(No Model.)

A. L. HUMPHREY.

CAR AXLE BOX.

No. 441,762. Patented Dec. 2, 1890.

Fig. 4.

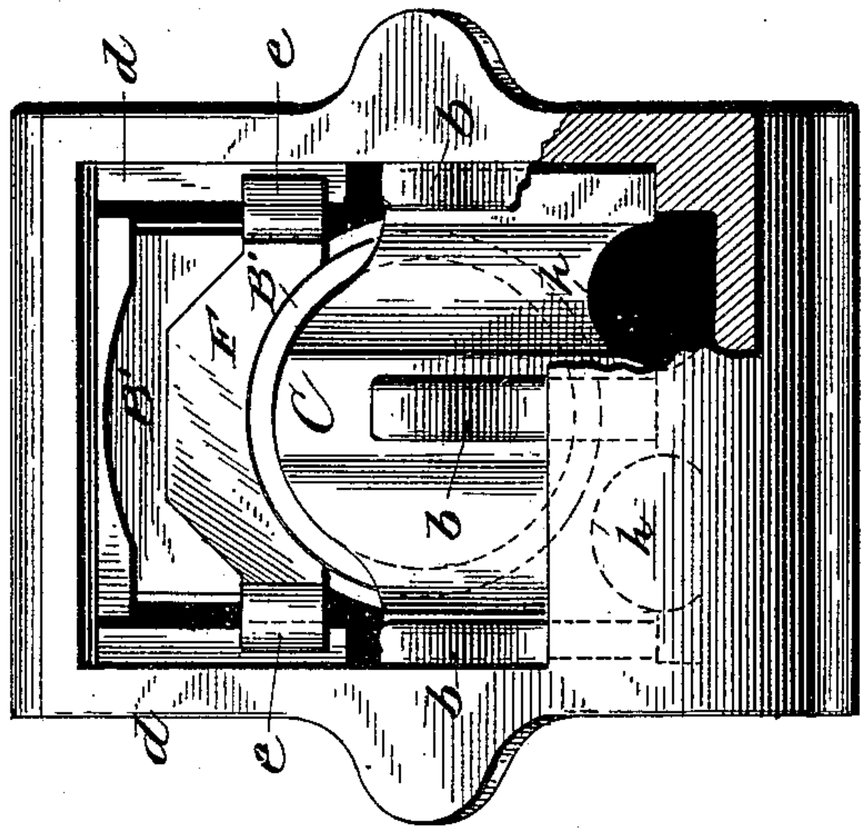

Fig. 2.

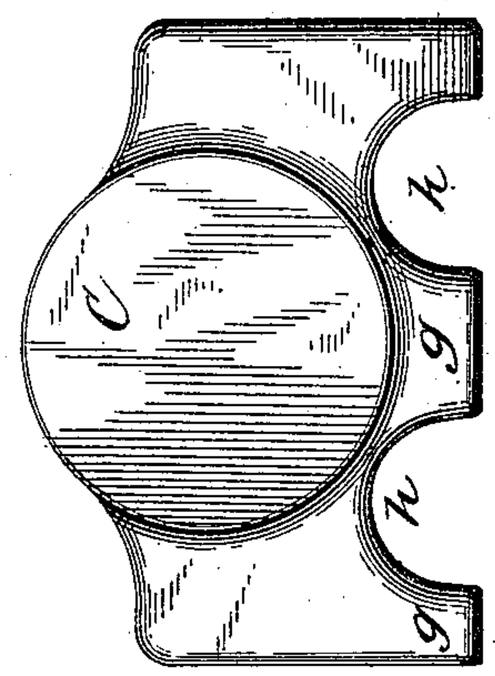

Fig. 3.

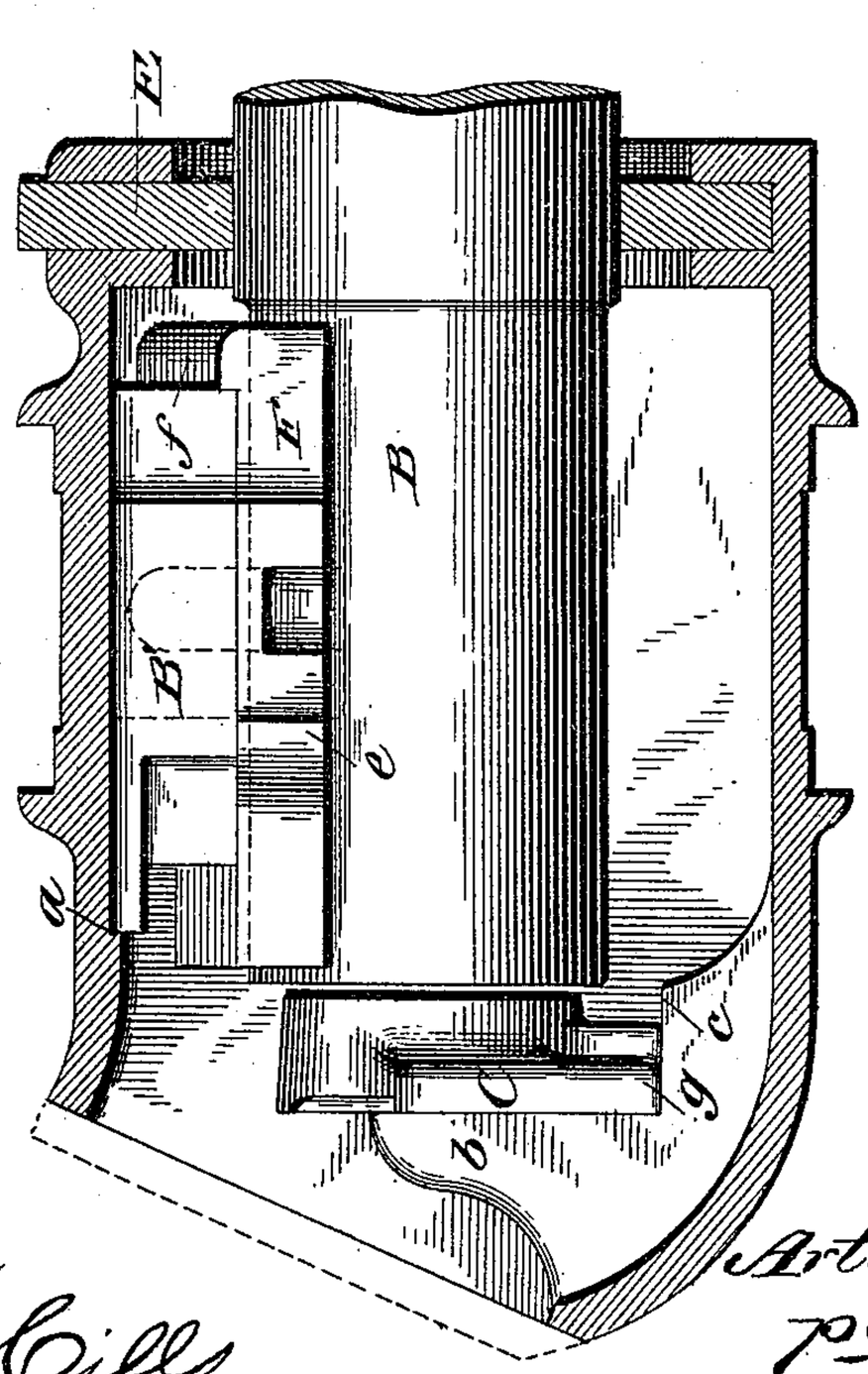

Fig. 1.

Witnesses
L. C. Hills.
Wm. J. Connor.

Inventor
Arthur L. Humphrey.
per Chas. H. Foote.
Attorney

UNITED STATES PATENT OFFICE.

ARTHUR L. HUMPHREY, OF COLORADO CITY, COLORADO.

CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 441,762, dated December 2, 1890.

Application filed August 22, 1890. Serial No. 362,762. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR L. HUMPHREY, a citizen of the United States, residing at Colorado City, in the county of El Paso and State of Colorado, have invented certain new and useful Improvements in Car-AxleBoxes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in car-axle boxes; and the novelty resides in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a vertical longitudinal section through a car-axle box embodying my invention. Fig. 2 is a front view of the same with parts broken away and others in section. Fig. 3 is a front view of the end-thrust block removed. Fig. 4 is an edge view of the same.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates a car-axle box of ordinary construction except as hereinafter specified. It is formed upon the under face of its top with a shoulder *a*, which prevents end movement of the upper block B′, the front end of which strikes against said shoulder, as shown in Fig. 1. At the front end the box is formed interiorly with vertical ribs *b*, which have a horizontal shoulder *c*, as seen in Fig. 1, and against which the end-thrust block C rests, as shown in the same figure.

B is the bearing, and E is a ring of asbestus or any other suitable material surrounding the same at the inner end of the box in the usual manner.

F is a block fitted to the journal and resting upon the upper side thereof. It is formed upon each side with a lug *e*, which engages vertical ribs *d* upon the inside of the box, as shown best in Fig. 2. This prevents endwise movement of the block. The block B is fitted to the upper face of the block F, and at its rear end engages a lug *f* on the said block F, as shown in Fig. 1, and thus the two blocks are prevented from endwise movement in either direction, the one helping to hold the other.

The end-thrust block C is formed with a central circular portion, as shown in Fig. 3, against which the end of the journal is designed to contact, and with depending legs or feet *g*, which are designed to rest upon the shoulders *c* of the vertical ribs at the front end of the box. Between the legs or feet are semicircular openings or passage-ways *h* for the passage of the lubricant. The block C is thickened at the circular portion and also at the central leg or foot, as seen in Fig. 1. This block serves also to prevent waste of lubricant at the front of the box.

What I claim as new is—

1. The combination, with the box formed with interior vertical ribs and shoulder *a* upon the under side of its top, of the block F, fitted to the journal and formed with side ribs and lug at its rear end, the block B, fitted to the block F and engaging the end lug and the shoulder *a*, and the end-thrust block, substantially as and for the purpose specified.

2. The combination, with the box formed with central and side ribs *b*, having shoulders *c*, of the end-thrust plate or block formed with circular portion bearing against the central rib, and depending legs resting on the shoulder *c*, substantially as specified.

3. The combination, with the box formed with vertical central and side ribs *b* and shoulders *c*, of the end-thrust block formed with thickened circular portion and depending legs, the central one of which is thickened, with passage-ways between the legs, substantially as shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ARTHUR L. HUMPHREY.

Witnesses:
E. S. BACH,
LUTE FIELD.