To all whom it may concern:

Be it known that we, FRANK BENJAMIN HARRISON and LACEY Y. WILLIAMS, citizens of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Lubricating Devices for Car-Axle Journals, of which the following is a specification.

Our invention relates to lubricating devices for car-axle journals, the object being the simplification of analogous means heretofore provided for the same general purpose, the reduction of the number of parts, and the diminution of the first cost as far as possible without impairing the efficiency of the device as a whole.

With this main end in view our invention consists in certain novelties of construction and combinations of parts, as hereinafter set forth, and specified in the claims.

The accompanying drawings illustrate one complete example and two slight modifications of the physical embodiment of our improvements constructed according to the best modes we have so far devised for the practical application of the principle.

Figure 1 is a longitudinal section of a journal-box, showing the axle-journal and the lubricating means. Fig. 2 is a cross-section of Fig. 1. Fig. 3 is a horizontal sectional plan view of the journal-box, showing the inner bottom surface. Fig. 4 shows a modified means for supporting one corner of the pan. Fig. 5 is a sectional plan view similar to Fig. 3, with the posts for supporting the pan cast integrally with or secured to the bottom of the box.

Referring to the figures, the letter A designates the journal of the axle; B, the journal-box as a whole, which is of the Master Car-Builders' type in general construction and dimensions; C, the brass or composite bearing; D, the wedge; E, recesses formed in the side walls of the box; F, posts fixed to the bottom of the box by being cast integral therewith, as shown in Figs. 4 and 5, or introduced from the bottom and held in place by screw-threads, as shown in Figs. 1 and 2, or rigidly secured in any other way, the said posts in Figs. 1, 2, 3, and 4 being located within the recesses in the sides of the box; G, springs upon the posts; H, the pan for holding the lubricating material and waste; I, in Figs. 1 and 2, perforated lugs upon the pan; J, in Fig. 4, a downwardly-projecting lug upon the pan engaging the top end of the spring; K, the inner edge of the pan bearing against the journal, and L is the outer projecting end of the pan where the lubricant is introduced.

It will be observed that the posts support the springs, which force and yieldingly hold the pan containing the lubricant and waste against the journal, and that the pan may readily be inserted within the box through the opening, closed by the lid at the end, and also be withdrawn when the brass and wedge are removed and the box lowered upon the journal. This arrangement and disposition of the parts prevents unauthorized persons from removing the pan from the box when the same is in service.

As the jar and vibration of the journal and box in service tend to displace the pan, we spread or locate the posts and springs as far apart as possible and at the sides of the box, thus preventing the pan from becoming displaced. By supporting the posts in the bottom of the box we simplify the construction and reduce the cost.

From the foregoing description, taken in connection with the drawings, it becomes obvious that we have provided simple means for holding the pan in place and produced a lubricating device which fulfils all the conditions set forth as the end and purpose of the invention.

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

1. The combination with a journal-box having recesses in its sides open to the inside of the box and springs within the recesses, of a pan and said pan supported by the springs.

2. The combination with a journal-box having recesses in its sides and springs and posts within the recesses, of a pan supported by the springs and posts.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANK BENJAMIN HARRISON.
LACEY Y. WILLIAMS.

Witnesses:
LEOLA G. WENDELL,
A. D. STEWART.