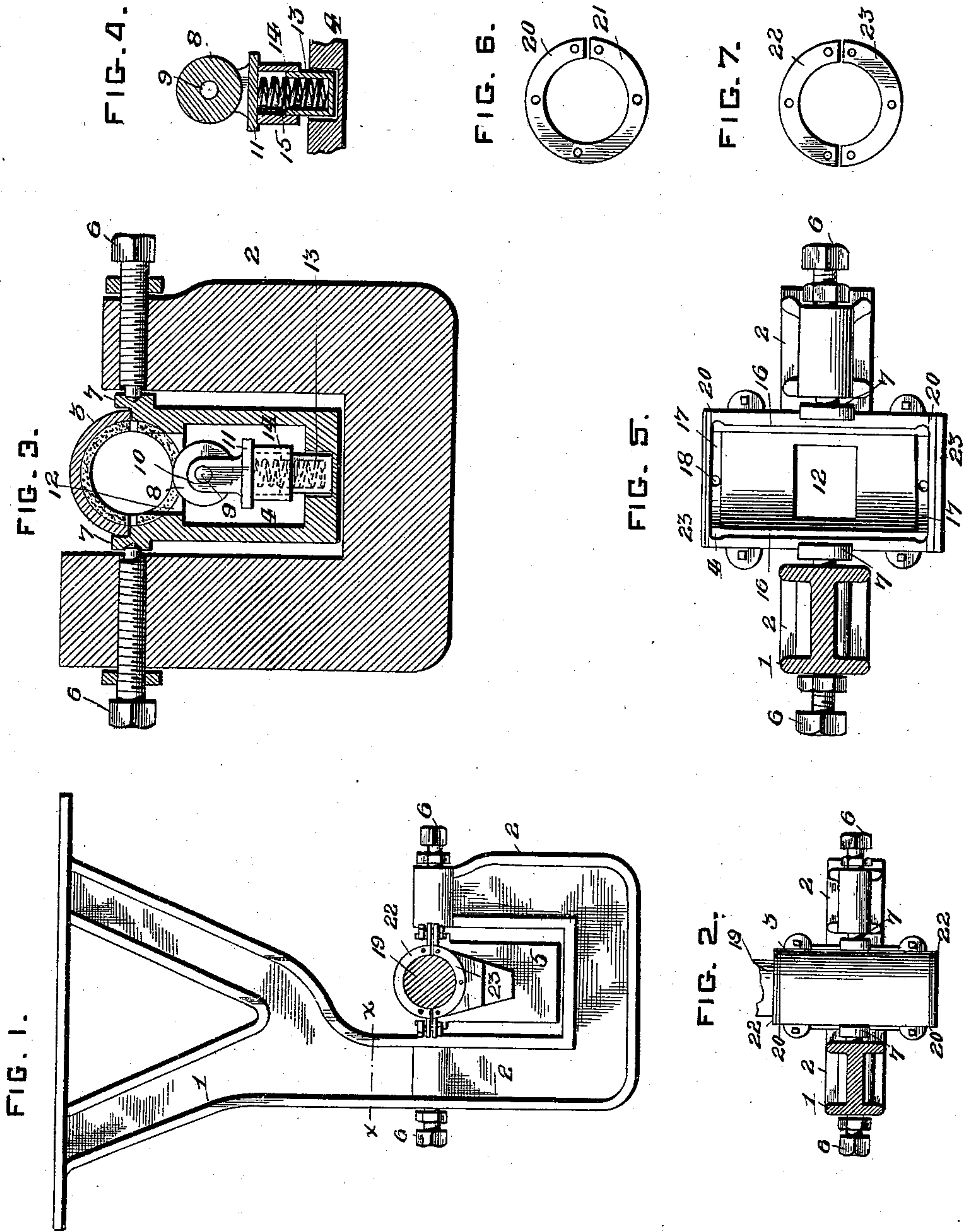


(No Model.)

J. J. BUSENBENZ & W. B. FERGUSON.
LUBRICATING JOURNAL BOX.

No. 547,845.

Patented Oct. 15, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

JACOB J. BUSENBENZ AND WILLIAM B. FERGUSON, OF ROCK ISLAND, ILLINOIS, ASSIGNORS TO THE ROCK ISLAND AUTOMATIC CAR JOURNAL LUBRICATOR COMPANY, OF SAME PLACE.

LUBRICATING JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 547,845, dated October 15, 1895.

Application filed August 17, 1892. Renewed March 18, 1895. Serial No. 542,271. (No model.)

To all whom it may concern:

Be it known that we, JACOB J. BUSENBENZ and WILLIAM B. FERGUSON, citizens of the United States, residing at Rock Island, in the county of Rock Island and State of Illinois, have invented a new and useful Improvement in Lubricating Journal-Boxes, of which the following is a specification.

Our invention relates to lubricating journal-boxes, and the objects of our improvements are hereinafter set forth, and specifically pointed out in the claim; and we accomplish these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a side view of our improved hanger for shafting. Fig. 2 represents a plan view of the same taken on the line $x x$ of Fig. 1. Fig. 3 is a view of a horizontal vertical section of the same, enlarged; and Figs. 4, 5, 6, and 7 are details, which will be hereinafter fully described.

Similar numerals of reference refer to similar parts throughout the several views.

We are aware that it is old to provide a journal-box with a connecting compartment or cell for the storage of the lubricant, and to provide a roller therein for transmitting the lubricant from the compartment or cell to the shaft in such box and to force or hold such roller against the shaft by spring power, and also to provide troughs in such box to receive the surplus lubricant thrown off by such shaft and conduct or return the same to such cell or compartment, and hence we do not in this application broadly claim the same, but confine ourselves to our specific device, as hereinafter described.

In brief, our invention consists of a novel manner of arranging the coiled spring, lubricant roller-frame, and cell or compartment for the purpose of holding or forcing the roller against the shaft—that is, we provide a box or well-hole in the floor of the cell or compartment, which may be integral therewith if desired, in which is seated a coiled spring, and upon the lower surface of the base of the roller-frame we provide another box or cap adapted to slide over the walls of the former box, which arrangement retains the roller-frame and spring in position, and such spring

exerts its force or power against the roller-frame and forces or holds the roller against the shaft. We also provide a novel packing at the ends of the box to prevent dust and other foreign substances from entering the box, which packing consists of a washer of leather or other suitable material, one wall of which being cut through or divided for convenience in placing around the shaft, and a metal bisected washer adapted to be secured to the end of the box by screws or other means and hold such leather washer firmly against the same and snugly around the shaft.

The frame of the hanger is represented by the numeral 1, its lower portion being hooked or U-shaped, as at 2. The box, consisting of the two halves 3 and 4 and the lubricant compartment or cell 5, located in the lower member 4 of the box, is suspended between the arms of the hooked or U-shaped portion of the frame by means of the horizontal pointed set-screws 6 6 entering the depressions 7 7 in the ears attached to the lower member 4 of the box, thus affording a yielding bearing for the box and an opportunity for lateral adjustment of the same, such set-screws passing through said arms of the frame, as shown in the drawings.

Within the lubricant cell or compartment 5 is located the lubricating mechanism, which consists of a base-plate 11, from which extend uprights 10, affording bearings for the journal 9, supporting the lubricant-roller 8.

In the bottom of the lubricant cell or compartment we properly seat a box 13, which box may be made integral with the floor of said cell or compartment, if desired, and to the under side of said base-plate 11 of the roller-frame we also secure another box or cap 14, adapted to slide over or upon the box 13, and within said box 13 we place a coiled spring 15, the upper portion of which bears against the base-plate 11 of the roller-frame. The lower half 4 of the box is provided with longitudinal and cross grooves or troughs 16 and 17 and apertures 18 leading into the cell or compartment 5. These grooves or troughs gather the lubricant discharged from the shaft 19 when rotating and convey the same to the apertures 18, through which the same passes

to the lubricant cell or compartment. We also construct packing for preventing dust and other foreign substances entering the box, which packing consists of a washer 20, of leather or other suitable material, the periphery or wall of which is cut or divided, as at 21, so that it may be passed over the shaft 19 and abut the ends of the box, as shown in Fig. 2, and we secure this to the ends of the box by means of the bisected metal washers 22 and 23, which are placed outside of the washer 20 and secured to the ends of the box by screws or other suitable means.

From the description given persons skilled in the art will readily understand the method of construction and mode of operation of our device.

What we claim as new, and desire to secure by Letters Patent, is—

20 The combination, with the hanger frame, 1, of a journal box supported therein formed

in two parts, 3 and 4, a lubricating cell or compartment located in the lower part, 4, and a lubricating mechanism located in said lubricating compartment, comprising a roller 8 supported in bearings afforded by uprights 10 extending from a base plate, 11, a guide box or cap, 13, extending upward from the floor of the lubricant compartment, a box or cap 14 depending from said base-plate and adapted to slide on the lower box or cap, and a coiled spring within said boxes adapted to exert pressure in an upward direction against the base-plate, thereby insuring constant contact of the roller 8 with the axle, substantially as described. 35

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