A. O. BUCKIUS, JR.

JOURNAL BOX.

APPLICATION FILED FEB. 6, 1915.

1,171,020. Patented Feb. 8, 1916.

Fig. 1

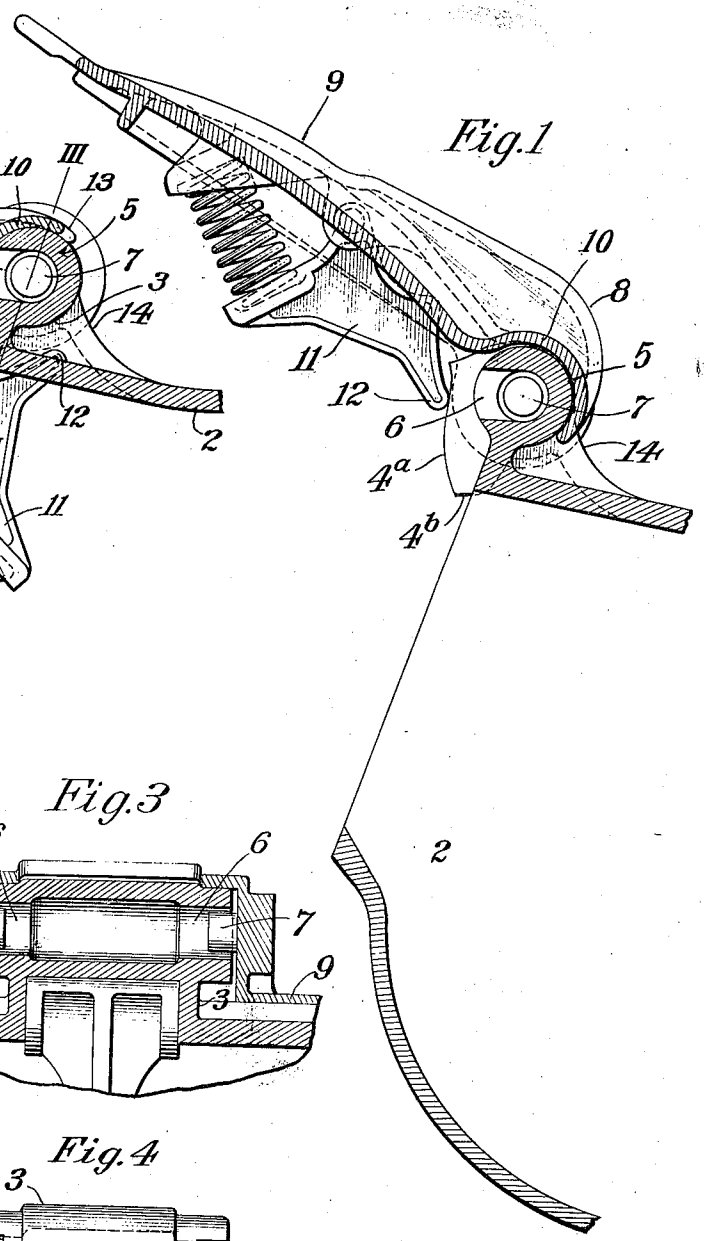


Fig. 2

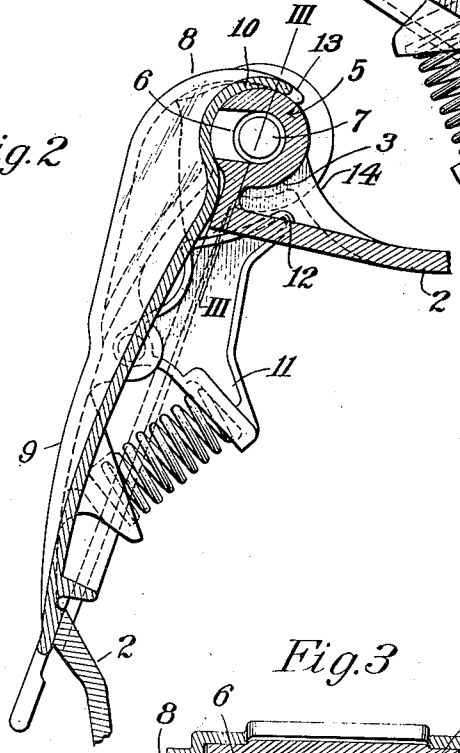
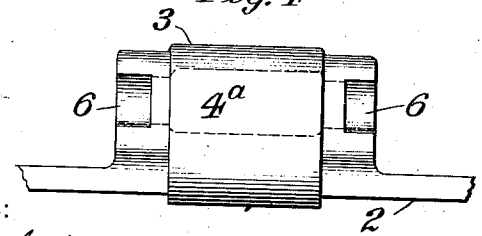


Fig. 3

Fig. 4



Witnesses:

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JOURNAL-BOX.

1,171,020. Specification of Letters Patent. Patented Feb. 8, 1916.

Application filed February 6, 1915. Serial No. 6,470.

To all whom it may concern:

Be it known that I, ALBERT O. BUCKIUS, Jr., a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Journal-Box, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a section of a journal box lid embodying my invention, with the lid shown in an open position; Fig. 2 is similar to Fig. 1, but with the lid shown in closed position; Fig. 3 is a section on line III—III of Fig. 2, and Fig. 4 is an elevation of the hinge lug.

My invention is an improvement upon the type of journal box shown in my Letters Patent No. 1,099,964, dated June 16, 1914, and consists in providing a lid with trunnions which coöperate with sockets on the hinge lug of the box, to resist abnormal opening and removal of the lid.

My invention also consists of the construction and coöperation of the various parts which I shall hereinafter describe and claim.

Referring to the drawings, 2 represents a journal box upon which is formed a hinge lug 3, having cam surfaces 4^a, 4^b and rounded bosses 5, having sockets 6. These sockets 6 are open at the forward side, to receive the trunnions 7 formed upon the portion 8 of the lid 9. The hinge lug 3, if desired, may be apertured, as is shown in Fig. 3, to receive a hinge bolt, so that the lid, if broken, may be replaced with one of the ordinary Master Car Builders' construction. The portion 8 of the lid 9 has circular socket bearings 10, adapted to bear upon the bosses 5. On the inside of the lid 9 is a spring-actuated lever 11, the toe 12 of which is firmly held alternately against the cam surfaces 4^a and 4^b as the lid is opened or closed. The spring-actuated lever 11 forms a wedging means by which the bearings 10 of the lid portion 8 are held firmly against the bosses 5 of the hinge lug 3, so that in opening the lid turns upon the bosses as a pivot. The upward movement of the lid is limited by the edge 13 of the lid portion 8 bearing against reinforcing base flanges 14 of the hinge lug 3 and coöperating with the trunnions 7 in the sockets 6 to prevent the lid from being opened farther than is necessary. The trunnions 7 are not under strain, except when pressure is applied to the lid to open it beyond the normal position illustrated in Fig. 1.

The lid is applied as follows: The lever 11 is placed in position on the lid, and a wedge, such as a rail spike, is driven between the lever 11 and the lid, so as to compress the lever spring slightly by tipping the upper end of the lever away from the inner surface of the lid. The lid is then applied in a closed position. The trunnions 7 on the lid enter the sockets 6 (and the toe 12 of the lever 11 passes under the cam surface 4^b.) When the lid is thus applied it may be opened until the action of the cam surface 4^b on the lever 13 lifts the lever still farther away from the lid and releases the spike, which may then be withdrawn.

It is obvious that various changes may be made in the device which I have shown and described without departing from my invention.

What I claim is:

1. In a journal box, a hinge lug on said box having rounded bosses and cam surfaces thereon, the bosses on the hinge-lug having sockets open at their forward sides, a lid having an upward extension with arc-shaped bearings adapted to turn on said bosses, the lid having trunnions mounted on its inner face adapted to fit into said socket openings, a spring seated on the inside of the lid, a lever pivoted to the lid, one arm engaging said spring, and the other arm the cam surfaces on the hinge lug, and being adapted in all positions to draw said socket bearings tightly against the bosses, to keep said trunnions in said sockets and to coöperate with said trunnions, lug, bearing bosses and sockets in limiting the upward movement of the lid.

2. A journal box having a hinge lug, said hinge-lug having arc-shaped bosses and cam surfaces thereon, a lid having an arc-shaped extension engaging and bearing upon said bosses, a lever pivoted on the inside of the

lid, one arm of the lever acting as a wedge between the pivot of the lever and said cam surfaces, said hinge-lug having also sockets in said bosses, open at the forward side, and said lid having trunnions also thereon, adapted to enter said sockets and to co-operate with said lever and cam surfaces in holding the said bearings of the lid against said bosses in all positions of the lid.

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