(No Model.) 2 Sheets—Sheet 1.

J. SAGMEISTER.

CAR AXLE BOX.

No. 332,112. Patented Dec. 8, 1885.

Fig. 1.

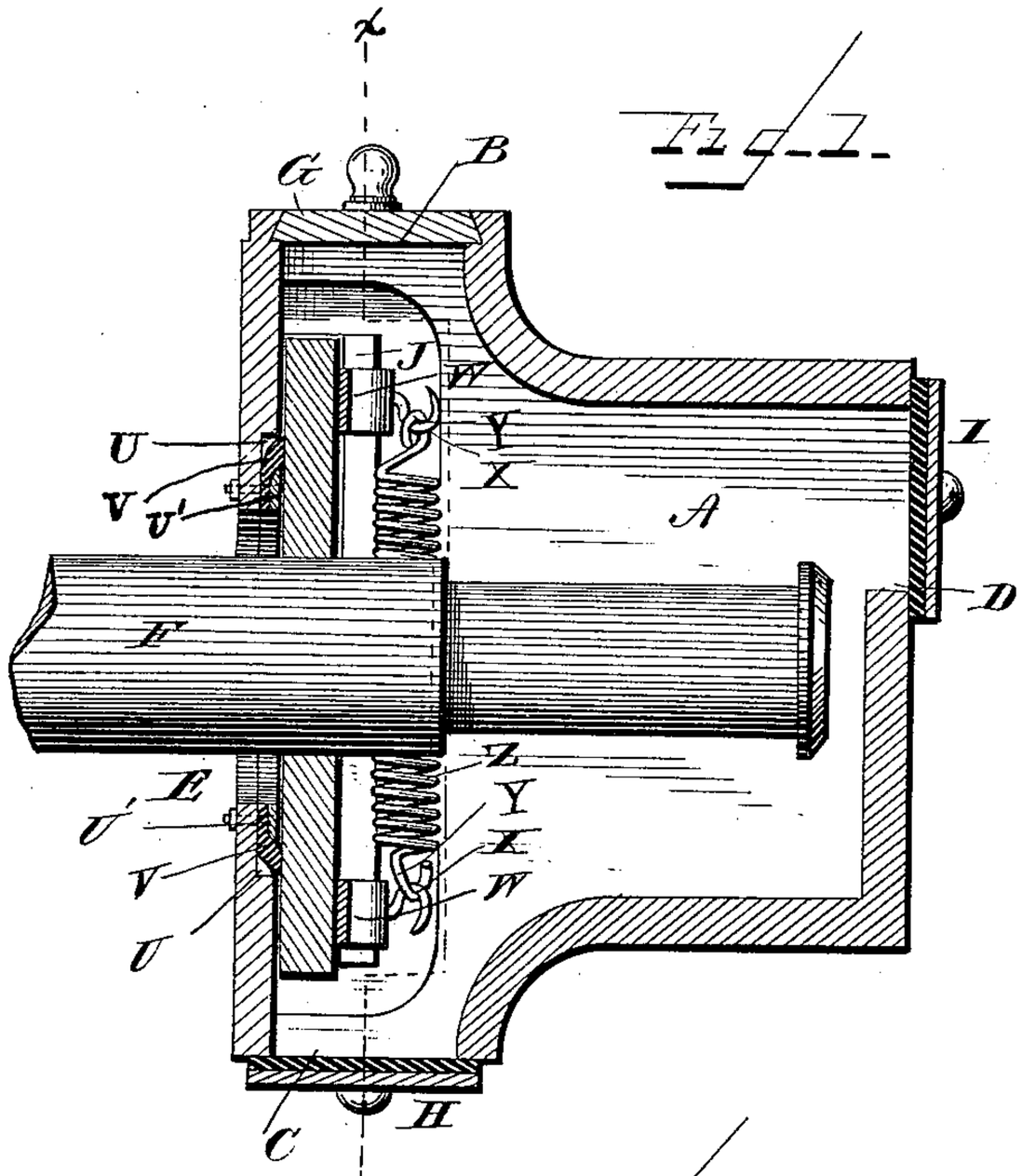


Fig. 4.

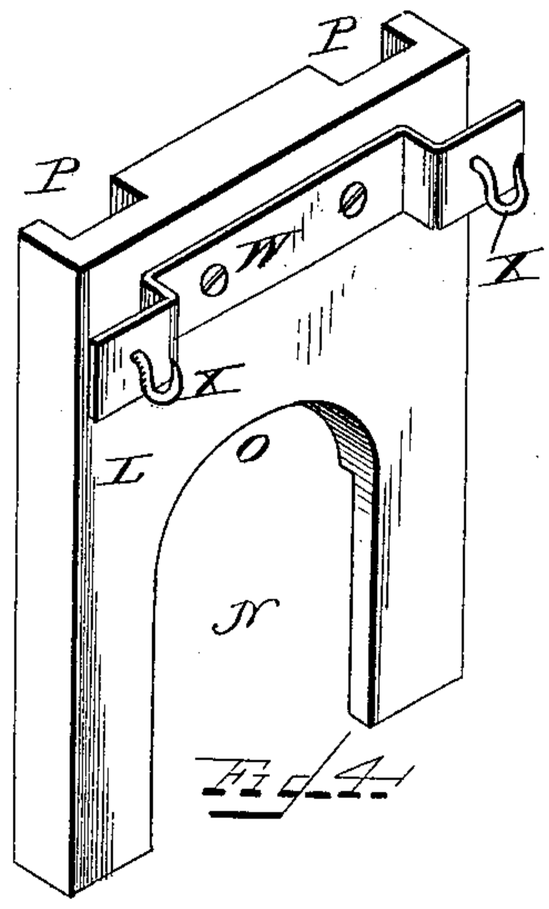


Fig. 2.

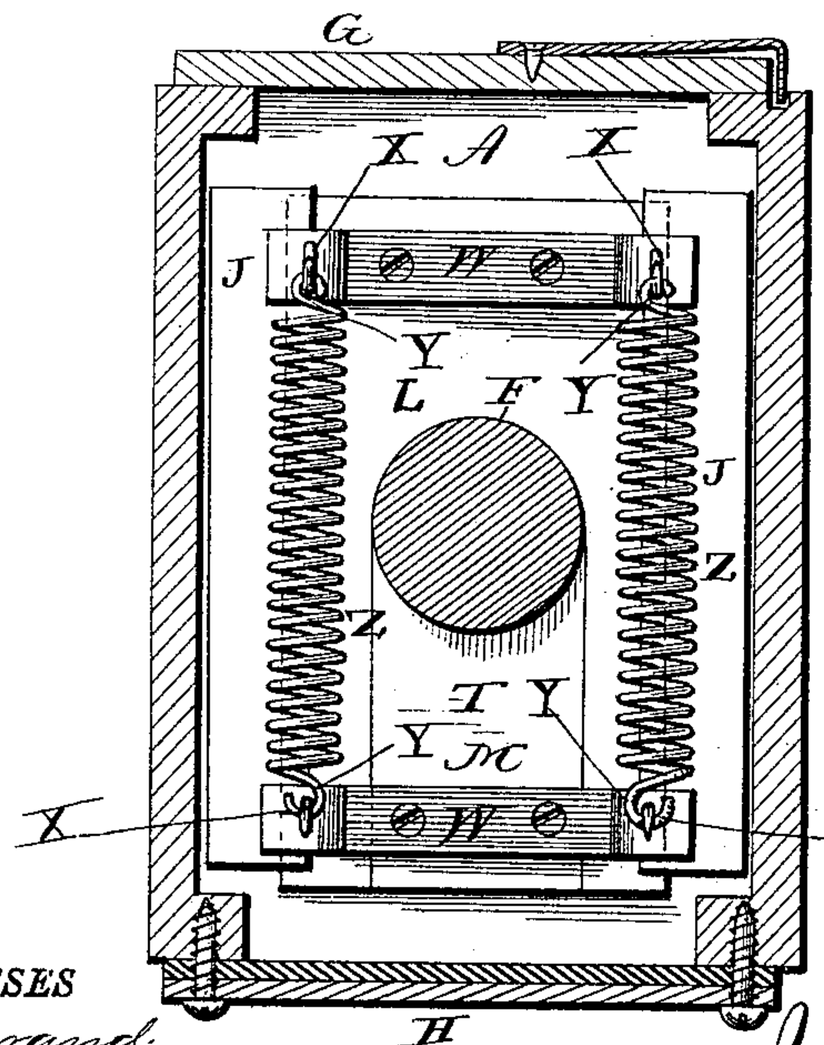
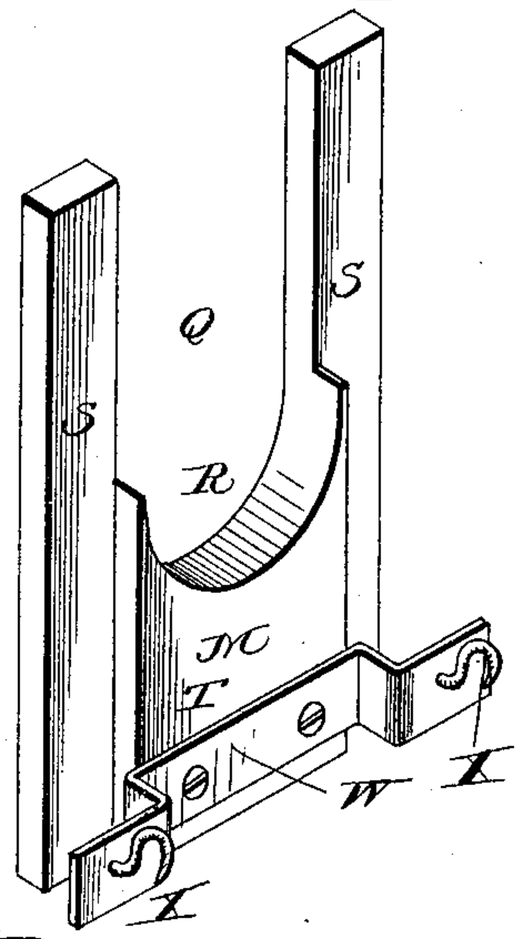


Fig. 5.



WITNESSES

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

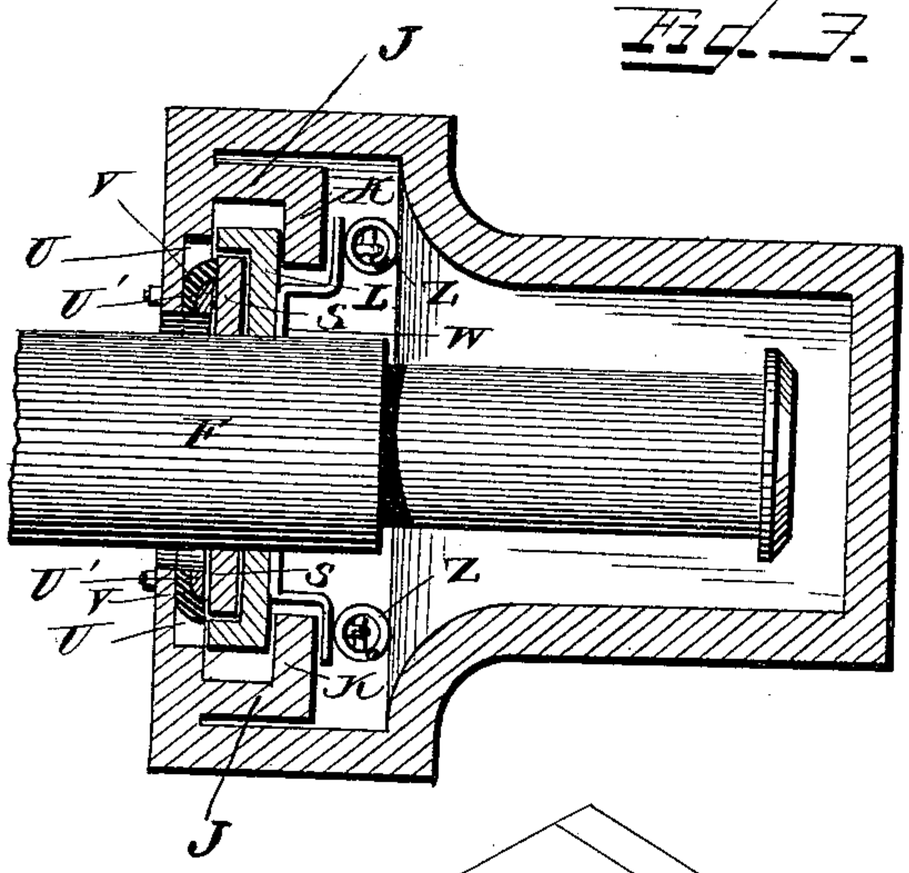
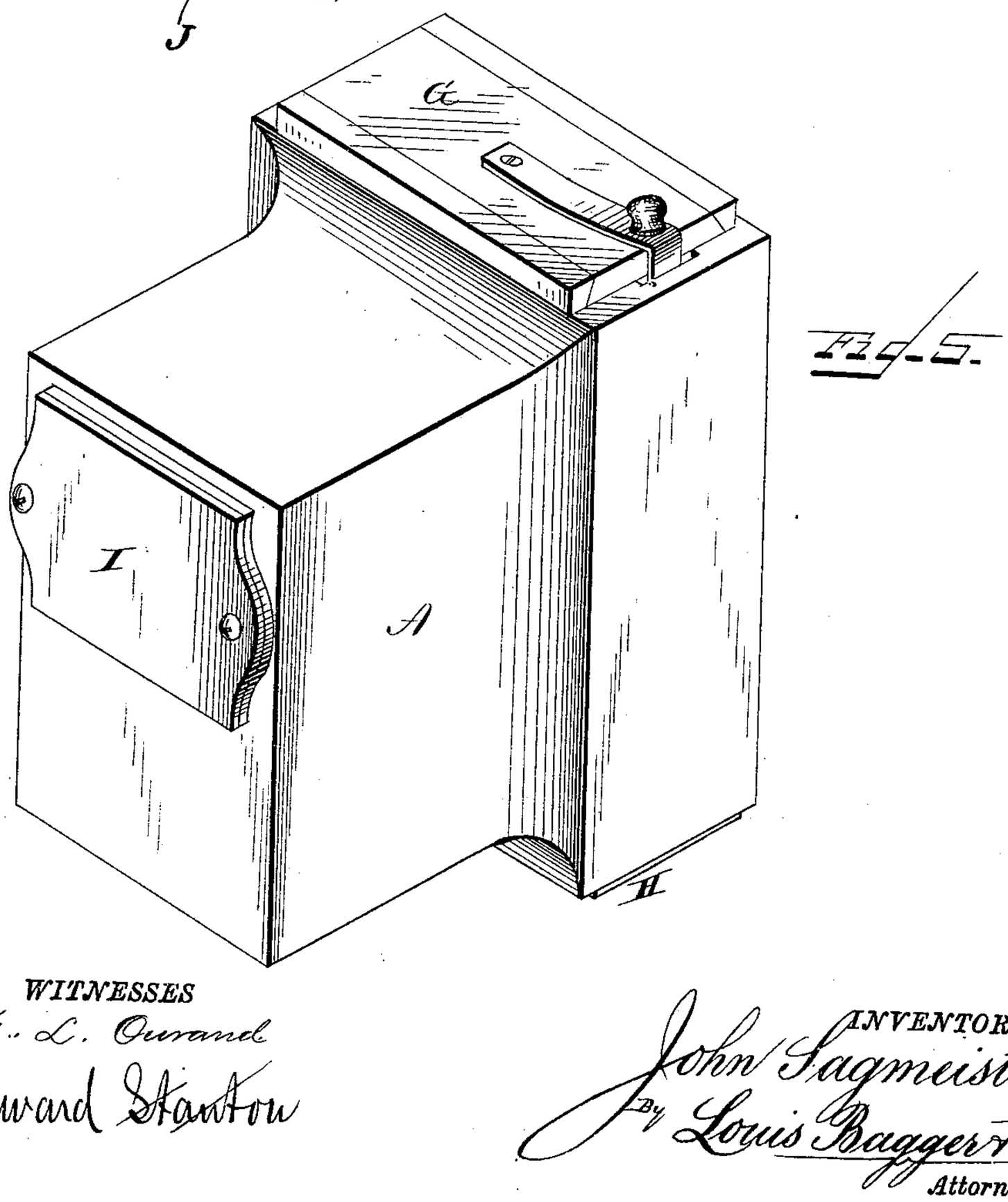


Fig. 5.



WITNESSES
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UNITED STATES PATENT OFFICE.

JOHN SAGMEISTER, OF OMAHA, NEBRASKA.

CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 332,112, dated December 8, 1885.

Application filed October 12, 1885. Serial No. 179,583. (No model.)

To all whom it may concern:

Be it known that I, JOHN SAGMEISTER, a citizen of the United States, and a resident of Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Car-Axle Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal vertical sectional view of my improved car-axle box. Fig. 2 is a cross-section on line *x x*, Fig. 1. Fig. 3 is a horizontal section of the same. Figs. 4 and 5 are perspective views of the dust-plates, showing them separated and from opposite sides; and Fig. 6 is a perspective view of the box.

Similar letters of reference indicate corresponding parts in all the figures,

My invention has relation to car-axle boxes having dust-plates at the apertures in the inner end of the box for the purpose of closing the aperture in that end surrounding the axle; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the axle-box, which is of the usual form, but entirely closed with the exception of an aperture, B, in its upper side, an aperture, C, in its lower side, an aperture, D, in its outer end, and the aperture E in its inner end, through which aperture the axle F passes, the said aperture being slightly oblong, so as to allow the axle to move vertically in the same. The aperture B in the upper side is provided with a sliding cover, G, while the apertures C and D are provided with covers H and I, lined with wood or similar material upon their inner sides and screwed upon the box, forming perfectly tight covers. The inside of the inner end piece of the box is provided with two vertical flanges having their edges bent inward, the flanges being lettered J J and the inwardly-bent edges K. The dust plates or shields L and M slide in the ways formed by the flanges, the side edges of the upper plate, L, fitting tightly under the inwardly-bent edges of the flanges, but having lateral play under the same. The upper plate, L, has a slot, N, opening from its lower edge and extending to the middle of the plate, where its end is rounded, as shown at O, so as to fit upon the upper side of the journal of the axle, and the outer side of the plate has two parallel grooves, P P, near its side edges. The lower plate, M, has a slot, Q, extending toward its middle from its upper edge and ending in a rounded portion, R, which fits against the lower half of the journal of the axle, and the legs S S or portions of the plate at the sides of the slot fit and slide in the grooves of the upper plate, while its enlarged middle portion, T, below the rounded portion of the slot, fits into the lower end of the slot of the upper plate. All the sliding portions of the two plates fit perfectly oil and dust tight upon each other. The outer faces of these plates bear against the inside of the inner end piece of the journal-box, and the aperture of the same is formed with a groove or shoulder, U, into which is placed a ring, V, of rubber or similar yielding material, which is retained by means of a ring, U′, secured in the groove and clamping the elastic ring between it and the bottom of the groove, the said yielding ring forming a tight packing around the aperture in the inner end piece through which the axle passes, and around which aperture the groove or shoulder is upon the inner end of the said side piece. The inner faces of the plates are provided, at the upper end of the upper plate and at the lower end of the lower plate, with two cross-bars, W W, having their ends bent outward, so as to project outside of the flanges, and these ends are provided with hooks X, respectively pointing upward and down, upon which hooks the eyed ends Y of two spiral springs, Z Z, are hooked. It will be seen that these springs will serve to draw the two plates toward each other, causing the rounded ends of the slots to bear tightly against the journal of the axle, and thus preventing any oil from escaping or any dust from entering, and the plates will have sufficient vertical and lateral play under the edges of the flanges upon the inner side of the box to allow the axle to give to any unevenness in its revolutions. The entire box is filled with oil, and the tight closures of the apertures in the box will prevent the oil from es-

caping or dust from entering, so that the journal may run in the box for a considerable time without any necessity for filling the box or for paying any attention to it. The sliding plates may be inserted from above and below, straddling the axle, whereupon the springs may be first secured to the hooks of the lower plate, and thereupon to the hooks of the upper plate, whereupon the covers may be secured by their screws, the box filled with oil, and at last the upper aperture covered by its sliding cover. The aperture in the outer end of the box is mainly for the purpose of inserting the bearing-block, which of course may be of any desired construction.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination of the box having an oblong aperture in its inner end surrounded upon the inside by a groove having a packing-ring laid into it, a journal projecting through the aperture in the box, and a set of dust-plates fitting tightly around the axle and against the inside of the inner end of the box, as and for the purpose shown and set forth.

2. A journal-box having an aperture in its upper and lower side and an aperture for the axle in its inner end, and having an aperture in its outer end for the insertion of the bearing-block, the apertures at the upper and lower side and at the outer end having tightly-fitting covers, as and for the purpose shown and set forth.

3. The combination of a journal-box having apertures at its upper and lower sides, an axle passing through an aperture in the inner end of the box, and dust-plates bearing with the ends of their slots against the journal and having springs for drawing them together, the said plates being inserted through the apertures in the box, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN SAGMEISTER.

Witnesses:
LUDWIG MIERENDORPF,
GEORGE KARLL.