

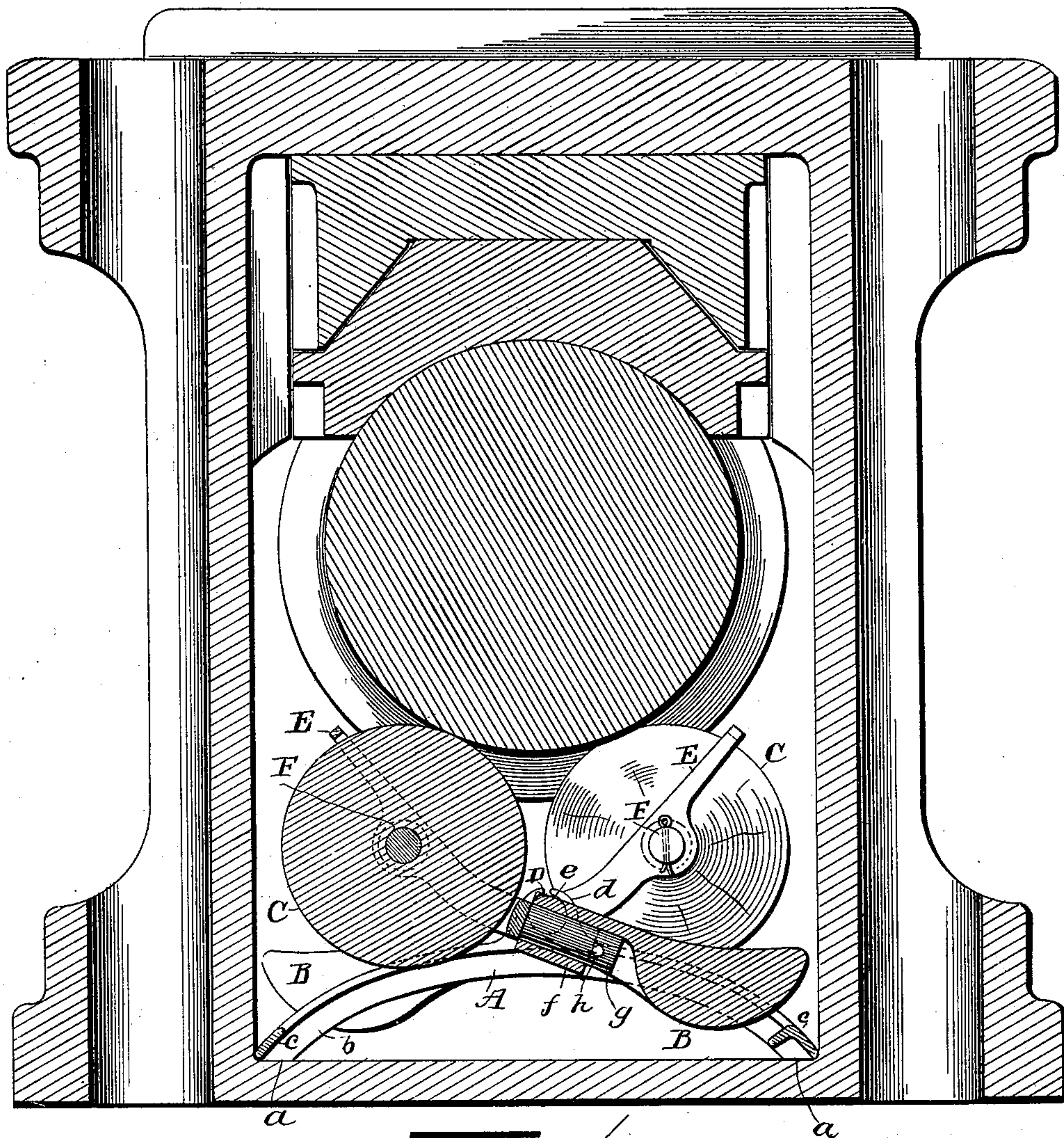
(No Model.)

2 Sheets—Sheet 1.

E. H. BENNERS & W. A. STADELMAN.  
CAR AXLE LUBRICATOR.

No. 594,515.

Patented Nov. 30, 1897.



Witnesses  
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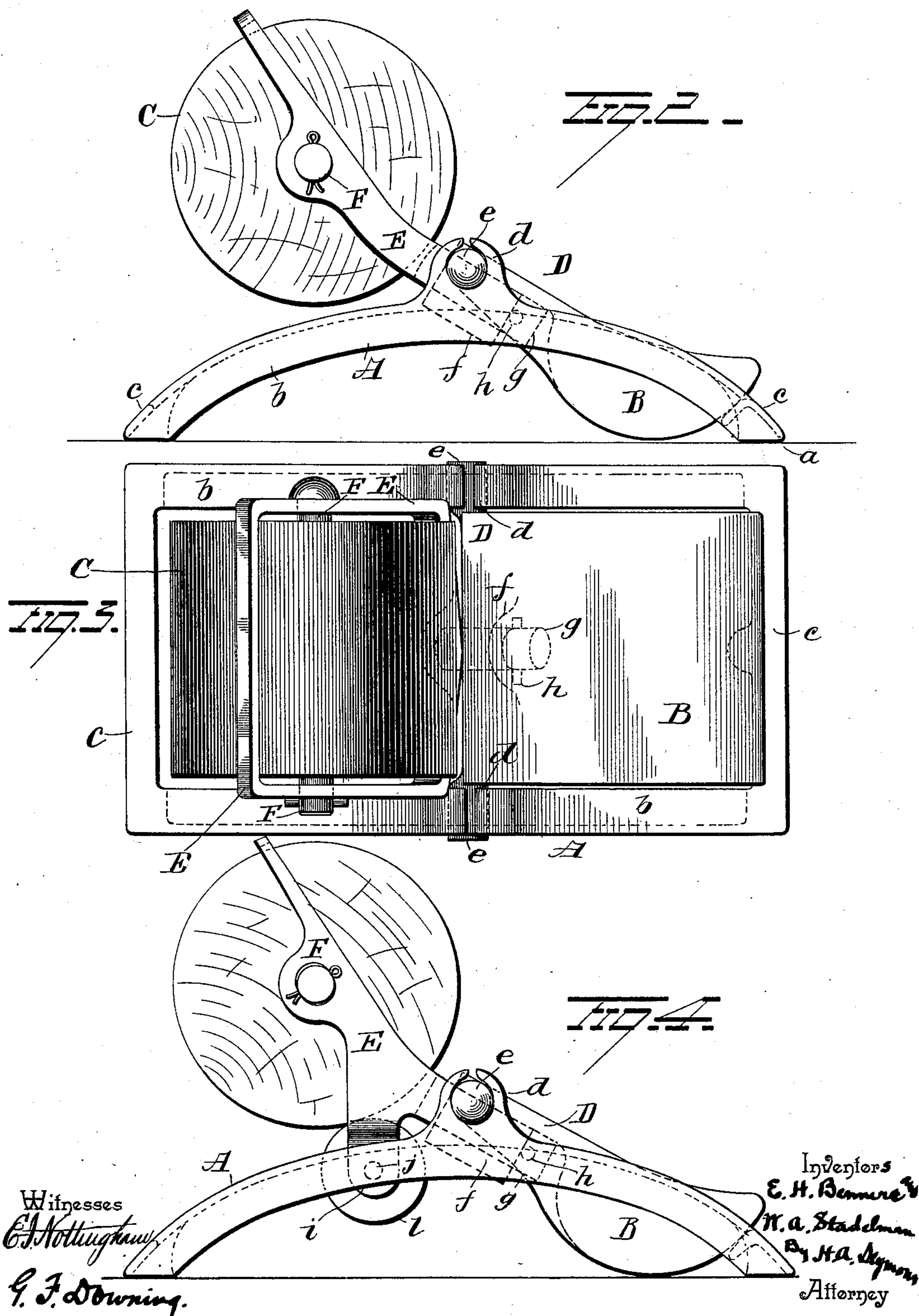
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# UNITED STATES PATENT OFFICE.

EDWIN H. BENNERS, OF ELIZABETH, NEW JERSEY, AND WILLIAM A. STADELMAN, OF NEW YORK, N. Y.

## CAR-AXLE LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 594,515, dated November 30, 1897.

Application filed November 24, 1896. Serial No. 613,347. (No model.)

*To all whom it may concern:*

Be it known that we, EDWIN H. BENNERS, a resident of Elizabeth, in the county of Union and State of New Jersey, and WILLIAM A. STADELMAN, a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Car-Axle Lubricators; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to an improvement in car-axle lubricators; and it consists in certain details of construction and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in transverse section of a box, showing our invention in position. Fig. 2 is a view in side elevation of one of the oiling devices. Fig. 3 is a view in plan of the same, and Fig. 4 is a view in side elevation of a modification.

A represents a frame, preferably made of cast metal, of suitable design. When in position in the box, it rests on its base *a*. This frame is composed of two sides *b* and two ends *c*, the body of the frame being open to permit of the free movements of the counterweight *B* and lubricating-roller *C*. The frame *A* is provided on its upper side with bearings *d* for the reception of the trunnions *e* of the frame *D*. This frame *D* is integral with the counterweight *B* and is provided at a point between the trunnions *e* with the bearing *f*, the latter being at right angles to the trunnions. Pivotaly mounted within the bearing *f* is the stem *g* of the frame *E*. This stem projects through the bearing *f* and is locked therein against longitudinal displacement by the pin *h* passing through the stem *g* and resting against the end of bearing *f*. From this it will be seen that the frame *D*, carrying the counterweight *B* and frame *E*, can rock or oscillate on the trunnions *e*, while the frame *E*, by means of its stem *g* and bearing *f*, can rock in a direction at right angles to the direction of movement of the frame *D*, thus always holding the lubricating-roller in contact with the journal throughout the

length of the former. Within the frame *E* and upon the shaft *F* is the lubricating-roller *C*, which can be made of any suitable material. This roller *C* is adapted to rest against the under side of the car-journal, to one side of the center thereof, and is held in such contact by the counterweight *B*, which latter, when the parts are in their operative positions, rests slightly above the bottom of the journal-box, thus permitting it to exert its entire weight in yieldingly holding the roller in contact with the journal.

The device thus described is designed to be used in the ordinary Master Car-Builders' journal-box without any change whatever in the construction of the latter. The rollers are arranged in pairs, side by side, in reverse order, so that the two rollers bear on opposite sides of the vertical center of the journal, and the rollers *C* are of such size that their lower edges or portions are always immersed in the lubricant.

From the foregoing it will be seen that the rotation of the journal by its frictional contact with the roller *C* causes the latter to revolve and carry up a film of oil, which it deposits on the journal, thereby keeping the latter lubricated.

In the modification shown in Fig. 4 we have provided the frame *E* with depending bearings *i*, which receive the journals *j* of the feed-roller *l*. The periphery of the feed-roller rests sufficiently close to the lubricating-roller *C* so as to deposit thereon the oil carried up by the roller *l*. With this construction the lubricating-rollers *C* can normally rest above the oil, while the lower rollers *l* are wholly or partly immersed, and by using feed-rollers *l* located below the lubricating-rollers and well down to the bottom of the box we are enabled to practically use up all the oil in the box before a refilling is necessary, whereas in the construction shown in Figs. 1 and 2 the level of the oil or other lubricant employed must be maintained above the bottom of the lubricating-rollers.

It is evident that changes in the construction and relative arrangement of the several parts might be made without avoiding our invention, and hence we would have it un-

derstood that we do not restrict ourselves to the particular construction and arrangement of parts shown and described; but,

Having fully described our invention, what  
5 we claim as new, and desire to secure by Letters Patent, is—

1. The combination of three frames, one of which is stationary and the other two pivotally supported thereon, said pivotally-sup-  
10 ported frames centrally swiveled to each other in an axis at right angles to the axis in which they are pivoted to the stationary frame, one of these pivotally-supported frames having a counterweight and the other carrying a roller  
15 which parallels itself with the journal to be lubricated and upon which it has bearing contact.

2. The combination, with a base having bearings, of a frame journaled therein and provided with a counterweight, a second frame 20 journaled in said first-mentioned frame and adapted to have an independent movement at right angles to the movement of said first-mentioned frame, and a lubricating-roller and a feed-roller journaled in said second frame, 25 substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

EDWIN H. BENNERS.

WILLIAM A. STADELMAN.

Witnesses:

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