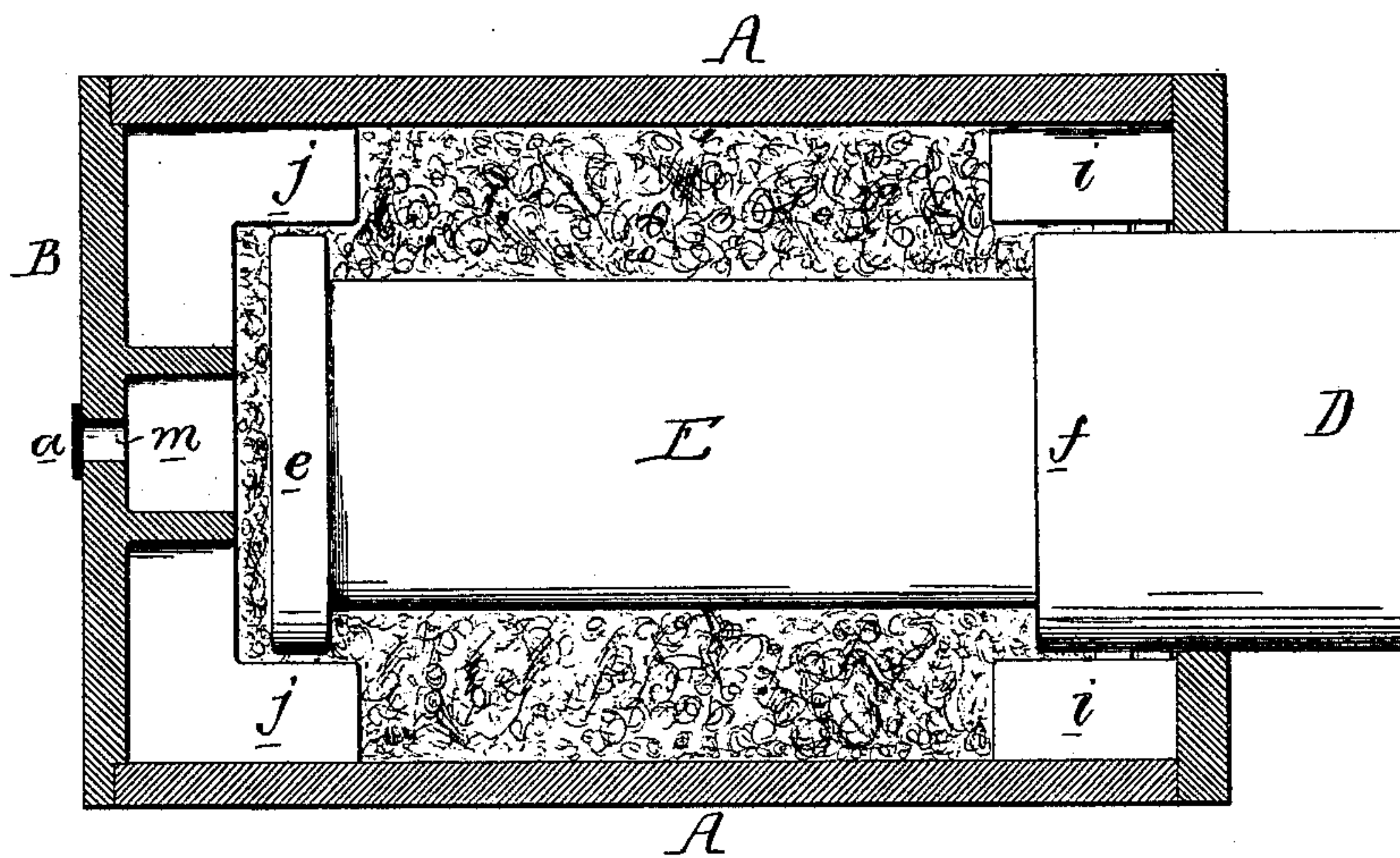


H. C. FEGER.  
CAR AXLE-BOX.

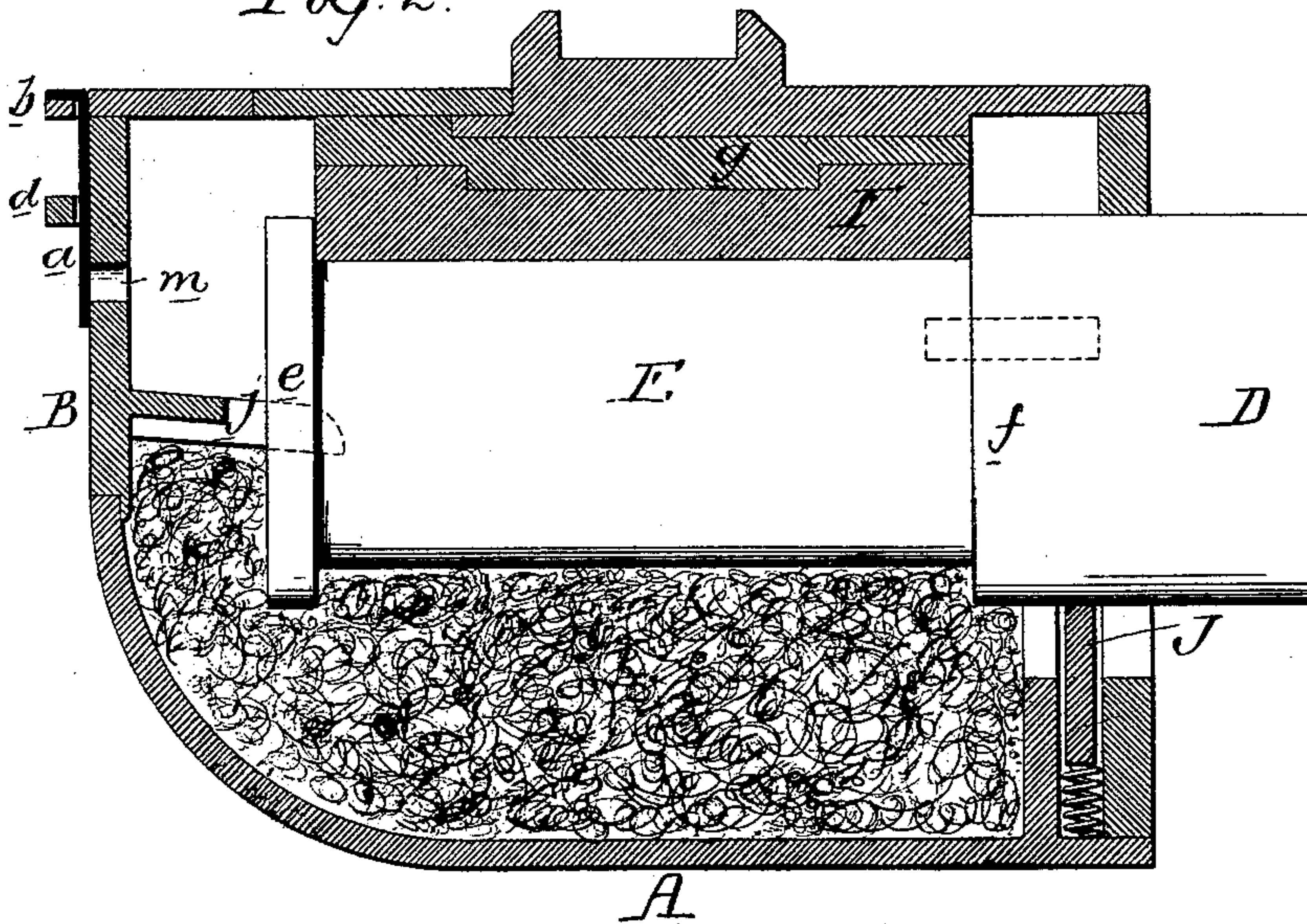
No. 188,118.

Patented March 6, 1877.

*Fig. 1*



*Fig. 2.*



Witnesses  
John M. Deemer  
Harry Smith

Hiram C. Feger.  
by his Attorneys.  
Howson & Son



# UNITED STATES PATENT OFFICE.

HIRAM C. FEGER, OF POTTSTOWN, PENNSYLVANIA, ASSIGNOR OF ONE-FOURTH HIS RIGHT TO JOHN H. HOBART, JR., OF SAME PLACE.

## IMPROVEMENT IN CAR-AXLE BOXES.

Specification forming part of Letters Patent No. 188,118, dated March 6, 1877; application filed February 16, 1877.

*To all whom it may concern:*

Be it known that I, HIRAM C. FEGER, of Pottstown, Montgomery county, Pennsylvania, have invented a new and useful Improvement in Axle-Boxes, of which the following is a specification:

The object of my invention is to so construct an axle-box that the oiled waste, or other lubricating material, will always be retained in its proper position in the bottom of the box—an object which I attain in the manner hereinafter set forth, reference being had to the accompanying drawing, in which—

Figure 1 is a sectional plan view of my improved axle-box, and Fig. 2 a vertical section of the same.

A is the casing of the box, and B the cover of the same, the latter being ribbed at the lower end, and adapted to the edge of the opening in the front of the box, and being retained in position by a plate or key, *a*, which passes through a slot in the projecting top *b* of the box, and through a slotted lug, *d*, on the cover-plate.

D is the axle, having the usual flanged end *e*, journal E, and shoulder *f*, the journal bearing against a block, F, in the top of the box, between which and said block intervenes a recessed filling-piece, *g*.

The lower portion of the box is filled with oiled cotton waste, or other lubricating material, as usual, and on the sides of the box, near the inner end of the same, and adjacent to the shouldered portion *f* of the axle, are arranged projecting plates *i*, similar plates *j* projecting from the cover-plate B of the box, and embracing the flange *e*. By means of these plates *i* and *j* I am enabled to overcome serious objection to ordinary axle-boxes—namely, the tendency of the flange *e* and shoulder *f*, when revolving, to carry up portions of the lubricating material from the bottom of the box, these portions becoming lodged in the top of the box, and, when dry, generating such a degree of friction as to become ignited, or to otherwise seriously interfere with the proper operation of the box.

Oil is introduced into the interior of the box through an opening, *m*, in the cover-

plate B, this opening being in line with the plate *a*, which thus serves not only to keep the cover B in position, but to prevent the entrance of dust into the interior of the box through the opening *m*. The plate *a* can, however, be raised sufficiently to permit the introduction of the spout of an oil-can into the opening *m* without disturbing the fastenings of the cover B.

Entrance of dust into the box at the inner end is prevented by a spring-plate, J, which is adapted to guides in the interior of the box, and embraces the lower half of the axle.

It will be evident, that although I have shown the plates *i* on the sides of the box, and the plates *j* on the cover-plate, both sets of plates may be formed on the sides of the box, if desired. I prefer to arrange the plates *j* on the cover-plate B, however, for this reason, that upon removing said cover-plate the interior of the outer end of the box is left entirely unobstructed, so that old lubricating material may be removed, and a new supply introduced, without difficulty.

I claim as my invention—

1. The combination of a car-axle with an axle-box having plates for preventing the axle from carrying the lubricating material into the upper portion of the box, as set forth.

2. The combination of the axle D, having a flange, *e*, and shoulder *f*, with plates *i i* and *j j*, as set forth.

3. The combination of the axle D with plates *i i* on the sides of the box and plates *j j* on the cover-plate B, as specified.

4. The combination of the axle-box A and its slotted projection *b*, the cover-plate B hung to the box, and having a slotted lug, *d*, and opening *m*, and the retaining key or plate *a*, as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HIRAM C. FEGER.

Witnesses:

HERMANN MOESSNER,  
HARRY SMITH.