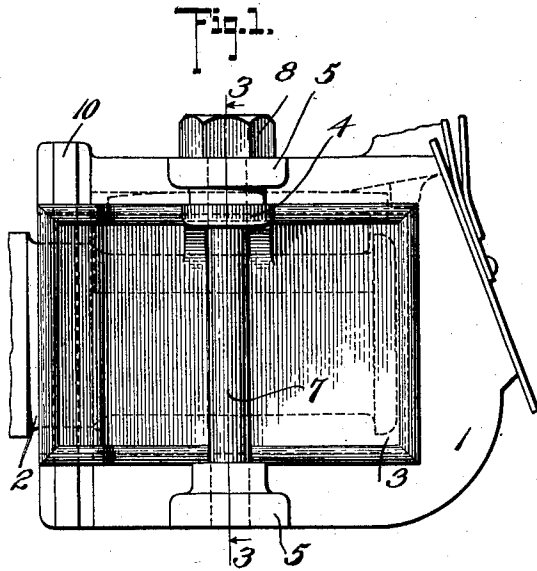


W. C. FICKLING.
JOURNAL BOX.
APPLICATION FILED NOV. 1, 1911.

1,057,229.

Patented Mar. 25, 1913.



Witnesses

C. H. Wagner.

H. C. Robb.

Inventor
William C. Fickling

By *Reelux Robb*
J. Robb Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM C. FICKLING, OF SAVANNAH, GEORGIA.

JOURNAL-BOX.

1,057,229.

Specification of Letters Patent.

Patented Mar. 25, 1913.

Application filed November 1, 1911. Serial No. 657,990.

To all whom it may concern:

Be it known that I, WILLIAM C. FICKLING, citizen of the United States, residing at Savannah, in the county of Chatham and State of Georgia, have invented certain new and useful Improvements in Journal-Boxes, of which the following is a specification.

My invention relates to improvements in journal boxes for railway car and engine trucks, and the particular object thereof is to provide a practical box with a side opening to facilitate removal of the axle from the box without necessitating taking the latter from the truck.

A further object of the device is the provision of a construction which will be cheap, from a manufacturing standpoint, and comprising novel means for retaining the closure in position, said means being quickly adjustable and adapted to form an oil tight closure for the box.

With the above and other objects in view, the invention consists of the construction, combination, and arrangement of parts, all as hereinafter more fully described, claimed and illustrated in the accompanying drawings wherein,

Figure 1 is a side elevation of a journal box showing my construction of closure; Fig. 2 is a central vertical cross section taken about on the line 3—3 of Fig. 1; Fig. 3 is a top plan view of the closure; Fig. 4 is a side elevation thereof; and, Fig. 5 is a cross section of the same showing the curved recess.

Throughout the following detail description, on the several figures of the drawings, similar parts are referred to by like reference characters.

Referring particularly to the drawings, 1 represents a journal box of conventional form, adapted to be secured to the frame of a car or engine truck in any well known manner and in which the axle 2 is adapted to be received. At one side of the box 1 is provided an opening, said opening being of proper length and width to permit of easy removal of the axle 2 when desired. The opening aforesaid is provided with a cap or closure 3 which has preferably at its upper central portion an eye or apertured lug 4. Located on the box 1 at suitable points, are other apertured lugs 5, the opening in said box being in alinement with the opening in the lug 4 on the closure 3, said opening continuing in the form of a recess

across the outer wall of the cap, as indicated at 6. The inner wall of this recess 6 is slightly curved outwardly, as clearly shown in Fig. 5, and performs the function of a cam, as will be apparent as this description proceeds. To hold the closure in place on the box 1, I provide a curved pin 7 which is inserted in the openings in the lugs 4 and 5, the curvature of said pin conforming to that of the inner wall of the recess 6 in the cap 3. The pin 7, furthermore, has at its upper extremity a head or similar formation 8 by means of which the pin may be turned after it is inserted in the lugs, causing the bent or curved portion thereof to impinge against the closure and thereby hold the latter in operative position. It will be apparent that the cam surface of the closure in cooperation with the pin 7 when the latter is turned in the position above-noted, will cause said closure to form a tight joint and prevent leaking of the lubricant contained in the hollow portion of the journal box. Preferably at the inner portion of the closure 3, I provide a groove 9 extending across the same, said groove interlocking with a tongue 10 on the box 1.

Any well known means for positively holding the pin or bolt 7 after it has been turned as above mentioned, may be employed. Such means comprehended hereby are the provision of the bolt 7 with a lock nut, or equivalent member, which will serve to perform the function specified, but since said means are conventional in this art no claim is made therefor.

The box 1 is provided with the usual brass 11 in its upper portion, said brass being held in position by the extensions 12.

It will be apparent from the foregoing, that my form of closure, necessitating the use of only one pin, may be very cheaply manufactured and its construction is such that it may be very quickly positioned over the opening of the box and locked in place by a turn of said pin. A slight turn of the pin will also permit it to be withdrawn from the lugs and the closure released, when the axle may be removed as desired.

Having thus fully described the invention, what is claimed as new is:—

1. A journal box provided with an opening in a side thereof, a closure for said opening provided with a curved surface forming a cam, and means to lock said closure in a position closing the opening aforesaid

consisting of a pin movable longitudinally on the journal box to be interlocked with the latter, said pin being curved longitudinally to provide an intermediate portion opposite the curved surface of the closure but not in engagement therewith during the longitudinal movement of the pin, said pin being provided with a head at one end of the same whereby rotative movement may be imparted to the pin after its longitudinal movement is completed to impinge the curved portion of the pin against the curved cam surface of the closure, and securely lock the latter in position on the journal box.

2. In combination, an axle, a journal box having an opening in the side through which the axle is adapted to pass, a closure for said opening having an apertured lug at its upper edge portion and a recess extending across the face of said closure directly in line with the apertured lug, the box aforesaid having other apertured lugs above and below the opening therein and in alinement with the lug on said closure, said closure having a groove at one side thereof, the box aforesaid also having a tongue formed thereon to interlock with the groove of the closure, and a curved pin adapted to pass through the lugs on the box and closure and the inner wall of the recess being outwardly curved to form a cam whereby when the pin is turned the curved portion thereof is caused to impinge against the wall of the recess aforesaid and press the closure tightly in position over the opening in the box.

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

WILLIAM C. FICKLING.

Witnesses:
S. A. WHITEHURST,
GEO. C. SHIVERS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."